





# The labour supply of low-skilled – incentives in the unemployment insurance systems

A comparative description based on Nordic countries

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# Content

Preface.....	7
Summary .....	9
Main purposes.....	9
Common features of the Nordic labour markets and welfare system .....	9
The changing labour market position of the low skilled.....	10
The changing UI systems in the Nordic countries.....	12
Have the reforms affected the labour market position of the low-skilled? .....	13
Further research.....	15
1. Unemployment insurance and the labour market position of the low skilled .....	17
1.1 The main issue to be discussed.....	17
1.2 The labour market attachment of the low skilled in the Nordic welfare states .....	18
1.3 Conceptual framework and theoretical considerations .....	21
1.4 Empirical Research – some main problems and results.....	27
2. The changing labor market position of the low skilled in the Nordic region.....	33
2.1 Main trends in the Nordic labor markets .....	35
2.2 The changing labour market position of low skilled in Denmark .....	42
2.3 The changing labour market position of the low skilled in Finland.....	50
2.4 The changing labour market position of the low skilled in Norway .....	59
2.5 The changing labour market position of low skilled in Sweden.....	67
3. The UI systems in the Nordic – main features and reforms.....	75
3.1 Denmark.....	75
3.2 Norway.....	87
3.3 Finland .....	99
4. Changing UI systems and the low skilled labour supply .....	111
4.1 The changing labour market position of the low skilled.....	111
4.2 The impact of the reforms on the low-skilled group – future research .....	113
References .....	121
Norsk sammendrag.....	127
Bolvig et al. ....	127
Appendices .....	133
Key information on the UIB system.....	133
Denmark.....	133
Norway.....	137
Finland .....	139



# Preface

This report is the result of two separate – but closely connected – projects financed by the Nordic Committee of Seniors Officials for Labour Market and Working Environment Policy of the Nordic Council of Ministers (Nordisk Ministerråds Arbeidsmarkedsutvalg).

The first, which took place in 2005, was “Labour market outcomes of low-skilled adults. The impact of unemployment benefits. A comparative analyses based on three Nordic countries”.

The second, which took place in 2006 (and to some extent in 2007), was “The changing labour market situation of low-skilled and the development in unemployment benefit systems. A comparative description based on four Nordic countries”.

These two projects have been accomplished by a cooperation between researchers in three Nordic countries; Denmark, Finland and Norway and three Research institutions; Aarhus School of Business, Department of economics, Labour Institute for Economic Research in Helsinki and Institute for Social Research in Oslo. The following researchers have participated in one or both projects:

Professor Nina Smith, Aarhus School of Business, Department of economics, Aarhus

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Hege Torp was the project leader for the first project until August 2005. After that Marianne Røed took over this job. She has also been the project leader for the second project.

As is apparent from the above, Sweden has not been represented in the research group. From the start this work was established as a cooperation between the above institutions. The situation for the low skilled in Sweden was not planned to be a part of the study. However, since the Committee wanted us to include Sweden as well we have done so, but in a much briefer manner than what is the case with regard to Denmark, Norway and Finland.





# Summary

## Main purposes

In this report we describe and discuss the changing character of unemployment insurance (UI) systems in the Nordic countries in relation to the changing labour market situation of low skilled adults, from around 1990 and onwards. The focus is on how different characteristics of the national UI systems – and particularly the changes in these systems – may have affected the labour market position of low skilled by affecting their work incentives.

This report has two main purposes: *First*, to construct a descriptive empirical basis for a discussion regarding the relationship between the design of the unemployment benefit system and the labour market performance of low-skilled compared to higher-skilled workers. *The second* purpose is to lay the foundation for a more systematic econometric analysis regarding the influence of the unemployment insurance systems on the labour market performance of low skilled – compared to high skilled workers in Norway, Sweden, Denmark and Finland. This prospective analysis should be based on data sets established from administrative registers containing (panel) information about the labour market histories of individual workers in the four countries.<sup>1</sup>

## Common features of the Nordic labour markets and welfare system

The national labour markets in the Nordic welfare states have common features which may place particular strains on the labour market position of the low skilled. The labour market institutions and the political strategies towards equal allocation of welfare have contributed to a compressed wage and income distributions. Combined with a high average wage levels the wage structure makes low-skilled workers in the Nordic countries to the best paid in the world. This places high productivity demands on the relatively less productive workers.

The Nordic countries have also in common the existence of a strong social security net which provides generous out-of-work benefit payments both within their UI systems and within the other aspects of the

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<sup>1</sup> For Norway, Denmark and Finland the relevant data sets have been thoroughly described in the report from the project “Labour market outcomes of low-skilled adults. The impact of unemployment benefits. A comparative analyses based on three Nordic countries” sent to the NMR 03.03.06.

social security systems; such as sickness payment, disability pensions, rehabilitation programs, housing subsidies and means tested social assistance. In line with the general aim of redistribution in the Nordic welfare countries the replacement rates, in this multi-layered insurance system against loss of income from employment, are clearly higher for low- than for high-wage earners. Thus, compared to the high-skilled, high income earners, the distributional profile of the social security system provide the low-skilled, low-income earners, with weak work incentives. Different studies indicate that considerable parts of the UI benefit and social security recipients are captured in so called “social security traps” which means that they earn very little from getting a job compare to collecting public welfare. This first of all concerns the low income earners who most often are low skilled.

At the same time, a common strong commitment in the Nordic countries with regard to poverty prevention have obstructed the use of strong sanctions in order to punish those who do not make the expected effort to seek or keep gainful employment.

## The changing labour market position of the low skilled

For Norway, Finland and Denmark we present descriptive statistics describing the development in the average labour market position of low skilled, medium skilled and high skilled, in their prime age (25–49 years of age), from the early nineties to the early 2000’s. These numbers are developed particularly for the project and have not been publicly available before. With regard to Sweden we had to manage with the publicly available sources in this regard. Thus, the description of the Swedish development is shallower.

From early 1990s to the early 2000’s, the labour market position of the low-skilled has deteriorated in all Nordic countries. The descriptive statistics demonstrate that the relative marginalization of this group has taken place with regard to different indicators of labour market integration.

Throughout the period, the unemployment risk is clearly higher for low-skilled workers compared with high-skilled workers in all the Nordic countries. As regards the development of the employment situation it has been somewhat divergent in the four Nordic countries. In Denmark and Norway the relative position of the low-skilled improved in this regard along with the business cycle in the second half of the nineties. In Finland and Sweden, the employment rates of the low-skilled are still at a remarkably lower level and unemployment rates still at a remarkably higher level than before the recessions of the 1990s that hit these countries.

The labour force participation is also relatively low among the least skilled in all the years. In the prime aged group, observed in Denmark, Finland and Norway, the differences between the labour participation

rates of the high-skilled and the low-skilled increased considerably from the early nineties to the early 2000's.

To an increasing extent the low-skilled workers in their prime age, have joined different welfare support measures. It is particularly the share of the population on disability pension which has increased markedly more among the low skilled compared to among the medium and high skilled workers. This development has taken place in all the three countries during the period we look at.

As regards the relative wages of the low-skilled compared to the high-skilled workers – in the prime age group – the development has been divergent in different Nordic countries. The inspection of the monthly wages for full-time workers would seem to imply that the earnings gap between the low-skilled and high-skilled workers has narrowed from the early 1990s to 2003 in Finland <sup>2</sup>, whereas in Denmark and Norway there is evidence of a widening of the earnings gap between the low-skilled and the high-skilled over the period, especially for women.

A widening of the earnings differentials between the low-skilled and the high-skilled has taken place in most EU countries from the beginning of the 1970's and over the following twenty years. This trend was a result of increased wage gain at the top of the earnings scale and stagnant real wages at the lower end of the distribution (Machin and Van Reenen, 1998). This development was less accentuated in the Nordic countries than in several of the other European countries. The descriptive statistics presented here may indicate that the Nordic deviation in this regard was still present in the early 2000's. Numbers from OECD (2007) show that in the whole OECD region the four Nordic countries had the lowest earnings dispersion in 2005.<sup>3</sup> However, in all these countries, as well as in nearly all the other OECD countries, the dispersion increased from 1995 to 2005 according to these statistics.

In Denmark and Finland the low-skilled unemployed are to a more limited extent eligible for earnings-related unemployment insurance and the share of those eligible for UIB has deteriorated over the inspection period. In Norway this development has not taken place and the eligibility for UIB is relatively high among the low skilled. This difference may be related to the fact that this insurance is voluntary in Finland and Denmark and compulsory in Norway.

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<sup>2</sup> But due to change in the education classification 1998 onwards the figures from 1990 and 1995 are not totally comparable to year 2003 figures, and e.g. figures calculated from Income distribution statistics imply that the earnings gap would have remained about the same or slightly widened when a comparison is made between years 1995 and 2003.

<sup>3</sup> Measured by the ratio of 9th to the 1st deciles limits of gross earnings among full time wage earners.

## The changing UI systems in the Nordic countries

The UI-systems in the Nordic countries, as well as in many others, may be described according to four key variables: The compensation rate from holding a job relative to collecting UI benefits, the eligibility rules that determines who will get benefits in the case of unemployment and who will not, the maximum duration of UI benefits if eligible, and the strictness of sanctions and control implemented to avoid insufficient job search among the insured unemployed (moral hazard).

With regard to all these characteristics there are variations in the system design between the Nordic countries. Since the early nineties there have been considerable reforms within the systems of each country which also provide variation with regard to the characteristics of the UI-systems over time within the same country. In the report we describe the present design of the UI-systems in Norway, Denmark and Finland and how it has changed from the early nineties.

From the late eighties/early nineties unemployment rates rose in all the Nordic countries. As a response to this development the Nordic governments redesigned the UI systems and to some extent also other social security arrangements. The motivation behind these changes was to some extent ambiguous. When the Norwegian authorities extended the duration of unemployment benefit in the early nineties the intention was to ease the economic situation of the growing numbers of unemployed. In the other countries the emphasis was, from the very beginning, to improve the work incentives of the unemployed.

Despite some differences, it can be said that in the latter half of the 1990s common to all Nordic countries was the tightening of the eligibility conditions of the UI. In both Finland and Denmark the minimum period of insured employment, which was required to qualify for earnings-related benefits, was lengthened: from 26 weeks to 52 weeks (during the last 36 months) in Denmark and from 26 weeks to 43 weeks (during the last 24 months) in Finland in 1997. In Sweden the employment requirement was raised from 4 to 5 months within a 12-months period in 1995. In 1997 it was further lengthened from 5 to 6 months within a 12-month period.<sup>4</sup> In Norway the previous income requirement for UI was increased.

In both Denmark and Norway considerable reductions in the maximum duration period was accomplished and in Sweden the compensation rate within the UI system was reduced during this period. In all the countries different steps have been taken to tighten the control with the search activity of the beneficiaries and to increase the strictness of sanctions related to undesired behaviour. To some extent these implied that the

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<sup>4</sup> In Sweden the tightening also showed in the cut of the benefit levels and the maximum duration of UIB (see more closely chapter 2)

active labour market programs (ALMP) became a part of the sanction and control strategies.

In the latter half of the 1990s increased emphasis was placed on activation and ALMP in some of the Nordic countries and greater efforts were made to improve the effectiveness of these measures. In Denmark since 1994 there were a series of reforms which placed more focus on activation as a test of availability for the labour market. In Finland, one of the most significant reforms was carried out in 1998. In this so called first wave of the labour market policy reform the active measures were reformed and the rights and obligations of the unemployed job seekers (such as e.g. obligation for individual action plans) were defined. In Norway the emphasis on ALMP increased considerably in the late 1980s, participation in ordinary labour market programmes reached a peak in 1993 – with regard to the share of unemployed enrolled in activation – and decreased considerably thereafter. Vocational rehabilitation programs, on the other hand, experienced precisely the opposite trend. In Sweden as a response to the unemployment crisis the diversity of activation programmes and the expenditure for the ALMP were increased in the 1990s (Bergmark, 2003). Sweden also introduced activation measures that tied eligibility for means-tested benefits to participation in the programmes.

So, for job-returning policies two different, often combined, strategies have been used in all the Nordic countries. The first type of measures adopted has focused on increasing work incentives by tightening the eligibility conditions and cutting the level of benefits and the maximum duration. These measures have acted as push factors pressuring people from out-of-work situations towards employment. The second type of measures can be characterised as activation measures, which aimed to increase the employability of people and also to make working life more attractive to them. These measures were originally ment to act as pull factors only. However, from the mid nineties the labour market authorities have to some extent turned them into push measures by including them in the sanction and control strategies.

## Have the reforms affected the labour market position of the low-skilled?

As described above, along with a substantial reduction in it's share of the population, the labour market situation of the low skilled in the Nordic countries has evolved in a negative direction since the early nineties. The considerable decrease in the groups' labour force participation and the increase in its share of disability pensioners are the most significant and consistent features of this development.

During the period of interest all Nordic countries, as well as most industrialised countries, have been witness to a negative shift in the labour demand from low-skilled to high-skilled workers. This shift is caused by a combination of an increase in high-tech production methods, which tend to substitute low-skilled labour and compliment high-skilled labour, and the increasing globalisation with wage pressure and outsourcing of the low-skilled jobs as a consequence.

In this situation the UI-system reforms have aimed at improving the functioning of the labour market from the supply side. The two main strategies in this regard have been:

- to improve work incentives through restricting the access to UI benefits and in some cases by lowering the level of these benefits.
- to increasing the productivity and general employability of the unemployed through ALMP

There is some evidence that the reforms carried out in order to increase incentives to work have reduced the “social security trap”- problems. However, the restrictions have mainly been directed towards the UI systems. Thus, the functioning of supplementary benefit arrangements (social assistance, housing benefits, child support and the like) – within the broader welfare systems of the Nordic countries – may have neutralized the work incentive effects of these UI reforms. Since such supplementary arrangements are designed to maintain an acceptable minimum standard of living this neutralizing effect first of all influences the disposable income of individuals with a low earning capacity – who more often are low skilled. At the same time the restricting reforms of the UI- systems may have increased the mobility out of the labour force by raising the relative attractiveness of welfare systems supporting people who are not able to work (disability pension, rehabilitation support and the like).

Several studies have evaluated the impact of the activation reforms in different Nordic countries although they have not solely focused on the impact for the low-skilled group. As regards the direct employment effects of ALMP, it has been found in the Finnish studies that labour market training, and vocational training in particular, has improved the employability of the unemployed, whereas the subsidised employment particularly in the public sector has not been that effective. The effect of Swedish and Danish ALMP have not been encouraging in this regard. In Norway, the effect of programmes have been more positive, except for employment programmes in the public sector and youth programmes that have had little or no effect.

## Further research

It is of utmost importance to include the impact of the whole benefit ‘package’ when studying the incentive effects of net compensation ratios on the duration of unemployment spells among the low-skilled unemployed job seekers. It is also important to analyse the effect of reforms on more than one exit from unemployment, i.e., to work, to education and out of the labour force.

This to include the whole benefit ‘package’ is not a straightforward task and requires simulation models that can take into account changes in all received social insurance benefits in case a low-skilled unemployed job seeker gets a job instead of remaining unemployed. This partly explains why there is very little empirical evidence using this type of a ‘holistic’ approach (including the whole variety of benefits that unemployed job seekers receive), even though policy makers would – no doubt – find this kind of information very valuable.

If a next phase of the project is undertaken we will do comparable cross country analyses of the effects of UI and other social insurance benefits on the probability of obtaining a job. Our special focus is on the impact of the compensation rates on the labour market performance of the low-skilled unemployed individuals, i.e. on their probabilities of exit from unemployment to employment or to states outside the labour force, their unemployment duration, length of subsequent employment and their economic well-being.





# 1. Unemployment insurance and the labour market position of the low skilled

## 1.1 The main issue to be discussed

In this report we describe and discuss the changing character of unemployment insurance (UI) systems in the Nordic countries in relation to the changing labour market situation of low skilled adults, from around 1990 and onwards. The focus is on how different characteristics of the national UI systems – and particularly the changes in these systems – may have affected the labour market position of low skilled by affecting their work incentives. By work incentives we mean (approximately) the economic returns to accepting job offers when unemployed or to the continuation of employment when having a job. In this discussion it is important to take into account the functioning of the whole system of social welfare provisions and skill upgrading measures targeted at the unemployed. Knowledge about this issue is important for policy makers who try to balance between actions to further poverty prevention and social security, on the one hand, and adequate labour supply and job search incentives on the other.

In the following the term *UI system* refers to the publicly financed insurance arrangements in the Nordic countries specifically directed towards the income maintenance of workers who become involuntarily unemployed. Other social security schemes which may also affect the economic situation of the unemployed are referred to as *supplementary benefit* arrangements. The low-skilled are defined as individuals who have not completed an upper secondary education. We focus on prime age individuals, defined as those in age group 25–49 years old. Thus, we do not discuss youth unemployment problems, the labour market of the elderly or the incentive effect of the retirement system.

This report has two main purposes: *First*, to construct a descriptive empirical basis for a discussion regarding the relationship between the design of the unemployment benefit system and the labour market performance of low-skilled compared to higher-skilled workers. To do so we present summary statistics on the labour market attachment of Nordic prime age adults, with different skill levels, at three different points in time since the early nineties. In addition we present a systematic description of how the UI systems in the Nordic countries are designed, the changes that have occurred during this period and how these changes may

have affected the relative work incentives of employed and unemployed from different skill groups.

*The second purpose is to lay the foundation for a more systematic econometric analysis regarding the influence of the unemployment insurance systems on the labour market performance of low skilled – compared to high skilled workers in Norway, Sweden, Denmark and Finland. This prospective analysis should be based on data sets established from administrative registers containing (panel) information about the labour market histories of individual workers in the four countries.*

One main challenge with regard to the evaluation of labour market policies is related to identification of independent (random) variation in the policy variable. That is, variation in the manner the policy measure in question affects workers, which is independent of their unobserved individual characteristics that also influence labour market performance. Without this kind of variation the causal effect of policies on individual labour market performance can not be identified. Two important sources of exogenous variation in this regard are policy reforms and differences in the design of the same kind of policy measures between relatively similar countries. Thus, a systematic mapping of the features and changes in the national UI systems across the Nordic countries and over time is a natural point of departure for this type of policy analysis.

## 1.2 The labour market attachment of the low skilled in the Nordic welfare states

As a group, low-skilled workers both in the Nordic countries and in other rich OECD countries have a relatively weak labour market position. They are clearly overrepresented among those outside the labour force, as well as among the unemployed, and their labour market position is considerably more vulnerable to economic downturns (OECD 2006). The low-skilled, also to a higher degree than the high-skilled, seem to be captured in destructive labour market dynamics; i.e., careers moving between unemployment, inactivity and low-pay employment. OECD (2003) shows for a number of OECD countries that low-skilled workers, in the second half of the nineties, had a much lower turnover in unemployment than higher skilled. At the same time the low-skilled showed a much higher persistence in low pay-jobs.

There are various explanations as to why this marginalisation of the low-skilled in the relatively rich areas of the world during the last decades has occurred. Some general explanations are associated with changes in the demand side of the labour market. Skill biased technological changes have increased the demand for education, while jobs available for persons with only compulsory education disappear – due to automation, to changes in the industrial structure, and outsourcing. (Ber-

man et al. 1994, 1998, Machin 1996, and Katz and Autor 1999, Caroli 2001, Salvanes and Førre 2003, McIntosh 2004). Another demand-side explanation is that increased trade with so-called “low-wage” countries has led to a substitution of foreign low-skilled labour for domestic low-skilled labour (OECD 1997). The inclusion of the big (partly prior) communist countries into the world economy implied a huge shift in the supply of low skilled labor in the world market. This has probably reinforced the strain on the low skilled in the rich OECD countries, since the early nineties, through the international division of labor.

The national labour markets in the Nordic welfare states have common features which may place particular strains on the labour market position of the low skilled. The labour market institutions and the political strategies towards equal allocation of welfare have contributed to – in an international context – a compressed wage and income distributions.<sup>5</sup> This wage structure, combined with a high average wage levels, makes low-skilled workers in the Nordic countries to the best paid in the world. This situation places high productivity demands on the relatively less productive workers. As a result low skilled in the Nordic countries may be relatively strongly exposed to problems related to insufficient labour demand and the demand side forces described above working to exclude the least productive from the labour market.

The Nordic countries have also in common the existence of a strong social security net which provides generous out-of-work benefit payments both within their UI systems and within the other aspects of the social security systems; such as sickness payment, disability pensions, rehabilitation programs, housing subsidies and means tested social assistance. In line with the general aim of redistribution in the Nordic welfare countries the replacement rates, in this multi-layered insurance system against loss of income from employment, are clearly higher for low- than for high-wage earners. For certain groups at the bottom of the income distribution the out of work compensation rate is higher than a hundred percent (Pedersen and Smith 2002, Fevang et al 2005). Thus, compared to the high-skilled, high income earners, the distributional profile of the social security system provide the low-skilled, low-income earners, with weak work incentives. At the same time, a common strong commitment in the Nordic countries with regard to poverty prevention have obstructed the use of strong sanctions in order to punish those who do not make the expected effort to seek or keep gainful employment. The types of sanctions available are related to the determination of benefits. However, since the public authorities in the Nordic countries in practice have guaranteed a minimum standard of living for the whole population the execu-

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<sup>5</sup> In all the Nordic countries the ratio between the average yearly earnings of employed with tertiary education and below secondary education (25–64 years of age) were approximately 1.5 in 2004. In most of the other European countries this ratio was close to 2 and in the US approximately 2.5 (OECD 2006).

tion of such sanctions means that one type of social security benefit are often substituted for another type.

Accordingly, central institutions in the welfare states may contribute to the marginalization of low-skilled, low-ability workers. This seems as a paradox since these institutions are particularly designed to protect the labour market position and the standard of living of the relatively low productive workers.

In this report we focus on the supply side disincentive effects embedded in the design of the national UI systems and supplementary arrangements and discuss to what extent these are biased towards low skilled groups.

From the late eighties/early nineties unemployment boosted in all the Nordic countries. One of the responses of political authorities was to redesign the UI systems. The motivations behind the changes were to some extent ambiguous and varied between countries. At least at an early stage, and in some of the countries, the reforms were mainly initiated to ease the economic situation of the growing numbers of unemployed. In other countries the emphasis was, from the very beginning, to improve their work and job-search incentives. Thus, the type and direction of reforms have changed over time and between countries. Looking at the countries all together we find changes in all the key variables characterising the UI-systems: The maximum duration period for UI benefits has been extended and shortened, the gross benefit level has been lowered, the entitlement rules have been tightened, the applications of active labour market policies have been changed and the control and sanctioning regimes have been considerably restructured.

The reform processes have clearly developed simultaneously with the situations in the labour markets of the Nordic countries. That is, the reforms are the political response to changes in the labour market. At the same time they are designed to improve the situation in the labour market. However, there is little comparative information on the causes for and effects of these policy changes in the different countries. In this report we will make an effort to systematise the reforms which have taken place and discuss how they interact with the development in the national labour markets.

The report proceeds as follows: To clarify the conceptual framework we describe in the next sections some key points within the economics of UI systems. In this context we refer to central theoretical and empirical contributions to the research literature which are relevant to the discussions in the report. This review is by no means complete with regard to the very rich research literature on this issue. In chapter 2, summary statistics describing the changing labor market position of different skilled groups in the Nordic countries are presented. In chapter 3, the changes since the early nineties in key characteristics of national UI-systems are described. In chapter 4, possible relationships between system changes

and the labor market development of the low skilled are pointed out and possible directions for further research are outlined.

### 1.3 Conceptual framework and theoretical considerations

The economic approach to the analysis of UI systems is mainly based on the theory of labour supply and particularly the search theory. A basic assumption within this theoretical framework is that workers behave as though they maximize present and future welfare. According to search theory unemployed (or employed) individuals affect their job (job change) possibilities by two types of decisions.<sup>6</sup> First, by the choice of job search intensity, i.e., how much effort is to be invested in the activity related to finding and applying for new jobs. Second, by the choice of a reservation wage, i.e., the minimum conditions – wage rates, work hours and other work related benefits – to be fulfilled in order to accept a job offer. Within this framework the economic analysis of UI systems centres around how the design of the UI system affects the incentives of employed and unemployed with regard to these aspects of search behaviour, as well as labour supply in general; entry to or exit from the labour market and number of hours the individual wants to work.

Most insurance arrangements involve the risk of moral hazard. That is, when the costs related to the occurrence of a type of misfortune are financed by somebody else, the potentially affected individuals do not invest as much effort to prevent it, as if they would have to cover costs themselves. This is also the case with regards to UI systems. One central question within the economic research literature on UI systems is to what degree they contribute to efficiency or work at the expense of it. On the one hand, lower effort among insured workers to remain in or to obtain gainful work obviously has a downside with respect to economic efficiency. However, there may be different kinds of upsides as well.

One type of potential efficiency gains relates to the quality of job matches (Belzil 2001). A decrease in the insurance against unemployment induces risk averse individuals to accept job offers which are less adapted to their preferences, abilities and human capital. Obviously, it may represent a loss of efficiency if human capital and abilities are used in jobs which give lower returns.

Another example of potential efficiency gain related to UI is that the uninsured (risk averse) workers may invest too much effort to prevent unemployment by choosing safe jobs and educations. However, it may be the higher-risk jobs which give high expected return in the long run. Acemoglu and Shimer (1999) analyzed within a general equilibrium framework the impact of risk attitudes and UI on the composition of

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<sup>6</sup> Mortensen (1977), Burdett (1997) and Van den Berg (1990) have given seminal contributions to this strand of the economic research literature.

jobs.<sup>7</sup> Unemployment insurance encourages risk averse workers to apply for jobs with higher wages and higher unemployment risk than in the no insurance case. They show that equilibrium without UI fails to maximise output when the workers (and firms) are risk averse because the capital/labour ratio becomes too low. Thus, since UI through some mechanisms may rise economic efficiency and lower it by others there is not a straight forward trade-off between risk sharing welfare benefits and productivity. In any case, the negative disincentives induced by the UI systems must be weighted against their success in achieving social political goals related to income maintenance and redistribution of wealth.

The UI systems in the Nordic countries, as well as in many others, may be described according to four key variables: The compensation rate from holding a job relative to collecting UI benefits, the eligibility rules that determines who will get benefits in the case of unemployment and who will not, the maximum duration of UI benefits if eligible, and the strictness of sanctions and control implemented to avoid problems related to moral hazard.

*The compensation rate* is a measure of the degree to which individuals' (and their households') standard of living while in work are maintained during periods of unemployment. The higher the compensation rate the more protected the insured workers are from the economic implications of losing their work. In relation to the analysis and descriptions of the national UI systems and supplementary benefits different definitions of compensation rate are relevant:

*The gross compensation rate defined within the UI system* is calculated as UI benefit payments as a per cent of the gross income the eligible worker earned in a specific period preceding the occurrence of the unemployment. In the national systems different rules regarding maximum and (in some cases) minimum thresholds are prescribed with regard to the amounts that can be paid in UI benefits. Such thresholds imply that the gross replacement rates become relatively higher among the low income earners and relatively lower among the high income earners.

*The net compensation rate defined within the tax- and UI system* is the gross compensation rate net of taxes and contribution payments. The progressive tax systems in the Nordic countries generally work to increase the real compensation of high-income groups compared to low-income groups.

*The net total compensation rate* is the value of the disposable (household) income when unemployed, relative to the value of disposable income if holding a job. In theory this concept includes all income and cost components affecting disposable income as unemployed relative to income as employed.

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<sup>7</sup> Acemoglu and Shimer (1999) solve a dynamic general equilibrium model with risk aversion, incomplete insurance markets and endogenous wages, productivity, consumption and savings.

In addition to the net UI benefit the social assistance received by the household while the family member is unemployed should be accounted for, as well as different types of work related costs. Since supplementary benefits are often means tested they increase the compensation rate among the low income earners. To include job related costs in the calculations have the same effect since they are often fixed – independent of income level.

According to the above descriptions, the net total compensation rate is typically higher for low income groups, than both the net – and particularly – the gross compensation rates defined within rules of the national tax- and UI systems. Since this concept describes the actual difference in the economic standard of living which is valid when an individual is unemployed and when holding a job it is *the net total compensation rate* which is the most relevant measure with regard to work incentives.<sup>8</sup> Due to its complexity this measure is, however, much more difficult to establish empirically than the gross and net compensation rates, which are defined by the rules of the UI and tax systems. However, the tax system and the supplementary benefits imply that a given change in the gross compensation rate may affect high- and low-skilled workers differently.<sup>9</sup> For instance, a reduction in the gross compensation rate may be compensated by an increase in the supplementary benefits among the low income earners to a greater extent than among high income earners.

*The eligibility rules* determines who is entitled to UI in case of unemployment. The eligibility rules vary considerably among the Nordic countries. However, in all the countries the conditions are in some way related to earlier work effort, which reflect that their main motivation is to secure that those who are covered are clearly members of the labour force. In Norway entitlement to UI benefits is conditional on a minimum amount of earnings during a reference period. In Denmark and Finland the rights are related to number of weeks worked, and membership in an UI fund. Considerable parts of the registered unemployed (20–40 percent) in the Nordic countries actually are not covered by the UI.

*The maximum duration* rules establish the period during which the unemployed may receive benefits within the UI system based on the eligibility rights acquired during one reference period. However, due to the multi-layered social security system in the Nordic countries it is not always the case that the unemployed who are entitled to benefits within the UI systems are better-off than those who receive some other kind of social welfare. Again, this is a problem first and foremost related to the low

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<sup>8</sup> However, it may also be argued that the rules of the different tax and benefit systems are so complex that the individual worker may not be able to know the actual net disposable compensation rate, and therefore he or she may not be able to react on the economic incentives or changes of the rules.

<sup>9</sup> See Pedersen and Smith (2002) and Pedersen and Smith (2003) where net disposable compensation rates, including UI benefits and all types of social income transfers and fixed costs of work (transportation and child care costs) are included for Danish employed and unemployed workers observed in 1993, 1996 and 2001.

income earners, and thus tends to be associated with the low-skilled. Thus, not to be eligible for UIB or that the UIB period is exhausted probably have different welfare implications for unemployed belonging to different skill groups.

*Sanctions and control.* To reduce the likelihood of moral hazard, UI systems condition benefit payments on some requirements regarding the claimant behaviour as a job seekers.

In general, such conditions are meant to secure that the unemployment state is really involuntary and that the claimants are real job seekers. To make sure that such demands are met the labour market authorities – usually the local labour market offices – exercise different sorts of monitoring routines. Those who fail to meet the demands are exposed to sanctions which usually mean that their benefits are stopped for a period of time. The monitoring is carried out in various manners. Job seekers may have to show up at the local employment office with some regularity and give an account of their behaviour as job applicants. The degree of monitoring varies in intensity and strictness. Due to the supplementary benefits available in the Nordic countries – such measures are likely to affect the economic welfare of unemployed who are located in the lower end of the income distribution less than those who are located higher up. Hence, the actual harshness of such sanctions may be relatively weak to the low-skilled/low-income earners.

The main (and original) motivation of active labour market policy (ALMP) has been to increase the employment prospects of the participants by upgrading their skills through different kinds of training programs. However, during the last decade some countries – for example Denmark – have started to use active labour market policies (ALMP) as a kind of sanction or work test.<sup>10</sup> That is, if the claimants don't find a job within a certain period of time they receive an offer to participate in an active labour market program (ALMP). If the offer is turned down for no apparent good reason, the unemployed might risk sanctions to their benefit.

Search theory predicts that an unemployed worker who is insured will raise his or her reservation wage when the compensation rate increases.<sup>11</sup> In addition the unemployed will reduce the search effort, which among other things implies that the willingness to move to another geographical area to get a job declines. The effect of an increase in the benefits of the employed workers covered by the insurance is that they decrease their job maintenance effort. The basic reason for these behavioural effects is that the relative disutility from unemployment is reduced when the compensation rate increases. Thus, basic search theory predicts that among the

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<sup>10</sup> In Denmark, where unemployment rates started to increase and were high since the mid 1970s, formal ALMP programmes were put into force already in the 1980s. In Sweden it might be argued that active labour market policy has been an important part of economic policy for many decades.

<sup>11</sup> This is shown by Mortensen (1977) in a model with a fixed duration of UI- payments, sequential search and a stochastic duration of employment spells.



eligible higher UI benefits may increase both the incidence and the duration of individual unemployment.

However, when eligibility is conditional on earlier work effort, the effect of higher UI benefits on the total unemployment remains in general ambiguous. The reason is that the disincentive effects on the search behaviour and on the labour supply of insured workers are not valid for all members of the labour force. The incentives of those who are currently *not eligible* for UI benefits and of the unemployed who are close to benefit exhaustion are, on the contrary, improved. For these groups a higher benefit level makes it more attractive to accept job offers since they by working acquire entitlement to a more favourable insurance against unemployment. This is the so called *entitlement effect* (Mortensen 1977).

According to the search theory the unemployed workers reservation wage declines as he or she approaches the date that UI benefits expire. Thus, a limited UI benefit period should result in a gradual increase in the escape rate from unemployment over the specified time span. This implies that a shorter maximum benefit period reduces the expected length of unemployment.

Theoretical considerations regarding monitoring and sanctions are based on the seminal work of Becker (1968) about crime and punishment.<sup>12</sup> To break the law is optimal if, and only if, the benefit from this action exceeds the expected loss, which increases with the probability of being detected and with the level of punishment (Becker 1968). Thus, to increase the probability that the claimants meet their behavioural obligations as active job seekers, they can either be monitored more closely or sanctioned more strictly. However, monitoring is costly and stricter sanctions may be at odds with the obligation to prevent poverty. One way to approach the problem of moral hazard is to require that the claimants participate in some activity which reduces their leisure time. The unemployed who have relatively high preferences for leisure will then increase their search effort. The policies which demand participation in ALMP after a period of passive unemployment may be interpreted with this context.

Given the Nordic background important questions relate to how the design of the UI system affects the transition from UIB to other types of social benefits and from unemployment to states outside the labour market. Røed and Westlie (2006) find that approximately 25 percent of completed unemployment spells in Norway end in transition from UI benefits to other types of social benefits, mostly disability pensions. Changes in the UI system not only affect the utility of unemployment relative to employment. The individual worker's relative assessments of other labour market states are also affected. If the conditions regulating the access to UI benefits become more restrictive and/or the benefit payments are reduced it may seem relatively more attractive to withdraw to states outside

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<sup>12</sup> The economic literature on monitoring and sanctions – both theoretical and empirical contributions – is summarized in Fredriksson and Holmlund (2006).

the labour market. For some of the low-skilled workers, who have low expectations regarding current and future income from work, the relative utility of such alternatives may increase more than the utility related to employment as a result of a tightening in the UI system.

It may also be important to look at the career development of the unemployed in a somewhat longer perspective than merely to the end of the unemployment period. Belzil (2001) points out that the level of UI benefits not only affects the escape rate from unemployment but the duration of subsequent employment spells as well. That is, if a more generous UI system increases the reservation wages of the job applicants this may prolong the period of unemployment, but also result in higher quality job matches and more stable employment spells. In economic terms the quality of a match increases with the return to the human capital and the abilities the workers hold, and will be reflected in the wage offers of the job applicants. Since both employers and employees realize the advantage of a good match relative to a bad match the employee will tend to stay longer in a job, the higher the quality of the match is.

In the literature on segmented labour markets it is hypothesized that so called “bad jobs” have a negative effect on the a persons future labour market prospects due to both low (or negative) human capital accumulation and stigmatization. Faced by uncertainty about the quality of job applicants, firms may use, in addition to unemployment duration, the type of earlier jobs, “bad” jobs or “good” jobs, as an indicator of future productivity.<sup>13</sup> Thus, when the unemployed are “forced” by more restrictive UI system to accept “bad” jobs they may more easily end up in a negative and self reinforcing labour market dynamics moving between unemployment and low paid – “bad” jobs.

There are, of course, dimensions other than those related to the short-term economic situation which affect the evaluation of the individual loss related to unemployment: Non-financial rewards from employment, negative stigma of unemployment, the possibility building up human capital through work experience and long-term career perspective are some examples of potential losses. The distribution of these types of losses may also be unequally distributed between skill groups. When this is the case the strength with which a certain change in key characteristics of the UI system affects the work incentives is also likely to depend on skill characteristics: Assume an UI benefit system that gives for instance a compensation rate of 65 per cent to all. Further, assume exogenous economic shocks, leading to termination of jobs and subsequently a certain rate of unemployment – randomly distributed. An increase of 10 percentage points in the compensation rate of the UI benefit will – according to simple economic reasoning – give longer periods of unemployment among employees eligible for UI benefits. The impact – at the individual

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<sup>13</sup> This works in equilibrium since high productivity workers find “bad” jobs more costly and invest more to get a “good” one.

level – will however vary according to preferences (work motivation) and prospects (job opportunities, the quantity and the quality of potential job offers). Assuming both work motivation and job opportunities to be *positively correlated* with education, gives two arguments for expecting that the negative incentive effects of higher UI benefits among those eligible is stronger for low-skilled than for highly educated job seekers.

#### 1.4 Empirical Research – some main problems and results

The economics of UI has been an active research area during the last decades. Studies have been based on data describing the labour market history of individual workers. The growing supply of such individual level panel data based on administrative registers – particularly in the Nordic countries – has increased the activity within this research field considerably during the last decades. Most of the effort has been directed towards analysing changes in the key characteristics of the UI-system on the unemployment duration of individual workers. The main focus of interest has been on the transition rate between unemployment and employment.<sup>14</sup> Less effort and attention has been allocated to questions related to how such changes have affected the transition to states outside the labour market. That is also the case with regard to how the design of UI systems have affected the careers of the unemployed individuals in a longer perspective, i.e., stability of subsequent employment, the tendency to enter low pay jobs, and return rates to unemployment.

There is a fundamental difficulty in this kind of empirical research related to disentangling causal effects from correlation resulting from uncontrolled heterogeneity. The basic reason for this problem is that the labour market development of individuals “not treated” has to represent the contra factual for the “treated”, i.e., the labour market development they would have experienced in the absence of the influence of the policy measure. However, as mentioned in the introduction, it is difficult to find independent (random) variation in the way individuals are affected by policies, i.e., variation which is not also correlated with characteristics that influence their labour market performance.

To put this in somewhat more concrete terms: One central issue have been how the gross compensation rate affects the duration of unemployment by increasing the moral hazard problem. In the Nordic countries, the compensation rates, as described above, clearly decrease with income from work. Even with very rich data about the characteristics of individual workers and their labour market histories it is difficult to control for all the individual heterogeneity that have a positive influence on both the ability to escape unemployment and on the level of income. However,

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<sup>14</sup> Relatively recent surveys of this literature are provided by Holmlund (1998), Meyer (2002) and Fredriksson and Holmlund (2006).

when this control is not attained it is not possible to interpret a negative correlation between the compensation rate of individuals and their unemployment duration as a causal relationship. Another research issue has been to identify the true duration dependence of unemployment. To what extent the duration of unemployment, by increasing human capital deterioration, disillusion and stigmatization, reduces the transition rate to employment? However, to identify this causal association the negative correlation between unemployment duration and the transition rate must be corrected for adverse selection. In this context adverse selection signifies that the more persons are endowed with weak fixed characteristics (laziness, bad moral, lack of motivation) the longer it takes to get a job.

In the US, researchers have used differences in the organization of unemployment systems between states to identify independent variation in the way persons are affected by different UI systems. That is, assuming that individuals from different states are not systematically different with regard to qualities that affect labour market outcome, the system induced variations in how they are hit by policy measures may be considered to be random.<sup>15</sup>

In the European studies it is first of all reforms in the UI systems which have been the sources of such independent variation. But as pointed out in Røed and Zang (2005: 1800) "..., empirical evidence from the United States appears more convincing than evidence from Europe, as there are more sources of exogenous variation in benefits in the United States due to differences in benefit schedules from state to state". As will be apparent from the descriptions in Chapter 3 of this report there are systematic differences with regard to the key characteristics of UI systems both between the Nordic countries and over time, due to reforms in the national systems. Nordic researchers have to some extent utilized the independent variation in policy measures that originates from reforms. However, with few exceptions (Røed et al 2002) the differences in UI system across countries have not yet been utilized to identify causal relationships of this kind. Since political, cultural and economic matters are quite similar across the Nordic region such country specific system differences is likely to be an equally good source of independent variation as the state specific system differences between North American states.

There has been a lot of empirical research on the relationship between the transition rate from unemployment to employment and the level of the (mainly gross) compensation rate. Reviewing the literature Layard et al. (1991: 255) conclude that the elasticity of the duration of unemployment with respect to the compensation rate is in the interval 0,2–0,9. This means that a ten percent rise in the benefit level increases the expected duration by between two and nine percent. Results from United States tend to support a significant negative effect of a higher UI benefits level on the transition rate to employment among (insured) unemployed

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<sup>15</sup> This of course also include differences in business cycles.

(Moffit 1985, Katz and Mayer 1990). Evidence from Europe is more mixed. Based on European data, significant benefit level effects on the exit rate from unemployment have been hard to establish (van den Berg 1990, Hunt 1995). In recent years there have been a number of Scandinavian contributions to the literature on this research issue (Among many others: Hernæs and Strøm 1996, Carling et al 2001, Røed and Zang 2003). These studies tend to substantiate that higher benefits reinforces the disincentive effects of UI. A problem related to the study of this issue in the Nordic countries is that there have been very few institutional changes in the compensation rates that can be used to identify independent variation between individual unemployed in this policy measure. Røed et al. (2002) use the differences in replacement rates between Sweden and Norway and provide clear indications that the benefit level reduces the transition rate from unemployment to employment.<sup>16</sup>

Pedersen and Smith (2002) calculate the net disposable compensation rates for Danish employed and unemployed workers observed in 1993 and 1996 and estimates the effects of the compensation rate in 1993 on search behaviour and on the employment state three years later. According to Pedersen and Smith, the incentive effects on search behaviour are mixed, but the net compensation rate in 1993 has a significantly positive effect on the probability of being unemployed or receiving other social income transfers in 1996, especially for women. In Pedersen and Smith (2003), extended estimations based on Danish panel data for the period 1996 and 2001, show that the economic incentive effects seem mainly to exist among the short-term unemployed, while for long-term unemployed the incentive effects are insignificant.

The entitlement effect implies that unemployed who are close to benefit exhaustion will respond to higher benefits by lowering their reservation wage and increasing their search effort. According to this theory the estimated effects of higher benefits should be sensitive to the length of the remaining entitlement period. Katz and Mayer (1990) test this hypothesis on data from the United States. Their result supports the hypothesis, but is only slightly significant.

The evidences from empirical research on the relationship between exit rates from unemployment and the maximum duration of the benefit period are largely consistent with the theoretical predictions. That is, the exit rates from unemployment seem to increase as the claimants approach the date when benefit payments expire. Studies from both Europe and North America seem to report this shape of the relationship.<sup>17</sup> Analyzing Norwegian data Røed and Westlie (2006) reveal that the increase in the escape rate from unemployment take place close to the termination of the benefit period and not gradually over the whole period as predicted by the search theory. Both Mofitt (1985) and Katz and Mayer (1990) find that a

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<sup>16</sup> We will describe this study more closely in Chapter 3.

<sup>17</sup> See Fredriksen and Holmlund (2003) and Røed and Westlie (2006) for references.

one week increase in the maximum duration of the UIB period in the US raises the expected length of unemployment with approximately one day. Card and Levine (2000) find that the effect is only half a day. Lalive and Zweimuller (2004) reveal a corresponding effect of 0.4 days in Austria.

Empirical research indicates that to call the unemployed benefit receivers in for consultations at the employment office has a positive influence on their transition rate to employment. Studies from the UK, using an experimental research design, clearly indicate that the employment probability of the claimants increased considerably in the period prior to the date appointed for the interview at the employment office (Dolton and O'Neill 1996). Examining the Norwegian UI –system and supplementary arrangement over time quite closely Røed (2006) points out that to distribute UI or supplementary benefits to claimants without such “check points” result in very long unemployment periods. However, the strictness of the sanctions the unemployed job seekers were exposed to at the “check points” did not seem to make a lot of difference. Analyzing the implications of sanctions on the escape rate from unemployment, Røed and Westly (2006:27) conclude:

... the harshness of duration –constraints and sanctions is of minor importance; the behavioural impact seems to be almost the same regardless of whether the treat is to terminate the benefit completely or only to reduce it slightly (or to terminate it for a short period of time).

This result indicates that the negative bias in the actual strictness of sanctions towards low skilled embedded in the Nordic UI systems may not have that big behavioural implications after all.

Black et al. (2003) analyse a project in Kentucky in which a randomized group among the unemployed benefit receivers were appointed to take part in ALMP. The average duration of unemployment in the participant group was 2.2 weeks shorter than in the control group. However, nearly all of the reduction was the result of an increase in the transition rate to employment in the period prior to the start up of the ALMP. That is, the “threat” of having to participate in such programs induced the claimants to intensify their search activity and/or lower their reservation wage. Studies from Denmark analysing the implementation of such activity demands in the Danish labour market policy from the mid nineties clearly indicate that such “threat” effects apply (Geerdsen 2006, Rosholm and Svarer 2004).

As mentioned in the introduction to this section, the economics of UI has been an active research area during more than twenty years. The main empirical results more or less support theoretical predictions regarding the behavioural consequences of different system designs. However there are still many research questions which have not been properly concluded by empirical research. This particularly regards the long-term effects of changes in the system designs on the labour market career of the unem-

ployed. It also regards the effect of interaction between different system designs and institutions in the labour market.





## 2. The changing labor market position of the low skilled in the Nordic region

In this chapter we examine major trends in the labor market situation of the adult Nordic populations according to skill levels, since the early nineties. That is, at three different points in time we describe – in country specific sections – how individuals belonging to different skill groups are distributed on states outside and inside the labor force, their relative wages and their dependency of social transfers. The purpose is to describe main trends with regard to labor market integration and/or marginalization of the low skilled in the Nordic countries.

In the country specific descriptions we define low skilled as individuals who have not completed an upper secondary education. By an upper secondary education we understand a high school education which is regulated to three or four years of schooling after lower secondary and which give access to university education and/ or to a vocational occupation.

Table 2.1 shows the fraction of low skilled in the Nordic populations by age groups and gender in the early and mid 1990s and in 2003. In this table the low skilled group is separated between those with only lower secondary education (ls) and those who have acquired some – but not a complete – upper secondary education (lus).<sup>18</sup> This distinction is only possible to do in Norway and Sweden. As can be seen, the last group is quite large in both countries. The table probably illustrates a difference between the educational systems in Norway and Sweden, on the one hand, and Finland and Denmark on the other. That is, in the two last countries the total groups of low skilled are generally smaller than in the two first. The reason may be that Denmark and Finland have a smaller group with an uncompleted upper secondary education. In Denmark, the extensive apprenticeship system is likely to get hold of those who otherwise would have ended up with an uncompleted upper secondary education. Instead, they get a vocational education and thereby escape the low-skill group.

The numbers in Table 2.1 clearly illustrate the dramatic reduction in the population shares of the low skilled group since the early nineties. Yet, in the Swedish and Norwegian case, it is interesting to notice that in

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<sup>18</sup> In Sweden this signifies individuals who are registered with “fögymsial utbildning högst 2 år” as their highest completed education. In Norway this group is registered with “videregående grunnutdanning” as their highest completed education.

the prime age male population this reduction first of all takes place in the share of the lowest educated among the low skilled.

For prime aged (25–49) the reduction in the population share of low skilled from 1990 to 2003 is between 4 (Danish males) and 22 (Swedish females) percentage points. Measured in this manner the change is clearly smallest in Denmark and biggest in Norway, and generally greater among females, who as a group started to educate at a somewhat later stage than the males.

This development is the result of the huge expansion of the education sector in the Nordic countries. With regard to secondary education the expansion intensified in the late sixties and early seventies, while the expansion of higher educations boomed during the eighties. Similar processes have taken place all over the Western Europe region. The relatively high skill levels in the populations of the Nordic countries today reflect that the growth in the educational sector started earlier in this region. During the last ten years many of the countries in the pre- 2004 EU/ EEA region are about to, or have already caught up in this regard.

**Table 2.1: Share of low skilled in the Nordic populations**

	Females											
	25–49						50–66					
	90		95		03		90		95		03	
	Is	Lus	Is	lus	Is	lus	Is	Lus	Is	Lus	Is	lus
Norway	19	39	14	37	8	29	24	22	20	27	14	28
Sweden	23	38	17	38	11	28	52	28	40	23	38	17
Denmark		38		33		26		62		53		40
Finland		30		23		15		68		57		40

	Males											
	25–49						50–64					
	90		95		03		90		95		03	
	Is	Lus	Is	lus	Is	lus	Is	Lus	Is	Lus	Is	lus
Norway	18	31	14	30	9	26	28	39	29	18	31	14
Sweden	27	33	22	37	15	34	50	19	41	27	33	22
Denmark		31		29		27		46		40		31
Finland		32		27		20		66		55		40

Is = lower secondary, lus= some, but not completed upper secondary education Sources: Statistics Denmark, Statistics Norway, Statistics Sweden, Statistics Finland

Thus, since the early nineties – and also before that – the supply of low-skilled labor in the domestic Nordic labor markets has decreased considerably. In isolation, this should work in the direction of more favorable labor market conditions with regard to this type of workers. However, as described in the introduction organizational and technological processes which have taken place on the demand side of the labor market during the last decades may have worked in the opposite direction. Main factors that were pointed out in this regard have been skill biased technological

change and the international division of labor which was intensified during the nineties due to the inclusion of the (prior) communist countries into the world economy. In the introduction we also pointed out that these development processes while interacting with the Nordic socio-economic system and labor market institutions could hit the labor market position of low skilled in the Nordic countries particularly hard.

Furthermore, a widening of the earnings differentials between low skilled and high skilled took place from the beginning of the 1970's and over the following twenty years in most EU countries. This trend was a result of increased wage gain at the top of the earnings scale and stagnant real wages at the lower end of the distribution (Machin and Van Reenen, 1998). This development was less accentuated in the Nordic countries than in several of the other European countries. This is, probably partly, due to the fact that Nordic countries are characterized by more regulated economies that keep wages of the low skilled relatively higher than in less regulated economies.

As a background for the skill-specific descriptions following below we first summarize some main features of the general labor market development in the Nordic countries during the last decades; prior to and during the period which is the focus of this report.

## 2.1 Main trends in the Nordic labor markets

Figure 1 shows the unemployment rates in the Nordic countries since the early sixties. It illustrates some important similarities and differences between the Nordic countries with regard to their labor market experiences. The oil crisis in the mid seventies initiated a great turning point with regard to the development of unemployment patterns within the Nordic region. Until then the unemployment rates were quite stable and – compared to later – at a very low level in all the four countries.

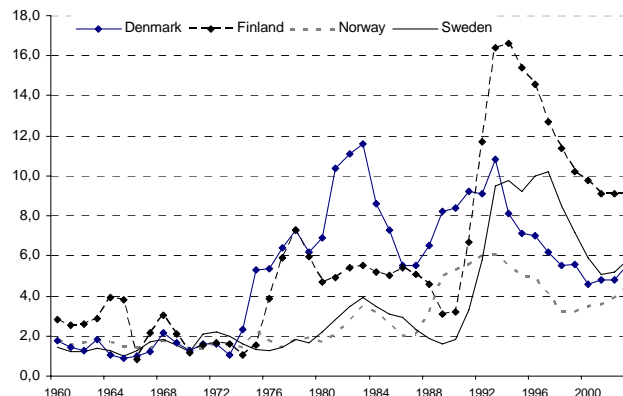


Figure 1: The unemployment rate in the Nordic countries 1960–2003

Source: Statistics Denmark

Denmark experienced a very strong increase from the early seventies to the early eighties. The Danish unemployment then decreased sharply in a few subsequent years before it boomed again towards the end of the 1980's. After the mid nineties the unemployment in Denmark dropped considerably and stabilized between 4 and 5 percent, as of the late nineties. The time path of fluctuations in the Norwegian unemployment follows the profile of the Danish quite closely, however at a much lower level. In Finland the unemployment rate increased above the Nordic average in the mid sixties, and after that again in the same years as in Denmark, i.e. in the mid seventies. It then seems to have fallen slowly again until the early nineties when "The Down Fall" of the Soviet Union sent shock waves into the Finnish economy and the unemployment rate reached dramatic heights. After the peak in 1994, when over 16 per cent of the labor force was unemployed, the Finnish unemployment rate has experienced a decreasing trend. However, as recent as in 2004 the unemployment rate was still close to 9 percent. As the Norwegian, the Swedish unemployment experiences a small peak in the mid eighties, but was low in the Nordic context until it increased sharply from the early nineties until 1998. After that the Swedish unemployment rate decreases sharply until 2003 when it slowly starts to raise again.

Thus, in all the Nordic countries we find the same two humps pattern in the profile of the unemployment development from the early seventies. In this report we focus on institutional changes and skill-specific labor market adjustments taking place during the second of these humps.

In the Nordic countries UI system reforms have partly been guided by intentions to ease the economic conditions of those who become unemployed and partly by an intention to strengthen their work incentives. Very generally speaking one may say the first kind of intentions was more dominating during the first hump in the Nordic unemployment, while the second kind of intentions took over during the second hump.

Figure 2 shows the development in the labor force participation of the prime age populations of the Nordic countries, since the early nineties. In all the four countries the male participation rate decreases from a level slightly above – or equal to – the EU average to a level slightly below this average. The negative change is most marked in Sweden. With regard to the female population the most striking feature in Figure 2 is the high level of the labor force participation rate in the Nordic populations compared to the EU average. For the female population the patterns of change are more diverse between the countries. Starting from a very high level in 1990 – compared to females in the other countries – Swedish females reduce their labor force participation with 6 percentage points, from 91 to 85 per cent. This fall is even greater than the reduction observed for males of 5 percentage points. In both Finland and Denmark smaller but marked reductions in the female participation rate are also observed from 1990 to 2004. Contrary to the other Nordic countries the Norwegian fe-

male labor force participation starts at a relatively lower level in 1990 and increases thereafter. However, by the year 2004 it had not reached the level of the other Nordic countries, yet. In any case, female labor force participation is much higher in the Nordic countries in the early 2000's compared to the EU average.

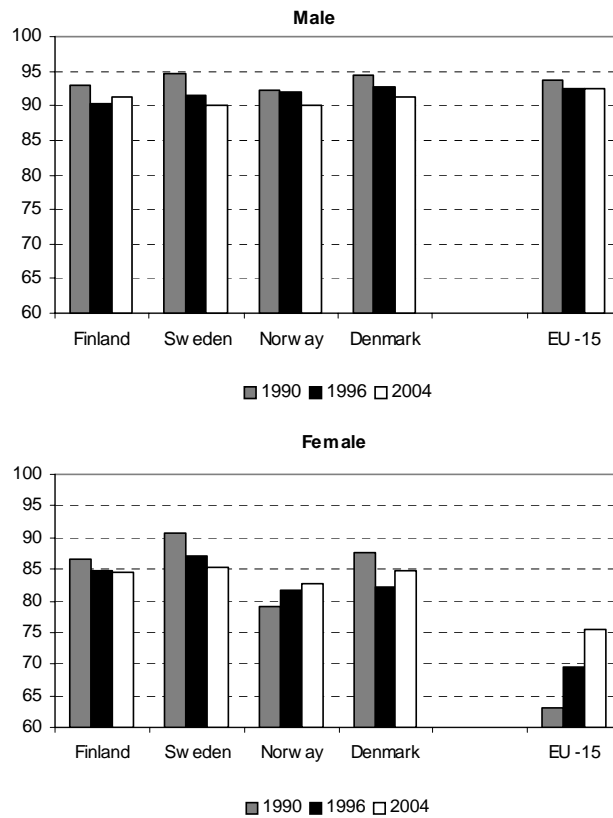


Figure 2: Labour force participation rate, population 25–54 years of age  
 Source: Employment Outlook, several editions, OECD

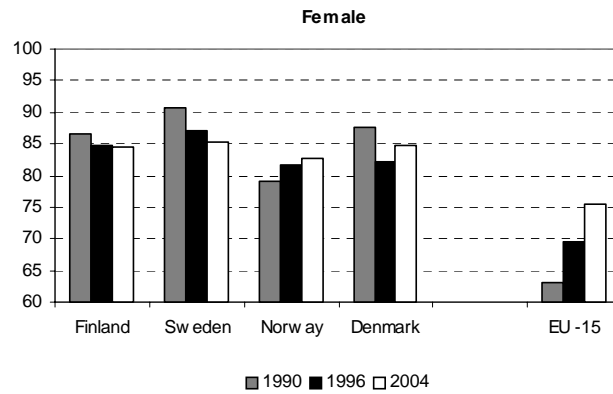


Figure 3: Employment ratios among high and low skilled, population 25–66 years of age  
 Source: Employment Outlook, several editions, OECD

Figure 3 shows the employment ratios in the population 25–66 years of age among low skilled and high skilled. Here low skilled are defined as individuals who have only attained a lower secondary level of education, while high skilled have at least completed a low university level of education. In all the Nordic countries, as well as in the EU mean, there is a huge positive difference between the employment rates of high and low skilled. In Sweden and in Finland this differences increases over the thirteen year period, while there is a slight decrease in Norway and in Denmark. The following patterns are worth noticing when comparing the Nordic countries with the EU mean in Figure 3. Even though the differences have shrunken, the employment rates of low skilled are considerably higher in all the Nordic countries. The gaps between employment rates of high and low skilled are considerably smaller in all the Nordic countries than the corresponding differences in the EU averages. Thus, these patterns of skill-specific employment rates don't indicate that the conditions in the Nordic labor markets contribute particularly to the marginalization and exclusion of low skilled labor.

In the introduction we mentioned some institutional and organizational characteristics of the Nordic labor market which could work in that direction; the weak work incentives created by the social security system and the high productivity demands towards the low skilled created by the compressed wage distribution. However, other characteristics related to the organizational and institutional setting of the labor markets in the Nordic countries may have worked to increase the employment propensities of the low skilled. To mention some cues: 1) In relation to the mobilization of the female labor force the Nordic family policy and children's day care systems clearly have been important. 2) Studies indicate that the upward wage mobility actually is quite strong in the Nordic countries (Pavlopoulos et al. 2005). Thus, to have a job may be an important investment to increase future income. Particularly in Sweden and Denmark, the strong emphasis on ALMP in the labor market policy may also have worked to stimulate the labor force participation of the low skilled in particular. Most studies do, however find sparse employment effects of the overall use of ALMP. Effects on labor force participation rates have to our knowledge not been studied (see e.g. Kluve 2005) on a review of the European literature including Denmark and Sweden).

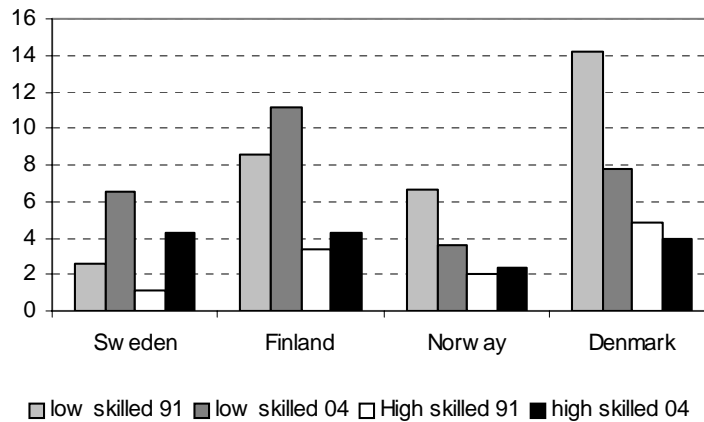


Figure 4: Unemployment rates (percent) among high and low skilled, population 25–66 years of age

Source: Employment Outlook. Several editions, OECD

Figure 4 shows unemployment rates for the same years and skill groups as in figure 3. In both years the observed unemployment rate is considerably higher among the low skilled. The figure illustrates that low skilled are more vulnerable to economic downturns than the high skilled, i.e., the difference between unemployment rates of low skilled increases with the overall level of unemployment. Looking at both Figure 3 and figure 4 it is interesting to notice that even though the unemployment rate among low skilled decreases quite considerably from 1991 to 2004 in Norway and – even more – in Denmark their employment rates remain unchanged. The reason must be that a part of the low skilled group withdraws from the labor force during this period.

One main tool of the labor market policy in the Nordic countries has been active labor market programs (ALMP), i.e., training courses or subsidized employment arranged by the employment authorities. The main motivation behind this policy has been to upgrade the skills and work life network of the unemployed and thus increase the demand for these presumably low productive workers. However, as pointed out in the introduction, ALMP have gradually become more in focus as a measure to enhance the work incentives of the unemployed as well. In all the Nordic countries there is some kind of formulation in the eligibility rules about how UIB recipients may be punished for not accepting offers of participation in ALMP. However, there are probably great variations in how these rules have been practiced between countries and over time. The emphasis on ALMP in the labor market policies of the Nordic countries is expressed in the level of recourses allocated to such measures.

Figure 5 shows the growth in public expenditure on ALMP as a percentage of GDP from the mid eighties in the Nordic countries and in the EU countries on average. Looking at the pattern of changes in this figure in relation to the changing level of unemployment – in Figure 1– it seems

clear the fluctuations in this expenditure measure has a tendency to be counter cyclical. This pattern is less pronounced in the Danish case where the level of expenditures is quite stable during the nineties, despite of a steep decrease in the level of unemployment after 1993.

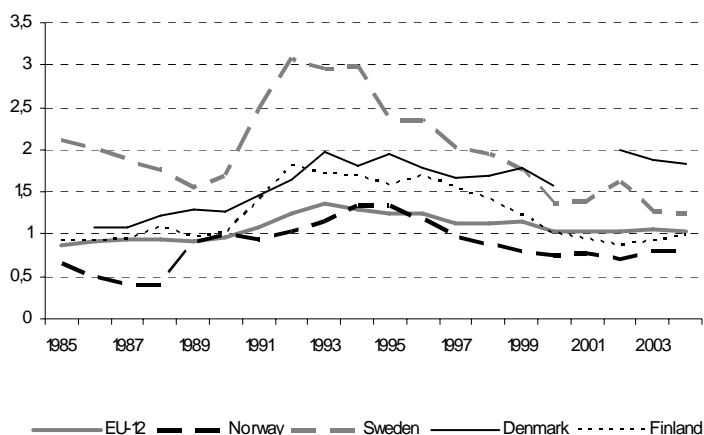


Figure 5: Public expenditure on active labor market programs as a percentage of GDP

Source: Employment Outlook, Statistical Annex, Table H, several editions

However, there are big differences between the countries in absolute expenditure which can not be explained by changes in the level of unemployment in the respective countries. In this regard the figure reflects that ALMP has been a particularly important part of the Swedish labor market policy.

Figure 6 shows public expenditure on ALMP for ordinary unemployed (excluding measures for the disable workers) as share of total public expenditure on unemployed purposes (including expenditure on unemployment benefits). Moving around the European average, the Nordic countries are not at a particularly high level in this regard. The high relative expenditure on active measures in Sweden is an exception and again reflect that ALMP programs – both in a European and Nordic context – have been particularly important in the Swedish labor market policy.



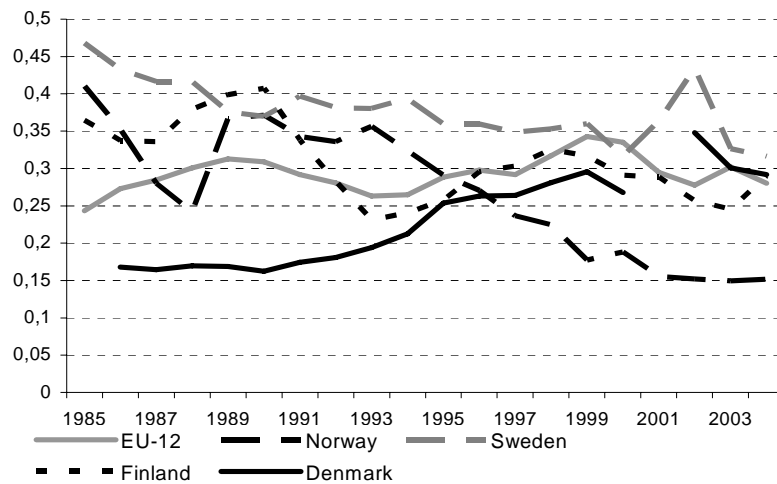


Figure 6: Public expenditure on active labor market programs for ordinary unemployed (excluding measures for the disabled) as a share of total public expenditure on labor market purposes

Source: Employment Outlook, Statistical Annex, Table H, several editions

Figure 6 illustrates the differences in trends among the Nordic countries since the mid 1980's. In Norway, on the one side, there is a strong downward trend starting in the early nineties and lasting until nowadays. However, it may be noticed that this development occurs parallel with a strong increase in public expenditure on active labor market measures for the disabled (vocational rehabilitation programs). A negative trend is also visible in the case of Sweden, but the fall is much weaker than in Norway. In Denmark, on the other side, there is a clearly positive trend with regard to the relative share of public expenditure on labor market purposes which is allocated to ALMP. The trend seems to become stronger from the mid nineties. This development is probably to some extent related to the policy reforms in the Danish UI systems which were initiated in 1994. From this year UIB claimants had to accept an offer of ALMP participation after passively having collected UIB in certain period. Otherwise they would lose their UIB. The labor market authorities at the same time were directed the obligation to give this offer to the claimants at the expiration of their passive period. In 1994 this period was stipulated to four years, but it was shortened year by year. Since 1997 it has been only one year. It seems obvious that this rule – when effective – will affect the scope of the ALMP.

## 2.2 The changing labour market position of low skilled in Denmark

### *Labour market status by skill level and gender*

Table 2.2 (end of this section) describes the labour market position of the Danish population 24 to 50 years old by skill level and gender. The numbers clearly indicate that the Danish low-skilled individuals are more marginalized than the rest of the labour force,<sup>19</sup> with respect to labour force participation rates, unemployment rates and different measures of dependency on public income support and active labour market policies.

The labour force participation rate is e.g. between 15 and 20 percentage points smaller for the low skilled throughout the period, for men as well as women. The labour force participation has decreased during the period regardless of skill level, although the decrease has been largest for the low-skilled. The low skilled females experienced the strongest reduction in labour force participation from 79.2 percent to 74.8 percent, whereas the lowest reduction is found for medium-skilled males who had a reduction in labour force participation from 93.3 percent to 92.4 percent. As was illustrated in Figure 2 the labour participation rate is higher for males than for females. This pattern is, however, much more pronounced among the low skilled. The gender difference is, in fact, not significant in the high-skilled group. The reduction in the labour force participation rate is likely to be caused by the large mobility into various permanent and temporary leave schemes, which took place during the mid-nineties.

The unemployment rate is throughout the period highest for the low skilled, varying between 12 and 15 percent for males and 18 and 20 percent for females, compared to 5–6 percent for high-skilled males and 5–7 percent for high-skilled females. The unemployment level has been falling for all skill groups in Denmark, reflecting both the business cycle boom of the late nineties and again, the mobility into various permanent and temporary leave schemes. The unemployment rate is considerably higher for low-skilled females compared to low-skilled males. As was the case with regard to the gender differences in labour force participation, the gender difference in unemployment is less pronounced at higher skill levels and in 1995 the unemployment rate was even lower for high-skilled females than for males.

In Denmark, there are still more women than men who work part-time. However, according to the numbers in Table 2.2 this difference has declined considerably, since the early nineties, in all the skill groups, due to a strong increase in the full-time share among female workers. In an international perspective, the Danish female part time rate is now lower

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19. The definition of low skilled in a Danish context is individuals with no completed schooling above the 10th grade (lower secondary school) or preparing courses for upper secondary school.

than the EU-15 average. In a Nordic context it is higher than both the Finnish and Swedish but considerably lower than the Norwegian one (OECD 2006). Among males the part-time rate has increased slightly between 1991 and 2002, especially for high-skilled men. The gender difference in part-time rates almost disappears between 1991 and 2002 for high-skilled workers. Surprisingly there is almost no difference in the part-time rates between skill levels. Especially, the two lowest skill levels have part-time rates of equivalent magnitude, whereas the part-time rate among high skilled is somewhat lower for both genders. This is probably due to a significant fraction of medium-skilled individuals being (part-time) students, although defined as employed.<sup>20</sup>

#### *The relative wages*

The wage ratio between low-skilled and high-skilled full-time employed females is 0.80 in 2002 while for men the same figure is 0.75, indicating that the wage difference between skill levels is smaller for females than for males. Investigating the wage distribution indicates that it is not the low-skilled women who get better paid than low-skilled men, in contrary it is the high-skilled women lacking behind high-skilled men, a results which is in line with other analyses of the Danish labour market, see e.g. Datta Gupta et al. (2006).

During the observation period, the relative wage for low skilled has decreased by 2 percentage points for males and 8 percentage points for females, i.e. the wage difference due to skill differences has increased. The relative wage between medium-skilled and high-skilled full-time workers has decreased with the same rate, indicating that the increase in the wage dispersion has mainly been driven by a relative increase of the wage among high-skilled full-time workers. Especially for women, the skill-specific wage dispersion increased, even though the female wage distribution is still narrower than the male wage distribution.

#### *ALMP participation and eligibility for UIB*

To qualify for UI-benefit an unemployed person, first of all, has to be insured. Besides this requirement, the Danish UI system has a working requirement, a benefit exhaustion rule and since 1994 an ALMP requirement. Except for the insurance requirement, the eligibility rules have been subject to many and large changes during the observation period (see Chapter 3).

According to Table 2.2 low-skilled unemployed are only to a limited extend eligible for UIB, hence, in 2002 only 39.4 percent of unemployed

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<sup>20</sup> Due to the way students are defined (see footnote 23), the group of employed are likely to include some students who typically work part time. If all students are excluded from the employment group the rate of part-time jobs decreases, and almost vanish for the high-skilled group (not shown).

low-skilled males and 41.2 percent of unemployed low-skilled females were eligible for UIB. As a comparison, 67.1 percent and 71.7 percent of high-skilled unemployed men respectively women were eligible for UIB. This difference is quite striking taking into account that the main reason for not being eligible is due to lack of a voluntary membership in one of the highly subsidised UI insurance funds. Since low-skilled on average both have a higher replacement rate and a higher unemployment risk, we would have expected this group to have a higher insurance rate.<sup>21</sup> The rate of eligibility for UIB has decreased during the observation period. This tendency is true for all skill groups, although the drop has been significantly larger for the low skilled (23 percent point for females and 16 percent point for males) compared to the high skilled (7 percent point for females and 9 percent point for males). This development indicates an ongoing process in the labour market, where the low-skilled unemployed, to a larger extent than the higher skilled become dependent on the public assistance arrangement outside the UI – system, i.e., social assistance, disability pension and rehabilitation payments. This tendency might be caused by the fact that the eligibility rules and activity requirement in the UI system has been strengthened, whereas the requirements within the welfare system, until lately, have remained unchanged. Moreover, for the most disadvantaged (no / low spouse income, no fortune, low previous wage and at least one dependent child) the monthly difference between UI benefit and social assistance is very low (see Appendix). For all skill groups, females receive UIB to a greater extent, but the gender difference seemed to have vanished during the observation period and by 2002 the percentage of unemployed women who are eligible for UIB is only 2–4 percentage point higher than that of men.

In Denmark ALMP has been an important element in the labour market policy since initiatives taken in the late 1970s. The administration of the programs is divided between the national labour market system and the municipalities. The labour market system is responsible for insured individuals who are eligible for UIB, and the municipalities are responsible for social assistance (SA) recipients.<sup>22</sup> Hence, even though SA recipients with no problems besides unemployment in many aspects resemble UIB recipients, the administration of and requirements to the two groups of unemployed might differ. However, since 2003 the two systems have converged and are now using the same kinds of programs, and by 2007 all programs will be provided by common job centres (“jobcentre”) regardless of the kind of benefit the unemployed person receive.

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<sup>21</sup> In 2002 the percentage of individuals (24-50 years old) being member of an insurance fund was 62 percent, 83 percent and 84 percent for respectively low-skilled, medium-skilled and high-skilled females, and 60 percent, 77 percent and 73 for respectively low-skilled, medium-skilled and high-skilled males.

<sup>22</sup> See Chapter 3 for a detailed description of the two systems.

ALMP comprise a broad range of different activities, which can be divided into four main categories:

1. Private sector employment programs
2. Public sector employment programs
3. Classroom training
4. Other programs

Employment programs consist of subsidised jobs, i.e. jobs where the unemployed person is hired at a wage below the working minimum wage (typically 50 percent). These jobs are typically restricted to last 6–9 months. Classroom training consists of different educational programs which might result in specific labour market qualifications (such as a truck certificate). In some cases classroom training consists of formal education. Other programs include among others job-search programmes, counselling and self-employment grants.

The administration and thereby the registration of ALMP has changed during the observation period. From 1988 to 1994 ALMP was administered by the so-called ATB (work offer) and UTB (education offer) commissions. Data for this period is only available from the labour market counsels (our source is DREAM<sup>23</sup>), and is not included in the official registration of ALMP from Statistics Denmark. Since 1994 ALMP has been registered in a central national register, AMFORA. In Table 2.2 we have included numbers from both data sources, and as it can be seen, the two sources are not strictly equivalent.<sup>24</sup> The numbers from AMFORA show that skill-differences seem to become stronger from 1995 to 2002. Hence, in 2002 the fraction of unemployed persons in ALMP is around 15 percentage points higher among low skilled compared to high skilled, whereas in 1995 there is almost no skill difference. This development is clearly related to the reform initiated in 1994 making participation in ALMP compulsory for UIB claimants after a certain period of passive benefit collection. As already described in section 2.1 the passive period was initially four years, but then each subsequent year reduced by one year until 1997. If the low skilled on average have longer unemployment spells than the other groups this may explain that their ALMP participation rate increased quite sharply from 1995 to 2002. That is, since they in that case should have been more affected by the reform than the other groups. The reduction in the ALMP participation rate among the high skilled, during the same period, may be the result of a redistribution of

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<sup>23</sup>. Our data source is DREAM from “Arbejdsmarkedsstyrelsen” (Danish National Labour Market Authority), who base their information of ALMP on data from CRAM for the period 1991-1994, from AF-match for the period 1991 to 1999, and from AMFORA for the period 2000 and onwards.

<sup>24</sup>. The different data sources used in DREAM makes it hard to compare number between periods. Especially numbers from before 1994 might to some extent be defective.

the programme capacity towards the low-skilled unemployed. However, this is just a hypothesis.

*Social security, rehabilitation, disability pension, and education*

In Denmark, recipients of SA can be divided into two groups:

1. Unemployed individuals with no problems besides unemployment, who are ineligible for UIB. This group has to be available for the labour market in order to receive social assistance.
2. Individuals with so severe social problems that they are not immediately able to undertake an ordinary job.

Group 1 are categorized as unemployed in Table 2.2 (though ineligible of UIB), and it is hence only members of group 2, who are included in the fraction of social assistance recipients presented in Table 2.2

Table 2.2 shows that the low-skilled individuals to a greater extent are receivers of social assistance. 6–8 percent of the low skilled females and 5–7 percent of low skilled males receive social assistance, compared to less than 1 percent both among high skilled females and males. This proportion has been fairly stable for the high skilled, whereas it has increased especially for low-skilled females with a 39 percent rise (from 5.9 percent to 8.2 percent of the population).

The fact that there has been an increase in the proportion of low skilled receiving social assistance, confirms the hypothesis that the large overall reduction in unemployment has not enabled the most marginalized group to be integrated in the labour market. The rise in the proportion of immigrants and refugees, due to large immigration inflows during the 1990s, explains part of this development. Since the immigrants on average have a lower educational level, and further often lack skills in (Danish) language, these groups have had low employment rates, and a large proportion of the immigrant population from less developed countries has been dependent on social assistance, see Pedersen and Smith (2003).

Besides social assistance, rehabilitation is an option for individuals who are not able to undertake an ordinary job because their working capacity has been reduced considerably for physical, psychological or social reasons, and who are considered to be able to undertake an ordinary job after the rehabilitation. It is the municipality that decide who can be assigned to rehabilitation. As the benefit payments received on rehabilitation equals the unemployment benefit there is a strong incentive for receivers of social assistance to be evaluated as eligible for rehabilitation payments.

The proportion of low skilled receiving rehabilitation payments is 1 percent among males and 2.5 percent among females. These figures are

much higher for low-skilled than for high-skilled individuals. The proportion of low-skilled individuals receiving rehabilitation payments has increased during the period, by a factor 5 for females and a factor 2 for the males. Rehabilitation is almost twice as likely among females as among males.

Permanent disability pension (*førtidspension*) is also an option available for persons with reduced working capacity, due to health or social conditions. It can be received by people aged 18–66 in three different levels depending on their health condition. This practice is administered by the municipalities. Temporary disability pension does not exist in the Danish system. However, in Table 2.2 persons on sickness leave payments of more than 8 weeks duration are included in the category ‘temporary disability pension.’<sup>25</sup>

Disability pension is most prevalent among low-skilled individuals, 11 percent for men and 12 percent for women, compared to respectively 1.3 percent and 2.3 percent for high-skilled men and women. There has been an increase in the proportion receiving disability pension or long-term sickness leave payments for all skill groups. Numbers from Ministry of Finance (1996) show, that the increase in disability pension receivers has mainly taken place among persons with no working capability. Though this pension - by definition - should not be subject to economic incentives, it may be noted that this group has had the highest increase in the compensation rate. The disability pension is slightly more frequent among females, but in general the gender difference is barely noteworthy.

The category ‘ongoing education’ in Table 2.2 contains those individuals who are enrolled into an ordinary education as their main activity, despite these individuals may also hold a job besides being students.<sup>26</sup> The proportion of the two lowest skill groups who are categorized as being enrolled in the educational system as their main activity has been fairly constant during the period, whereas the proportion of students among high-skilled individuals has increased slightly. This may partly reflect the fact that Danish youth tend to acquire higher educations.

In 1994, a large leave scheme programme was implemented: The leave schemes for education, child care and sabbatical leave. The educational leave<sup>27</sup> (“uddannelsesorlov”) was introduced by the labour market reform in 1994 with the purpose to reduce long-term unemployment, by promoting job rotation and re-qualification. Individuals who entered the educational leave schemes should be substituted by an unemployed wor-

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<sup>25</sup> Individuals with long-term sickness problems have the right to sickness leave benefit for up to 52 weeks. If they still are sick after this period they may receive permanent disability pension or possibly rehabilitation payments.

<sup>26</sup> Statistics Denmark defines this group as individuals who are either full time students with no employment or students who are also employed in the last week of November but who earned less than a given earnings limit, defined as 80 hours’ work at the minimum wage. In 1998 this annual wage limit was 7,134 DKK.

<sup>27</sup> Sabbatical, education- and childcare leave was actually introduced in 1992. In 1994, the rules were liberalized and the take-up rate increased considerably.

ker. The leave schemes became extremely popular during 1994–1995 and when the cyclical upturn started in 1995 and open unemployment was reduced the leave schemes were gradually made less generous or even abandoned.

**Table 2.2.a Denmark. Males**

	Low-skilled			Medium-skilled			High-skilled		
	1991	1995	2002	1991	1995	2002	1991	1995	2002
Labour force (share of pop.)	82.6	80.9	76.3	93.3	92.7	92.4	96.7	95.5	94.4
- employed	84.6	84.6	87.2	91.8	93.0	94.5	93.9	94.9	95.4
- unemployed	15.4	15.4	12.8	8.2	7.0	5.5	6.1	5.2	4.6
Employed (share of pop.)	69.6	68.2	66.4	85.5	85.9	87.1	90.6	90.3	89.7
- full-time <sup>a</sup>	96.5	97.5	95.4	95.9	96.3	95.6	98.0	97.0	94.8
- part-time <sup>a</sup>	3.6	2.5	4.6	4.1	3.7	4.4	2.0	3.0	5.2
- relative full-time wage	0.77	0.77	0.75	0.80	0.80	0.78	1	1	1
Unemployed (share of pop.)	12.8	12.6	9.9	7.7	6.6	5.2	5.9	5.0	4.4
- ALMP (Amfora) <sup>b</sup>	---	11.9	32.5	---	26.0	22.5	---	23.0	17.6
- open unemployment (Amfora) <sup>b</sup>	---	88.9	67.5	---	74.0	77.4	---	77.0	82.4
- ALMP (DREAM) <sup>c</sup>				17.2	14.4	21.0			
- open unemployment (DREAM) <sup>c</sup>				82.8	85.6	79.0			
- eligible for UIB <sup>d</sup>	55.7	48.2	39.4	67.4	59.7	59.0	75.7	67.3	67.1
- ineligible for UIB <sup>d</sup>	44.3	51.9	60.6	32.6	40.3	41.0	24.3	32.7	32.9
Rehabilitation (share of pop.)	0.5	0.7	1.0	0.3	0.4	0.7	0.1	0.2	0.3
Social assistance (share of pop.) <sup>e</sup>	5.6	4.7	6.6	1.8	1.3	1.6	0.7	0.7	0.9
Disability pension (share of pop.) <sup>f</sup>	7.9	9.8	11.1	1.8	2.3	2.4	0.9	1.1	1.3
Ongoing education (share of pop.)	1.0	0.9	1.0	1.9	1.6	1.5	0.8	1.1	1.8
Leave schemes		0.7	1.0		0.7	0.5		0.4	0.5

Note: measured 2<sup>nd</sup> week of November each year.

a) Full-time and part-time definitions are based on membership level of UI fond for members. and on level of employment pension contribution (ATP) – HDTID2 from Statistics Denmark.

b) Based on numbers from AMFORA from Statistics Denmark

c) Based on numbers from DREAM from Danish National Labour Market Authority. Not divided by skill-level.

d) Eligible: unemployed and member of UI fond. ineligible: unemployed not member of UI fond.

e) Receive social assistance and are not registered as unemployed.

f) Permanent = "førtidspension", temporary = sickness leave above 8 weeks.



Table 2.2.b Denmark. Females

	Low-skilled			Medium-skilled			High-skilled		
	1991	1995	2002	1991	1995	2002	1991	1995	2002
Labour force (share of pop.)	79.2	74.8	74.8	91.2	88.3	88.7	96.0	93.9	93.5
- employed	80.3	80.2	80.2	88.5	89.8	91.3	93.0	95.2	94.6
- unemployed	19.7	19.8	19.8	11.5	10.2	8.7	7.0	4.8	5.4
Employed (share of pop.)	63.3	59.5	59.5	80.5	78.9	80.9	88.8	88.9	87.4
- full-time <sup>a</sup>	79.1	87.2	87.2	80.0	88.7	92.9	88.0	92.8	94.3
- part-time <sup>a</sup>	20.9	12.8	12.8	20.0	11.3	7.1	12.0	7.2	5.7
- relative full-time wage	0.88	0.85	0.85	0.95	0.90	0.84	1	1	1
Unemployed (share of pop.)	15.8	15.0	15.0	10.6	8.9	7.8	6.8	4.6	5.1
- ALMP (Amfora) <sup>b</sup>	---	24.7	24.7	---	26.1	26.2	---	24.1	14.5
- open unemployment (Amfora) <sup>b</sup>	---	75.3	75.3	---	73.9	73.8	---	76.0	85.5
- ALMP (DREAM) <sup>c</sup>				21.1	12.2	12.2			
- open unemployment (DREAM) <sup>c</sup>				78.9	87.8	87.8			
- eligible for UIB <sup>d</sup>	64.8	55.2	55.2	74.5	67.9	61.7	78.0	73.2	71.7
- ineligible for UIB <sup>d</sup>	35.2	44.8	44.8	25.5	32.1	38.3	22.0	26.8	28.3
Rehabilitation (share of pop.)	0.5	0.9	0.9	0.3	0.5	1.4	0.2	0.2	0.5
Social assistance (share of pop.) <sup>e</sup>	5.9	5.8	5.8	1.6	1.5	1.7	0.7	0.7	0.6
Disability pension (share of pop.) <sup>f</sup>	7.7	10.1	10.1	1.8	2.3	2.4	1.2	1.5	2.3
Ongoing education (share of pop.)	1.2	1.2	1.2	2.6	2.7	2.7	0.7	1.2	2.0
Leave schemes		3.0	3.0		2.4	1.5		1.5	0.9

Note: measured 2<sup>nd</sup> week of November each year.

a) Full-time and part-time definitions are based on membership level of UI fond for members and on level of employment pension contribution (ATP) – HDTID2 from Statistics Denmark.

b) Based on numbers from AMFORA from Statistics Denmark

c) Based on numbers from DREAM from Danish National Labour Market Authority. Not divided by skill-level.

d) Eligible: unemployed and member of UI fond, ineligible: unemployed not member of UI fond.

e) Receive social assistance and are not registered as unemployed.

f) Permanent = "førtidspension", temporary = sickness leave above 8 weeks.

*In summary*

The skill-differentiated picture of the Danish labour market from 1990 to 2002 gives the impression that the low-skilled group has become more marginalized. Not only have they had the largest decrease in the labour force participation rate, and the biggest drop in the employment rate, the relative full-time wage of this group compared to the high skilled has also been declining. Also the fraction of low-skilled unemployed who are eligible for UIB has declined significantly and now less than half of the low-skilled unemployed are eligible, whereas 2/3 of the medium- and high-skilled unemployed are. Finally, the share of low-skilled individuals being dependent on social assistance has increased at a higher rate than that of medium-skilled and high-skilled individual.

## 2.3 The changing labour market position of the low skilled in Finland

*Labour market status by skill level and gender*

Table 2.3 depicts the labour market position of the prime age Finnish population from 1990 onwards, by gender and skill. The dominating ~~main~~ pattern described by the numbers is that the low skilled have a weaker labour market position than the medium – and particularly the high skilled individuals. That is, both in the female and male populations their employment shares are lower, unemployment is higher, as is their dependency on social transfers of different kinds. In many respects the figures also indicate a worsening of the labour market position for the low-skilled from 1990 to 2003.

Figure 1 - describing the changing levels of unemployment in the Nordic countries since 1960 – clearly indicates that Finland in the early 1990s was hit by the most severe economic recession in the Nordic region during the post war period. To understand the changing situation of the low skilled in Finland in this period it is important to have in mind the dramatic development which the Finnish labour market went through during these years. In 1990 the unemployment rate in Finland was 3.2 percent and the employment rate was 74.1 percent. Table 2.3 shows that among the prime-aged the differences between the skill groups, both with regard to the employment and the unemployment rates, were relatively small in 1990. This was the case for both genders and the differences were particularly small between the low skilled and the medium skilled. In the early 1990s Finland was hit by the recession, and by 1994 the number of employed had decreased by 450 000 people (by 18 percent),

employment rate had decreased to 59.9 percent, and the unemployment rate was 16.6 percent.

Some sectors of the economy were hit more strongly. Relatively many jobs were lost in the manufacturing industry, in the construction, and in the retail trade and hotels and restaurants. High skilled employees had a much lower propensity to lose their jobs, while employees with only a basic education and the least-experienced employees carried the heaviest burden. Table 2.3 verifies this for the prime-aged population as the unemployment rate rose by around 16 percent points among the low skilled and only around 7 percent points among the high skilled, from 1990 – (before the recession hits) to 1995 one of recession's worst years). During the same period the employment rate decreased by as much as 17 percent points among the low skilled but only 8 percent points among the high skilled.

The recession implied a structural change in the economy, and the jobs lost during the recession were not regained afterwards in the same sectors and in the same professions. Job destruction was particularly strong in textile manufacturing and in construction whereas new jobs were created in social work, IT-services, advertising and in education. The dominant pattern was that the majority of new jobs were created in high skill professions, while the job destruction primarily affected low skill occupations (Uusitalo, 2001).

Table 2.3 shows that, despite of the favourable labour market development after 1993, there still existed large differences in employment rates, labour force participation rates and unemployment rates between the high-skilled and the low-skilled in 2003. The labour force participation rates and employment rates of the low-skilled workers had not increased as much as those of the high-skilled and the medium-skilled from 1995. In 2003, 93.2 percent of high-skilled prime-age men were employed, compared to 73.8 percent of the low-skilled prime-age men. The corresponding figures for women were 85.9 percent and 62.5 percent.

According to Table 2.3 the labour force participation rates of the low-skilled workers have further been declining quite considerably, particularly in the female population, from the level of 1995. In 2003, as many as 96.8 percent of men with higher education participated in the labour force, whereas the corresponding figure was nearly 13 percentage points lower for the men with lower than upper secondary education. For 25–49-year-old women the difference in the labour force participation rates between the high-skilled and the low-skilled was even larger amounting to nearly 18 percentage points in 2003.

One explanation for the reduction in the low-skilled women labour force participation rate is that the low-skilled women have used child care home allowance as an alternative to open unemployment<sup>28</sup>. 75 percent of

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<sup>28</sup> Child home care allowance is financial support that is paid to under school-aged children's parents after their parental allowance period has ended. The allowance is taxable income. Child home

the mothers who received child care home allowance, and who had no work related income during the year, had either an upper secondary or a lower education. For those mothers whose position in the labour market is weakest, the low-skilled and those with temporary jobs, child home care allowance has been a tempting alternative (Hämäläinen, 2005).

The unemployment rate for the low-skilled men was as high as 12.1 percent in 2003 and for the low-skilled women 13.1 percent in 2003. The risk of unemployment was about three times higher among the low-skilled workers compared to those with a higher education. As shown in Table 2.3, from 1995 the unemployment rates of the low-skilled for both genders came down by over 6 percentage points but were still at a much higher level than in year 1990, i.e. before the recession. An indication of the poorer labour market situation of the low-skilled workers in Finland was that their relative share among the unemployed was much higher than among the employed in 2003 compared to year 1990.

Another relevant indicator of the development of the labour market situation of the low-skilled group is also the share of long-term unemployed among this group. It seems to be the case that in Finland prolonging of unemployment has been concentrated on the low-skilled group quite considerably (see e.g. Aho, 2004).

It is, however, good to remember that the share of those with less than upper secondary education of the working age population has been steadily declining in Finland. This decline is also reflected in the share of the low-skilled of all the prime-age unemployed: it has decreased from around 30 percent in 1990 to 17 percent in 2003 (see also Table 1.1 in Chapter 2).

As illustrated in Table 2.3 prime-age low-skilled workers, especially women, were also more engaged in part-time work than the high-skilled workers in all the inspection years. It also seems to be the case that the growth of part-time work has been more targeted at the low-skilled workers than the high-skilled ones. This can be seen by looking at the development of shares of part-time workers by skill levels. For the female prime-age low-skilled group the share in part-time work increased from 11.7 percent in 1990 to 16.7 percent in 2003, whereas for the high-skilled group the share remained about the same in these years.

Since the early 1990s the use of part-time work has increased most in the female-dominated private service sectors such as the retail trade, hotels and restaurants, the maintenance of real estate, and cleaning. Even within these sectors those jobs that demand lower education are also more likely to be part-time. The corresponding differences by educational attainment level for men working part-time are much smaller.

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care allowance can be paid to families that have a child under age 3 who is not in municipal day care. If granted, the allowance is also paid for any other children under school age who are looked after in the same way.

However, the most common form of atypical work in Finland has been temporary employment which also increased considerably after the recession. Temporary employment has not been as a whole not more common among the low-skilled compared to the medium-skilled or the high-skilled workers. It is, however, the case that for the low-skilled workers the combination of part-time and temporary work has been more common than for the highly educated, which makes their employment even more precarious.

Taking gender aspect into consideration both part-time and temporary work are highly concentrated on women (over 70 percent of part-time and over 60 percent of temporary wage earners in Finland are women), which may make the low-skilled women's position even worse than that of the men. This is also reflected in the higher share of women among the working poor in Finland (Kauhanen, 2005).

#### *Relative wages*

The developments in the skill specific labour force participation, employment and unemployment rates show worsening in the labour market position of the low-skilled in Finland during the observation period. The direction of these changes is similar to findings elsewhere and in the other Nordic countries. As regards the relative wages of the low-skilled compared to the high-skilled workers in Finland the figures in Table 2.3 seem to imply that the earnings gap between the low-skilled and high-skilled narrowed, from the early 1990s to 2003. In 1990 the low-skilled, 25–49 year-old male full-time workers, earned on average 63.5 percent of the high-skilled. The earnings gap was smaller for women; the low-skilled workers earned on average 67 percent of the high-skilled workers. In 1995 the relative wage of the low-skilled had increased to on average 69 percent for males and 72 percent for females. Hence, for women the earnings gap was still smaller. By 2003 this gap had narrowed further for both genders; the low-skilled male worker's monthly salary was on average 27 per cent less than the high-skilled worker's. For women the corresponding gap was in 2003 around 21 per cent. However, the figures between 1995 and 2003 taken from wages and salaries statistics published by Statistics Finland are not totally comparable because in this statistics an ISCED 1997 (a new classification of education) was adopted from 1998 onwards<sup>29</sup>.

That the wage differentials not seem to have grown between the low-skilled and the high-skilled in Finland might be due to the highly centralised collective bargaining and the sector-specific minimum wages. These

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<sup>29</sup> This change in the classification may affect these results. For comparison we also calculated relative wages of the low-skilled from Income distribution statistics from the same years and they imply that the earnings gap between the low-skilled and the high-skilled has remained about the same or slightly widened between 1995 and 2003.

kind of institutions have also been claimed to limit the extension of low wage employment (Fernandez et al. 2004).

With regard to the economic situation of low skilled one also has to take into consideration that a larger share of the low-skilled workers are employed in part-time jobs. This matters as far as income differentials are concerned and which do not show in the comparison of the full-time workers' monthly income in Table 2.3. Due to shorter working hours, part-timers' monthly salaries are on average lower than full-timers' monthly salaries and from the perspective of the part-time worker it is of relevance whether part-time workers can earn a decent living from the work.

If low-skilled workers are more frequently employed in part-time jobs it may also make a difference to their working careers. According to Kauhanen (2003) part-time workers in the private service sector perceived that their opportunities to develop themselves and to be promoted were weaker than what full-time workers did. It has been emphasised in the European Commission's report (2002) on social inclusion that being employed is by far the most effective way to secure oneself against the risk of poverty and social inclusion. However, remaining in and out of insecure, low paid, low quality and often part-time employment can lead to persistent poverty and weaker social and cultural relationships as well as leading to inadequate pensions in the future.

#### *ALMP and eligibility for UIB*<sup>30</sup>

Table 2.3 shows that skill specific differences also exist in the shares of the unemployed eligible for the ERA. A remarkably smaller share of the low-skilled unemployed men (26.4 percent) received an earnings-related unemployment allowance in 2000 compared to the high-skilled unemployed men (45 percent). The situation also applies for women; of the low-skilled unemployed 40.1 percent received an earnings-related unemployment allowance compared to 58.2 percent for the high-skilled women. One explanation to this skill specific eligibility pattern is that the incidence of long-term unemployment is higher among the low-skilled unemployed. There are more unemployed among this group who have received an earnings-related unemployment benefit for the maximum of 500 days and therefore exhausted eligibility for earnings-related unemployment insurance. The share of the unemployed not receiving earnings-related unemployment allowance at all educational levels was greater in 2000 compared to year 1995 for the same reason, i.e. the higher incidence of long-term unemployment in 2000.

Another reason for the lower eligibility of the low skilled is that the share of low-skilled who are members of unemployment funds is clearly

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<sup>30</sup> Note that figures in this chapter derive from 'Vaikuttavuusaineisto' and the last inspection year is 2000 instead of earlier 2003.

lower than the corresponding share of the high-skilled in Finland. The difference is around 10 percentage points (Böckerman and Uusitalo, 2005). In addition to fulfilling the employment condition, to be eligible for an earnings-related allowance an unemployed job seeker in Finland must also have been a member of an unemployment fund for at least 10 months.

The lower rate of membership of unemployment funds among of the low-skilled is somewhat surprising as they have on average higher unemployment risk, and may imply that the unemployment risk may not necessarily be the most important reason for persons to decide to join the union or an independent unemployment fund (Böckerman and Uusitalo, 2005).

In Finland ALMP can be divided into three sections: public employment service, subsidised employment and labour market training. Table 2.3 shows that among the unemployed women, the medium-skilled participated most in the active labour market measures and the high-skilled least, both in 1995 and 2000, whereas for men the highest participation was among the high-skilled unemployed job seekers and the lowest for the low-skilled (although the differences were relatively small).

As regards the type of active labour market measure there are interesting differences by educational attainment levels<sup>31</sup>. The most striking difference is that the high-skilled unemployed were more likely to participate in labour market training measures than the low-skilled or the medium-skilled both in 1995 and 2000. For the latter groups subsidised employment was the primary form of the labour market policy measure both in 1995 and 2000.

The higher share of the high-skilled unemployed participating in labour market training may partly be explained by the fact that the high-skilled more actively apply for the training and, on the other hand, are more often selected into training.<sup>32</sup>

#### *Social assistance, rehabilitation, disability pensions and education*

Another indication of the relatively poorer labour market position of the low-skilled in Finland is that they have to resort more to social assistance than the higher educated. Table 2.3 shows that, in 2000, 21 percent of the low-skilled women received social assistance compared with 10.0 percent of the medium-skilled women and 3.6 percent of the high-skilled women. It was also much more common for the low-skilled men to receive social assistance compared to the higher educated men. From 1995 to 2000 the propensity to be a receiver of social assistance did not decrease among the low-skilled as was the case among the medium-skilled and the high-skilled.

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<sup>31</sup> Based on more accurate inspection done with 'Vaikuttavuusaineisto' and not reported in Table 2.3ax.

<sup>32</sup> In Finland employment offices choose participants to labour market training on the basis of the received applications.

In Finland social assistance is a last-resort financial assistance paid to a household from municipal funds when no ordinary sources of income are available or they do not suffice to ensure the person or family the minimum level of living needed for a life of human dignity. So it is a household level social security and also means-tested. The amount of social assistance is determined on the basis of incomes and expenses of the household during each month.

The most frequent other income sources for all social assistance recipients in November 2004 were housing allowance and labour market subsidy/basic unemployment allowance (Toimeentulotukitilasto 2004). In the case of the low-skilled social assistance recipients, it is also common that they are more often not qualified for earnings-related unemployment benefit and therefore need a supplementary social insurance.<sup>33</sup> Among the low-skilled assistance is also received on average for a longer period of time (e.g. Lindholm, 2001).

Table 2.3 also shows that the low-skilled have a higher rate of participation in rehabilitation. In 2000 1.6 percent of the low-skilled male aged 25–49 participated in rehabilitation compared 1.0 percent of the high-skilled male. For women the corresponding figures were 2.3 percent and 1.8 percent. Table 2.3 shows that as a whole, women participate in rehabilitation more frequently than men. There has also been an increasing trend in the participation among the low-skilled and the medium-skilled during the observation period.

In Finland KELA (The Social Insurance Institution in Finland) is under law required to assess the client's need of rehabilitation at the latest when he or she has received sickness allowance for 60 days. KELA's local offices determine on a case-by-case basis whether a rehabilitation assessment is necessary. KELA also acts as a provider of vocational rehabilitation to persons with impaired functional capacity and medical rehabilitation for persons with severe disabilities. Persons who are at risk of disability, whose capacity for work and ability to earn a living are significantly weakened by an illness or injury are entitled to the vocational rehabilitation.

Persons, between 16 to 64 years of age, who are permanently resident in Finland are eligible for the rehabilitation allowance which is payable for the duration of a rehabilitation programme. The rate of this allowance is determined in the same way as the sickness allowance. During vocational rehabilitation the allowance amounts to 75 percent of earned income.

As can be seen from Table 2.3, disability pensions are also by far more common among the low-skilled than the high-skilled in Finland. Of the prime-age low-skilled women 9.0 percent were on disability pension whereas only 1.0 percent of the high-skilled were on this type of pension in 2000. The differences are equally large for men (9.2 percent of the

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<sup>33</sup> These systems are described in more detail in chapter 3.



low-skilled and 0.9 percent of the high-skilled). During the observation period the share of disability pensioners has slightly increased among the low-skilled and the medium-skilled, but not among the high-skilled. Disability pension is meant as compensation for work incapacity, i.e. a person's inability to engage in gainful employment and it is usually granted as permanent. But it can also be granted for a specified period as a pension-like rehabilitation subsidy to cover the period the recipient is in treatment or rehabilitation.

The shares in ongoing education, i.e. whose main activity is studying, are highest among the medium-skilled in the age group 25–49 throughout the inspection period.

This is probably due to the fact that it is quite common for young people to complete their education at the age of little under 30 years.

#### *In summary*

The position of the low-skilled has deteriorated in the Finnish labour market since the early 1990s, which shows in higher unemployment rates, a higher incidence of long-term unemployment, lower labour force participation rates and employment rates.

The low-skilled are also less likely to be eligible for an earnings-related unemployment allowance. They have to resort to social assistance more often than the higher educated. Their share in rehabilitation and on disability pension is higher than that of the higher educated.

The relative wage gap between the full-time high-skilled and low-skilled workers would seem to not have grown due to the highly centralised collective bargaining and the sector-specific minimum wages. But in this context one has also to take into consideration the differences between job statuses of the low-skilled and the high-skilled workers. Larger share of the low-skilled workers are employed in part-time jobs, which also matters as far as earnings differentials are concerned.

**Table 2.3 a Labour market position of 25–49-year-old males by educational attainment level in Finland.**

	Low skilled			Medium skilled			High skilled		
	1990	1995	2003b	1990	1995	2003b	1990	1995	2003b
Labour force (share of pop.)	91.7	87.8	84.0	94.0	91.5	90.7	96.8	94.9	96.8
Employment (share of pop.)	88.9	71.7	73.8	91.3	78,4	83.2	95.9	87.9	93.2
- full-time (share of empl.) a	97.0	94.0	95.2	96.8	94,8	96.0	96.4	94.0	97.1
- part-time (share of empl.)	3.0	5.9	4.7	3.2	5,2	4.0	3.6	6.0	2.8
- relative full-time wage h	63.5	69.0	73.2	71.5	72,9	74.2	100.0	100.0	100.0
Open unemployment (share of labour force)	3.1	18.3	12.1	2.8	14,4	8.3	1.0	7.4	3.8
- Eligible for UIB (share of unempl.) d	NA c	45.2	26.4*	NA	57,2	37.2*	NA	62.3	45.0*
Programmes (share of unempl.)	NA	17.6	19.0*	NA	23,5	19.9*	NA	27.8	22.0*
Social assistance (share of pop.) f	8.9	19.1	18.9*	6.7	13,8	10.4*	1.6	5.1	2.9*
Rehabilitation (share of pop.)	NA	1.5	1.6*	NA	1,4	1.4*	NA	0.8	1.0*
Disability pension (share of pop.)	8.0	8.3	9.2*	2.8	3,1	3.5*	0.8	0.9	0.9*
In formal education (share of pop.) g	0.8	1.9	1.7*	3.0	5,0	3.8*	1.8	4.1	2.3*

Sources: Statistics Finland: Labour force survey + 'Vaikuttavuusaineisto'. The latter data set is from Statistics of Finland and consists of information on 350 000 individuals from years 1987-2000 from various separate registers. (figures in italics)

Notes:

a) full-time and part-time workers – definition based on respondent's own assessment of his/her work status

b) \*=Year 2000.

c) NA= not available from 'Vaikuttavuusaineisto'

d) Eligible for UIB= those receiving earnings-related unemployment allowance

e) Programmes- those taking part in active labour market programmes

f) Social assistance – household has received social assistance

g) In formal education – may also include those in labour market training measures

h) Figures between 1995 and 2003 are not totally comparable because in the wages and salaries statistics published by Statistics Finland an ISCED 1997 (a new classification of education) was adopted from 1998 onwards.

**Table 2.3 b Labour market position of 25–49-year-old females by educational attainment level in Finland.**

	Low skilled			Medium skilled			High skilled		
	1990	1995	2003b	1990	1995	2003b	1990	1995	2003b
Labour force (share of pop.)	86.2	82.1	71.9	84.6	82.6	83.3	90.9	87.8	89.9
Employment (share of pop.)	84.3	66.4	62.5	83.1	70.6	76.2	90.1	80.3	85.9
- full-time (share of empl.) a	88.3	85.4	83.3	89.8	87.3	86.2	89.8	89.6	90.2
- part-time (share of empl.)	11.7	14.6	16.7	10.2	12.8	13.8	10.2	10.4	9.7
Relative full-time wage h)	67.2	70.0	78.7	71.4	72.6	78.6	100.0	100.0	100.0
Open unemployment (share of labour force)	2.2	19.1	13.1	1.9	14.5	8.5	0.9	8.5	4.5
-Eligible for UIB (share of unempl.) d	NA c	55.1	35.9*	NA c	68.0	52.5*	NA c	69.7	58.2*
Programmes (share of unempl.)	NA c	26.1	29.2*	NA c	31.7	32.0*	NA c	28.5	26.9*
Social assistance (share of pop.) f	7.8	18.5	21.0*	5.9	13.2	10.9*	1.7*	5.5	3.6*
Rehabilitation (share of pop.)	NA c	2.0	2.3*	NA c	1.8	2.1*	NA* c	1.5	1.0*
Disability pension (share of pop.)	6.7	7.4	9.0*	2.3	2.6	3.2*	0.7*	0.7	1.0*
In formal education (share of pop.) g	1.6	2.8	3.0*	4.6	7.1	5.1*	2.9*	4.9	3.4*

Sources: Statistics Finland: Labour force survey + 'Vaikuttavuusaineisto'. The latter data set is from Statistics of Finland and consists of information on 350 000 individuals from years 1987-2000 from various separate registers. (figures in italics)

Notes:

a) full-time and part-time workers – definition based on respondent's own assessment of his/her work status

b) \*=Year 2000.

c) NA= not available from 'Vaikuttavuusaineisto'

d) Eligible for UIB= those receiving earnings-related unemployment allowance

e) Programmes- those taking part in active labour market programmes

f) Social assistance – household has received social assistance

g) In formal education – may also include those in labour market training measures

h) Figures between 1995 and 2003 are not totally comparable because in the wages and salaries statistics published by Statistics Finland an ISCED 1997 (a new classification of education) was adopted from 1998 onwards.

## 2.4 The changing labour market position of the low skilled in Norway

### *Labour market status by skill level and gender*

Table 2.4 describes the changing labour market position of the Norwegian prime age population by educational attainment and gender, since the early nineties. As can be seen from Figure 1 above, Norway experienced, in the beginning of the nineties, the highest levels of unemployment since the early sixties. Unemployment reached its peak in 1992–93 and decreased thereafter. However, the level of unemployment was, throughout this recession, very low compared to the other Nordic countries. Thus, in the first year we look at in Table 2.4; 1992, the business

cycle is at its lowest and the unemployment at its highest. In the next two years observed; 1995 the business cycle has clearly turned, and 2003 the economic upturn went into a slight slowdown before establishing its foothold.

Figure 3 and 4 above show that in the entire adult, working age, Norwegian population the low skilled, both in 1991 and in 2004, had considerably lower employment rates and higher unemployment rates than the high skilled. The descriptive statistics in Table 2.4 confirms that the same pattern of relative differences apply in the prime age female and male populations. Table 2.4 further shows that the labour market performance of the low skilled in these regards is weaker than among medium skilled. Also with regard to labour force participation, part-time shares and dependency on different kinds of public income support Table 2.4 indicates that the low skilled occupy a relatively more marginalized position in Norway than the two other groups. The general pattern is that the low skilled have the weakest position with regard to these indicators of labour market performance. The medium skilled perform relatively better than the low skilled, while the high skilled clearly occupy the strongest position.

The labour force participation is stable in all the skill groups from 1992 to 1995. The relative differences in participation rates are around six percentage points between medium skilled and low skilled for both gender, and around five percentage points between medium skilled and high skilled women. During the next eight years, from 1995 to 2003, the labour force participation decreases considerably among the low skilled; around five percentage points in the female group and around seven percentage points in the male group (eight since 1992). The corresponding changes among the medium and high skilled females is close to zero, while there are slight decreases in the labour force participation of both medium skilled and high skilled males. Thus, while the Norwegian economy recovered from the turndown in the early nineties and moved into an economic boom in the early years of 2000's, the differences in participation rates between the low skilled, on the one side, and the medium and high skilled, on the other side, increases considerably.

However, despite the reduction in the labour force participation in the low skilled group the total labour force participation decreases only by a little more than one percentage point in the prime age group as a whole, from 1992 to 2003. This is because the composition of the group has changed, i.e., the more skilled groups with relatively high participation labour force participation rates have become more dominating.

Labour force participation is throughout higher for males than for females. The gender gap is more or less the same within the low skilled and medium skilled groups, but lower for the high skilled. In all the groups the gender gap in labour force participation decreases from 1992 to 2003; from around twelve to around eight percentage points in the low- and

medium skilled groups and from six to four and a half in the high skilled group.

With regard to the skill specific development in employment and unemployment levels we find a somewhat diverse development in the male and female prime age populations. Table 2.4 shows that, among the low skilled males, the employment share decreases more than the labour force share from 1995 to 2005. Thus, within the shrinking part of the low skilled male population participating in the labour market a higher fraction is unemployed. This is not the case with regard to the low skilled females who slightly lower their unemployment rate. In the medium and high skilled groups the employment rates of the labour force nearly don't change between these years. Medium skilled females, who experience a reduction in their unemployment rate during both periods observed, are an exception in this regard.

The relative unemployment levels in the group of low skilled compared to in the two other skill groups are higher in 1992 than in the later years when the overall unemployment situation is better. This indicates that low skilled are the most affected in times of economic hardship.

As regards working hours the tables clearly indicate that part-time work (less than 30 hours a week) is mainly a female phenomenon, irrespective of skill level and time period. In the male group part time work is a marginal phenomenon and the part time share among the low skilled is actually not higher than among the more educated. The part-time rate is around thirty percent higher for the low skilled compared to the medium skilled, while the corresponding difference is about forty percent higher when the low skilled females are compared to the high skilled. These skill and gender specific patterns in part-time work seem rather stable over the period we look at.

### *The relative wages*

Table 2.4 shows the ratio between the average wage of low skilled and high skilled and between medium skilled and high skilled. These relative wages are calculated on the basis of information of the yearly income of wage earners that have been employed full time the whole year, i.e., who has worked at least 30 hours a week every month.<sup>34</sup>

Table 2.4 indicates that the low skilled females earn around sixty percent of the high skilled and that that this wage gap increases by approximately one percent point over the period we look at. The corresponding wage gap within the male group is a bit smaller and increases with about two percent points from 1992 and 2003. For both men and women the low skilled groups earn in the upper edge of ninety percent of the medium

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<sup>34</sup> We choose to use this measure since the most reliable source of income is annual wages collected from the tax registers.

skilled and this wage gaps rather seem to be narrowing then widening. Thus, with regard to the skill specific wage development the trend seems to be that the high skilled are increasing their lead on the two other groups, particularly from 1995. This finding is substantiated by other studies of the wage distribution in Norway. In summary these analysis indicate that the earnings differences between high an low skilled have been stable or narrowing since the early eighties and until around 2000 (Barth and Røed 1999, Hegeland 2002, Bjørnstad og Sjørpen 2003). However, after the turn of the century the studies indicate that the return to education has been increasing (Schøne 2004, Barth et al. 2004). Schøne and Torp (2005) found that the wage gap between employees with a university education, on the one side, and employees educated on an upper or lower secondary level of education, on the other side, increased each year from 1997 to 2003, but particularly from 2000. They show that the widening of this skill specific wage gap took place among workers employed both in the private and in the public sector. As pointed to in the introduction the widening of the wage distribution is an international phenomenon which have taken place in many of the riche OECD countries and which has been explained by theological and organisational changes. More specific explanations related to Norwegian case in the period we study is that the wage formation in Norway after 1995 has been characterized by a rise in local and/or personalised wage bargaining procedures, particularly among the high skilled. This development particularly took place in the public sector where wage setting procedures earlier had been highly centralized and collectively implemented. Thus, such institutional changes have probably allowed a relative shortage of highly skilled worker in the Norwegian labour market to manifest it self in widening wage differences.

#### *ALMP, open unemployment and eligibility for UIB*

Ordinary active labour market programs (ALMP) in Norway are offered to unemployed individuals who are able to accept a job offer at short notice, i.e., who don't need any extra rehabilitation due to some health problem.

These programs can be divided in three broad categories: 1) Employment programs: wage subsidies in for jobs in the public and private sector and on-the-job training in the public sector. 2) Vocational programs for youth: a combination of on-the-job and off-the-job training. 3) Training programs; educational programs in classroom courses.

While in an employment program participants receive an ordinary wage; participants in vocational and training programs receive a weekly allowance. If program participants are eligible for unemployment benefit, which may be higher, they can choose to collect this instead. Since voca-

tional programs are targeted at youth there are few above 25 years old who participate in these programs.

Table 2.4 indicates that there have been small skill specific differences with regard to the share of the unemployed who have been engaged in ALMP. As regards gender differences it is clear that females participated in such programs considerably more often than males. In the first half of the nineties, about one third of the unemployed females, irrespective of educational level, participated in ALMP, while this was the case for only one fourth of the male unemployed.

Figure 6 above clearly indicates that ALMP have been given less priority in the Norwegian labour market policy since the mid nineties. Table 2.4 substantiates this. While the shares of unemployed who participates in ALMP are quit stable from 1992 to 1995 these shares are shrink to the half in all groups from 1995 to 2003. The sharp decrease takes place irrespective of skill level and gender, but is bigger for females than males and for high-skilled compared to low-skilled.

About three fourths of the unemployed are eligible for unemployment benefits (UIB). The share of eligible is more or less equal among the low and medium skilled but considerably lower among the high skilled. Thus, we do not find a positive relationship between skill level and eligibility rate as is found in Denmark and Finland (see Table 2.2 and Table 2.3).

To be enrolled in an insurance fund is voluntary in Denmark and Finland. Since, in all these countries, the replacement rates in the UI-systems, as well as the unemployment risks, are higher for low skilled one would expect the voluntary enrolment rate to be relatively high in this group. However, in both Denmark and in Finland the opposite pattern prevails, i.e., the low skilled are less eligible for UIB due to lower enrolment in the voluntary insurance funds. In Norway, on the contrary, where the insurance is compulsory, we find that the low skilled have a relatively high eligibility rate. Thus, these patterns indicate that a compulsory system to a greater extent take care of the low skilled with regard to their UI needs.

As is closer described in Chapter 3 the Norwegian UI system rules require that the unemployed – to become eligible for UIB – have earned a certain amount during the last calendar year, or during the last three years on average. Thus, the relatively low eligibility rate among the high skilled in Norway may be explained by the fact that they are relatively older when they finish school and start working. That is, a higher share of the youngest in the high skilled group may not yet have worked long enough to fulfil the income requirement in the eligibility rules. This theory is confirmed by the fact that we find hardly any differences in the specific eligibility rates among unemployed who are older then 29 years of age.

The share of unemployed eligible for UIB is higher for males than for females. This gender difference may be explained by the fact that the labour market carer of females more often is interrupted – due to family

obligations – and that they more often have a part-time job. The result is probably that they more frequently don't meet the income requirement for eligibility when they become unemployed.

The shares of eligible for UIB are generally higher in 1992 than in 1995, in all the groups of unemployed. This is related to the composition of the unemployed during the swings of the economy. When the unemployment rate falls, as it did from 1992 to 1995, the exit rate from unemployment tends to be relatively high among those who have been unemployed for a relatively short period. At the same time few individuals enters the group of unemployed with fresh eligibility rights and a long potential period on UIB in front of them. Hence, among those who stay unemployed when the business cycle turns upwards relatively many have exhausted their maximum duration on UIB and thus have become ineligible.

#### *Social security, rehabilitation, disability pensions and ongoing education*

A major concern of the political authorities in Norway during the last years has been the huge increase in the number of individuals within the working age population who have been declared disabled. After being quite stable during the first half of the nineties, the share of the population (18-67) on disability pension increased from around eight percent in 1995 to around eleven percent in 2005 (NOS 2006).<sup>35</sup> This general development is reflected in Table 2.4 as the disability share of the prime age population increases in all the skill groups from 1995 to 2003. Table 2.4 also establishes that the disability problem is very strongly related to the low skilled. During the two years observed, in the first half of the nineties, the disability rates are close to four times as high among the low skilled as among the medium skilled. Compared with the high skilled, the disability rates among the low skilled are five times as high for women and seven times as high for men. The increase in the disability rates from 1995 to 2003 are also much stronger (in percent points) in the low skilled group.

The usual course of events for a worker experiencing health problems that limit his/her working capacity is a period of sick leave for one year at the most, followed by a period of rehabilitation of maximum one year, after which the possibility of return to the labour market is considered. At this stage some will return to the labour market while others would need to acquire new skills before applying for work, in which case the person is offered participation in a vocational rehabilitation program. If work is not a feasible option in the short or long run the person will receive disability pension.

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<sup>35</sup> The disability share in the population also increased considerably during the eighties; from around six percent of the population in 1980 to around eight percent in 1990 (NOS 2006).



As a policy response to the growing number of disabled the authorities has made the eligibility rules related to this type of pension more restrictive in recent years. Another response has been to invest more in rehabilitation and in measures that deal with health problems at an earlier stage, i.e., during the sick leave period. Vocational rehabilitation programs are targeted at persons who for health reasons have been forced to change responsibilities or profession and in general need schooling or training in order to facilitate insertion in the labour market. Over the period under consideration there has been a dramatic increase in participation in vocational rehabilitation programs matched by an equally dramatic fall in ordinary labour market programs. In the mid 90's about one in ten participants in a labour market programs participated in vocational rehabilitation programs. By the end of the 90's the shares had reversed: ten times as many participants in rehabilitation programs relative to ordinary ALMP.

This development is reflected in Table 2.4 as the share of the prime age population on a rehabilitation type of pension clearly increases from 1995 to 2003. This type of pension is also clearly more widespread among the lowest skilled. However, the difference between the low and medium skilled is less marked than with regard to the disability pension.

Persons who are not capable of covering basic needs through their own means or any other social security system can receive social assistance (SA), to ensure a decent minimum. SA is a means-tested benefit which also can be received in combination with UIB.<sup>36</sup> Table 2.4 shows the shares in the prime aged population that have received SA during September. The same skill specific pattern emerge with regard to SA as with the other social security arrangements. To collect SA, in addition to other – or as your only – sources of income, is much more common among the low skilled than in the two more educated skill groups.

When it comes to taking part in ordinary education which may upgrade the skill level, Tables 2.4 shows that those who have most want more, i.e., high-skilled persons are considerably more prone to participate – and the medium skilled the second most – in such programs. Thus, also in this regard the low skilled are lacking behind.

### *In summary*

The low skilled occupy a relatively more marginalized position in the Norwegian labour market than the medium and the high skilled. With regard to relative wage, unemployment, labour force participation and dependency on social security, the low skilled perform considerably weaker than the medium and the high skilled.

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<sup>36</sup> The rules related to the Norwegian SA are closer described in Chapter 3.

In the period from 1992 to 2003 Norway experienced a recovery of the economy, characterised by falling unemployment rates and improved economic activity.

Furthermore, during this period there has been a substantial decrease in the share of low skilled in the population. Among prime age females the fall is particularly dramatic, from 57 percent in 1992 to 34 percent in 2003.

With regard the low skilled there are many tendencies which indicate that this group has moved towards a more marginalized labour market position since the early nineties: A considerably higher share of the prime age are now outside the labour force, their relative wage have decreased and their dependency on different types of social security has increased quite considerably. The level of – and the increase in – the shares of the low skilled population who are recipients of a permanent or a temporary disability pension are particularly alarming.

**Table 2.4a Labour market position of 25–49 year old males by educational attainment level in Norway**

	Low-skilled			Medium-skilled			High-skilled		
	1992	1995	2003	1992	1995	2003	1992	1995	2003
Labour force (share of pop.)	86.8	88.4	78.9	92.3	93.9	89.7	91.8	91.9	89.7
	8,6	6,8	7,8	5,5	3,7	4,0	3,3	3,3	3,7
Employed (share of pop.)	79.4	79.8	72.7	87.2	88.8	86.1	88.8	87.5	86.4
- full-time (=>30 hours a week)	94.2	93.9	92.7	95.6	95.8	95.1	94.1	94.2	93.4
- part-time (< 30 hours a week)	5.8	6.1	7.3	4.4	4.2	4.9	5.9	5.8	6.6
- full-time wage <sup>1</sup> (100 kr.)	2258	2474	3005	2428	2624	3171	3476	3792	4766
- relative full-time wage	65.0	65.2	63.1	69.9	69.2	66.5	100	100	100
				5,8	3,4	3,0			
Unemployed <sup>2</sup> (share of pop.)	7.5	5.8	6.2	5.1	3.4	3.6	3.0	3.0	3.0
- openly unemployed full-time	74.6	73.4	83.4	74.9	74.5	86.5	71.8	72.6	86.9
- ALMP	25.4	26.6	16.6	25.1	25.5	13.5	28.2	27.4	13.1
- eligible for UIB	78.3	68.1	77,1	77.9	70.7	70,6	67.4	61.9	66,1
- not eligible for UIB	21.7	31.9	22.9	22.1	29.3	29,4	32.6	38.1	33,9
Social assistance (share of pop.)	4.0	4.6	5.0	1.4	1.3	1.1	0.9	0.9	0.6
Disability pension (share of pop.) <sup>3</sup>	7.3	7.2	12.8	2.0	1.6	3.4	1.0	0.9	1.9
Rehabilitation (share of pop.) <sup>4</sup>	3.5	2.8	6.1	2.0	1.6	3.1	1.2	1.2	1.5
Ongoing education (share of pop.)	3.0	2.7	3.2	5.9	5.0	5.5	11.4	12.0	11.6

1) Comprises only individuals working full-time the whole year.

2) Includes full-time unemployed

3) Includes both temporary (rehabiliteringspenger) and permanent (uføretrygd) disability pensions

4) Includes both participants in vocational rehabilitation programs as well as persons waiting to participate in programs.

**Table 2.4 b Labour market position of 25–49 year old females by educational attainment level in Norway**

	Low-skilled			Medium-skilled			High-skilled		
	1992	1995	2003	1992	1995	2003	1992	1995	2003
Labour force (share of pop.)	74.5	77.0	71.2	80.4	82.9	80.9	85.8	86.0	85.1
	7,4	7,4	6,9	6,6	6,1	5,1	2,6	3,2	3,2
Employed (share of pop.)	69.0	69.5	66.3	75.1	75.9	76.7	83.6	82.1	82.4
- full-time (=>30 hours a week)	57.4	58.2	57.6	71.6	70.5	65.1	75.4	75.9	76.8
- part-time (< 30 hours a week)	42.6	41.8	42.4	28.4	29.5	34.9	24.6	24.1	23.2
- full-time wage <sup>1</sup> (100kr.)	1606	1772	2049	1757	1912	2217	2658	2838	3447
- relative full-time wage	60.4	62.4	59.4	66.1	67.4	64.3	100	100	100
Unemployed <sup>2</sup> (share of pop.)	5.5	5,5	4.9	5.3	5,0	4.1	2.3	2,7	2.7
- openly unemployed full-time	67.1	68.3	82.6	68.6	70.0	84.4	67.6	70.6	86.3
- ALMP	32.9	31.7	17.4	31.4	30.0	15.6	32.4	29.4	13.7
- eligible for UIB <sup>2</sup>	73.3	65.4	62,8	74.9	69.2	61,6	65.0	60.4	58,4
- not eligible for UIB	26.7	34.6	37,2	25.1	30.8	38,4	35.0	39.6	41,6
Social assistance (share of pop.)	2.7	2.9	3.2	1.2	1.1	1.2	0.5	0.5	0.4
Disability pension (share of pop.) <sup>3</sup>	9.7	9.0	16.6	2.8	2.4	5.7	2.0	1.8	3.3
Rehabilitation (share of pop.) <sup>4</sup>	4.0	3.1	5.7	2.4	2.1	4.1	1.6	1.5	1.7
Ongoing education (share of pop.)	3.9	3.5	5.3	8.6	7.9	10.5	13.7	14.3	14.7

1) Comprises only individuals working full-time the whole year.

2) Includes full-time unemployed only. There are three main unemployment categories in Norway: Full-time open unemployed, part-time employed/unemployed and labour market program participant. To be regarded as part-time unemployed it requires that ordinary working hours is reduced with at least 40 percent (changed to 50 percent December 2002, in effect as of January 2003). Part-time unemployed are not included in the data for the unemployed (but appear among the part-time employed).

3) includes both temporary (rehabiliteringspenger) and permanent (uføretrygd) disability pensions

4) Includes both participants in vocational rehabilitation programs as well as persons waiting to participate in programs.

## 2.5 The changing labour market position of low skilled in Sweden

In this section we briefly describe the distribution of the population in Sweden by labour market status and skill level during the 1990s and early 2000. In this case the descriptions have to rely only on publicly available statistics, from Statistics Sweden and Labour Force Surveys. Therefore, we are not able to break down the Swedish population into age groups, educational levels and states inside and outside the labour market to the same detailed extent as we did with the populations in Norway, Denmark and Finland.

Like the other Nordic countries Sweden experienced a dramatic rise in the level of education during the last decades. The proportion of the whole working age population with only compulsory education fell from 52 per cent to 16 per cent from 1974 to 2000 (Statistics Sweden ). Table 2.1 above shows that, among the prime age females, the group with only

lower secondary education decreased from 23 percent of the population in 1990, to 11 percent, in 2003. In the prime age male population the corresponding decrease was from 27 to 14.5 percent.

As is clear from Figures 2, Sweden, like the other Nordic countries, has a considerably higher labor force participation rate than the EU average. This is mostly the result of the high propensity to seek employment in the Swedish female population. In the early nineties the Swedish labor force participation was clearly higher than in the other Nordic countries, as well. However, as indicated in Figures 2, the labour force participation has equalized between the countries in the Nordic region during the last fifteen years, due to stronger a decline in Sweden than in the other countries.

In the early 1990's Sweden was hit by the most severe recession since World War II. Employment fell with 13 per cent from 1991 to 1994 (Calmfors et al. 2001). The number of persons employed fell dramatically to the level which prevailed in the beginning of the 1970s. Unemployment rose, reaching its peak in the mid nineties and then slowly declining again (se Figure 1). At worst about 8 percent of the labour force was openly unemployed in addition another 5 per cent that was on active labour market programs (Calmfors et al. 2001). Unemployment remained relatively low until the next, short lived, economic downturn that took place at the turn of the century.

### *Employment*

Table 2.5 shows some figures on the labour market position of individuals between 25 and 49 years old (prime age ) by skill level and gender. In this table low skilled are defined as persons who have not completed an upper secondary level of education, medium skilled are those who have completed an upper secondary education and high skilled have completed a degree on a higher than upper secondary education.

As can be observed in the table, the higher the skill level the greater share of the population in employment. Figure 3, above, indicates that these skill specific differences in Swedish employment rates increased from the early 1990s to the early 2000s.

The skill differences in employment rates are more pronounced in the female population. While 66 percent of the prime age female population with less than completed secondary education was employed in the beginning of this decade the equivalent figure for women with at least a year of tertiary education was 20 percentage points higher. The share of low-skilled in employment was 10 percentage points higher for males than for females. However, there is no gender difference in employment rates among high-skilled.

Table 2.5 shows also that the share in employment is lower for all levels of education in 2003 than in 2001. This is related to the economic slump that prevailed during 2001-2003. For instance, the number of jobs

was 10 000 less in 2003 compared to the prior year, and the decline was twice as big in 2004 compared to 2003 (Statistics Sweden).

#### *Labour force participation*

Table 2.6 includes persons 25 to 64 years old. The educational groups on the two lowest levels are defined somewhat differently than in Table 2.6. Low skilled are individuals with only lower secondary education, while medium skilled are those who have acquired some or a completed upper secondary education. High skilled have completed an education on a higher than upper secondary level, i.e., the same definition as in Table 2.6.

Table 2.6 shows, as expected, that the proportion in the labour force is higher the higher the level of education is. In 1991, 15 percent of the low skilled Swedes was outside the labour force compared to only 5 percent of the high skilled. Figure 2, above, showed that the Swedish labour force participation declined quite considerably from the 1990 to 2004. Table 2.6 demonstrates that the decline is much stronger among the low skilled than in the two more educated groups. From 1991 to 2003 the proportion of low skilled in the labour force, 25 to 64 years of age, fell with 13 percentage points, to 72 per cent. The corresponding decline among the medium and high skilled was 7 and 6 percentage points, respectively.

#### *Ongoing education*

Table 2.6 describes the proportion of the prime aged Swedish population in ongoing education. In this respect it needs to be mentioned that in 1997, Sweden launched a massive offensive to increase the education of all low- skilled workers to medium skill level. The educational programme, called “Knowledge Lift” involved participation from more than 10 percent of the whole labour force in the period 1997–2000 (Albrecht et al., 2004). This program was in effect until the end of 2002. Given this background we may expect to find many of the low skilled that withdrew from the labour force during the nineties enlisted in educational programs in the early 2000. Yet, according to Table 2.5 the share of low skilled in ongoing education hardly increased from 1995 to 2001 and actually fell in the two following years. Among the medium skilled women, on the other hand, the proportion taking part in education increased considerably during both periods observed. This may be a result of the “Knowledge Lift” program. The high skilled also increased their participation in education from 1995 to 2003 quite substantially. Even though the age groups are not equally defined in Table 2.5 and Table 2.6, this may lead to the conclusion that the reduction in labour force participation among the high skilled during the same period may be explained by their higher share in ongoing education. This is not the case with regard to the reduced labor force participation of the low skilled. Or, to summarise, during the eco-

conomic downturn that prevailed in the early 2000 the high skilled seem to have increased their educational activity, while the low skilled increased their passivity.

Table 2.5 also shows that the share in ongoing education, irrespective of skill level, is greater for females than for males. Nearly one out of four women in prime age with tertiary education was engaged in education in 2003. The equivalent figure for men is 14 per cent.

### *Open unemployment*

The recession that began in early 1990 and lasted for almost a decade, and which still have repercussions today, was the deepest and longest since the 1930s and resulted in a rate of unemployment of almost 9 per cent, unprecedented in Sweden, and a significant increase in the public sector's overall budget deficit. Unemployment climbed from 4 per cent of the labour force in 2002 to 5.5 per cent in 2004 (Statistics Sweden). The rise in unemployment in the early 2000's was a direct consequence of the fall in employment and the cutback in adult education (the Knowledge Lift was mostly predominant until 2000 and stopped in 2002) that occurred around the turn of the century. The unemployment rates are clearly higher among the less educated groups. According to the numbers in Table 2.6, this skill specific unemployment pattern is not reinforced over time, i.e., compared to the unemployment rate of the high skilled the rate of the low skilled is relatively lower in 2002 than in 1991.

Not shown in Table 2.6 is that the rate of unemployment (as a percentage of the labour force) is on average lower for females than for males, but it is higher for low-skilled women than for low-skilled men. The opposite is the case for the high-skilled. For instance, in 2003 the unemployment rate was 4.3 per cent of the labour force for women and 5.3 for men. Among those with only lower secondary education the number was 7.7 for females and 5.7 for males, while among those with higher education the proportions were 4.7 for males and 2.6 for females (Statistics Sweden).

### *Labour market programmes*

Sweden has a long tradition in active labour market policies. As a response to the recession of the early 1990's Sweden escalated dramatically their active labour market policies (see Figure 5 and Figure 6 above). Up to about 3 per cent of GDP was spent on active labour market policies. Programmes have changed name, character and content through out the years. Still their main purpose has remained.

- To channel work to the unemployed and labour to the employer
- To take steps to combat recruitment problems

- To take initiatives to help those who have difficulty obtaining work in the regular labour market

There is a broad array of measures, from recruitment initiatives (type of wage subsidy target at the long term unemployed), to start-up grants and a sabbatical year. The authorities offer sheltered employment in the public sector and also own corporations that produce goods and services and in that way give work to occupationally handicapped people who cannot get a job in the regular labour market. A series of evaluation studies based on Swedish micro and macro data indicates the massive investment in ALMP in Sweden during the 1990s had small or no positive effects on the employment probabilities of the participants or on the aggregated unemployment development (see Calmfors et al. 2001 for a review of this literature). This literature, however, gives little information with regard to the effect of ALMP on the labour force participation.

As is illustrated in Figure 5 the Swedish expenditure on ALMP as a percentage of GDP decreases sharply from 1994 and onwards. Figure 6 illustrates that as share of the total public expenditure on labour market purposes (including UIB) the Swedish investments in ALMP has decreased since 1998. Starting from a much higher level in the early 1990s, the Swedish expenditures on ALMP, both absolute (as percent of GDP) and relative to total expenditures on labour market purposes, is very close to the EU (12) average in 2004. During the same period the labour force participation and the employment rate of the low skilled in Sweden have converged towards the EU mean as well (OECD Employment Outlook).

### *Relative earnings*

Earnings differentials according to level of education give an indication of the economic incentives prevalent in country to invest in further education. Table 2.6 shows the average yearly earnings of the low and medium skilled relative to the high skilled 1997 and in 2003. No distinction is made concerning working hours. These numbers illustrates, the well known fact, that the earnings distribution in Sweden is very compressed. In Sweden the average yearly earnings of those who have only completed a lower secondary education is around seventy percent of the earnings of those who are educated on a college or university level. In the other Nordic countries the corresponding measure of relative earnings is around sixty five, while in most other EU (15) countries it is around fifty percent (OECD 2006). However, the numbers in Table 2.6 indicate that the high skilled in Sweden increased their earnings advantage from 1997 to 2003.

As regards the gender wage gap by level of education, Table 2.6 shows the within skill levels relative annual earnings of women. These numbers show that females have a yearly income which is about seventy percent of the males. According to these numbers the gender earnings gap

actually is wider among the high skilled. Female workers with only a completed secondary education earned, 72 and 75 percent of their male counterparts in 1997 and in 2003, respectively. In the high skilled group the corresponding values of this measure of the gender wage gap were 67 and 68 percent in the same years.

The average yearly earnings measure in Table 2.6 is not corrected for working time. Thus, this gender gap in average earnings may partly be explained by the high part time share of Swedish female workers. Around 40 percent of the employed Swedish females have a part-time position, which is above the EU average. However, other studies show that the Swedish full time average gender gap in earnings is approximately 80 percent.

#### *In summary*

The Swedish labour force participation and employment rate have decreased considerably since the early 1990s. These changes have taken place irrespective of skill level. However, the reductions have been considerably stronger among the low skilled than among the less educated workers. Thus, the skill specific employment pattern was reinforced during the 1990s and early 2000s.

As their labour market participation was reduced the high skilled seem to have increased their participation in educational programmes. Thus, their withdrawal from the labour market may appear as an investment in a future career. This does not seem to be the case with regard to the low skilled who hardly increase their participation in ongoing education during the period observed.

**Table 2.5 Labour market position of females and males 24-49 years old by educational attainment level in Sweden.**

	Low-skilled			Medium-skilled			High-skilled		
	1995	2001	2003	1995	2001	2003	1995	2001	2003
<b>FEMALES:</b>									
Employed (share of pop.)		66	65		77	76		84	83
Ongoing education (share of pop.)	6	7	4	10	14	17	5	12	24
<b>MALES:</b>									
Employed (share of pop.)		76	75		78	77		85	82
Ongoing education (share of pop.)	2	3	2	7	7	8	5	9	14

Source: Statistics Sweden database (own calculations)



**Table 2.6 Labour market position of persons 25-64 years old by educational attainment level in Sweden.**

	Very low-skilled			Low-Medium-skilled			High-skilled		
	1991	1995 (1997)	2003 (2002)	1991	1995 (1997)	2003 (2002)	1991	1995 (1997)	2003 (2002)
Labour force (share of pop.)	85	86	(72)	93	91	(86)	95	93	(89)
Not in labour force (share of pop.)	15	14	(28)	7	9	(14)	5	7	(11)
Employed (share of pop.)	83	78	68 (68)	91	84	81 (82)	94	89	86 (87)
Unemployed (share of pop.)	2.2	8.7	(4.2)	2.1	7.9	(3.9)	1.1	4.2	(2.7)
Relative earnings <sup>1</sup>		(70)	68		(78)	75		(100)	100
Relative earnings women <sup>1</sup>		(73)	75		(72)	72		(67)	68

1) Relative yearly earnings of the population with income from employment, see Annex 3 ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)) for a closer definition

Source: OECD, Education at a Glance 2004, 2005, 2006.



## 3. The UI systems in the Nordic – main features and reforms

In this chapter we outline and discuss the present design of UI systems in Denmark, Finland and Norway. In addition reforms which have been accomplished in these institutions since the early nineties are described with regard to their contents and main motives. We also point out results from empirical research regarding the labor market effects of these policy changes. This examination of the national UI systems is organized according to the four key characteristics of the UI systems already defined in Chapter 1: Compensation rate, maximum duration of UIB, eligibility rules and the systems for monitoring and sanctions. In addition we sketch the supplementary social security arrangements which interact with the design of the UI systems in determining the work incentives.

### 3.1 Denmark

*The main features of the Danish UI system to day*<sup>37</sup>

In Denmark the benefit system related to unemployment is organized in two parallel systems: One providing unemployment insurance benefit (UIB) for insured unemployed and the other providing social assistance (SA) for the non-insured unemployed. Moreover, the SA recipients are divided into two groups, those with unemployment as their only problem, and those who have social problems in addition to unemployment. Social assistance is in principle available for everyone, but since it is a means tested benefit depending on household income and assets, only a minor part of the Danish labour force is eligible for it in case of unemployment. To be a member of the Danish UI system is voluntary. On average, 80 per cent of the Danish labour forces are members of UI funds.

UI benefits are administered jointly by the public employment service and the private insurance funds, whereas social assistance is administered by the municipalities. Even though the Danish UI funds are private they are heavily subsidised by around 70 percent of their costs.

*Eligibility rules.* To become eligible for UIB the unemployed must fulfil three main requirements: 1) They must have been members of an UI fund in at least one year. 2) During a period of three years they must have

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<sup>37</sup> We only point out the major structure of the UI- system in the main text. A more detailed description is to be found in Appendix

been employed for what equivalence 52 weeks of fulltime work. 3) They must behave as real job searchers which implies that they must actively apply for jobs and be able to accept offers of employment and/or ALMP participation on a short notice.

*Maximum duration* The maximum duration of UIB is 4 years, 1 year on passive UIB (no compulsory activation) and 3 years on active UIB (with compulsory activation).

*The replacement rate:* Benefits amounts to 90 percent of previous earnings until a maximum amount, which in 2006 was DKK 667 per day and taxable as ordinary earnings. The minimum amount was DKK 536 per day. For employees the income basis is calculated as the average of earnings from the last three months. Because of the relative low ceiling most UIB recipients, except low-skilled in the lower part of the wage distribution, have a gross replacement rate well below 90 percent. However, for some individuals with previous wages below the minimum amount, the gross replacement rate is 100 percent or even higher.

*Monitoring and Sanctions.* The first time the claimant refuses to accept a job offer UIB are stopped for five weeks. In case of repeated refusals the claimant loses the right to UIB. That is, new eligibility rights have to be accumulated through the fulfilment of the employment condition described above. Unemployed who are otherwise eligible but become self-induced unemployed are exposed to a five-weeks quarantine before they are granted UIB. During the first year of unemployment there is a right to participate in ALMP. After one year participation in ALMP become compulsory, i.e., an offer which is turned down is met with the same sanctions as rejected job offers. Sanctions vary from case to case, but the general penalty is quarantine from UIB for between 2-3 days and 3-5 weeks.<sup>38</sup>

*Alternative and supplementary social security.* In Denmark the UIB recipients are not able to apply for supplementary benefits from SA. Unemployed who are not eligible for UIB have the right to SA if a minimum standard of living can not be obtained by other income sources within the household, i.e., the entitlement to SA is means tested against household income. The amounts of monthly SA benefits are regulated by national provisions according to the family situation. Single parents get the highest payments while childless individuals living with a cohabitant or a spouse get the lowest.

Besides the UI and the SA benefit systems additional supplementary supports are available, which are not per se depending on whether or not a person receives UIB or SA, or even is employed. Housing benefits are the most important of these supports. This benefit is means tested; hence the size of the support is dependent on household income and fortune, as well

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<sup>38</sup> In 2005, 64% of the reported irregular procedures among UIB recipients ended with a sanction. Among these sanctions, 24 % lost their right to UIB for at least 3 weeks (see Arbejdsdirektoratet (2005)).

as family size. Housing benefit is in general only granted to rented accommodations and, depending on size of the household, only available for a maximum number of square meters. Supplementary support for child care and children support are other means tested benefits. Whereas the former is a benefit related to the cost of child care, the latter is a general benefit granted to low-income parents, often single parents. Finally, a child benefit amounting to DKK 9–13,000 per year is available to all children below 18 living in Denmark, irrespective of the income of their parents.

Until 2002, there were different rules concerning availability for the labour market and search behaviour in the two parallel unemployment systems, SA and UIB. In 2002, this was changed and since then the recipients of UI benefit and SA recipients with unemployment as the only problem, should – according to the law – be evaluated according to the same criteria. However, it is sometimes claimed that the administrative practices have not completely converged between the two systems (Danish Employers Association (2005).

#### *The content and motives of main reforms in the Danish UI-system*

Until the late 1980s, the Danish unemployment system could be described as a passive system with fairly easy access, high compensation and unemployment benefit eligibility for long periods. However, the cyclical upturn in 1982–1986 indicated that the Danish labour market suffered from considerable structural unemployment problems implying major changes in the labour market policy since wage pressure (‘bottleneck problems’) started to dominate a number of sectors at a high unemployment level, see Jensen (1999), Ministry of Finance (1995 and 1999).

Table 3.1 describes the main changes in the Danish UI system and supplementary arrangements since the early nineties. It took some years until the first major labour market reform was initiated: In 1994 the first reform directed toward the structural labour market problems was introduced. During the next years a number of reforms were put into force which gradually improved the efficiency of the Danish labour market. The main changes to the UIB system are presented in Table 3.1, below. In general, the reforms have been based on two strategies: Shorter duration of the UIB-period (mainly the passive period) and more focus on activation and test of availability for the labour market while the fairly high compensation rates for low-income workers (up to 90%) has not been reformed.

Before the labour market reform in 1994, the benefit period was almost infinite as a person was eligible for UIB for 2.5 years and this right could be regained by half a year of subsidised activation, implying that it was possible to receive UIB for 9 years without unsupported employment. The eligibility to benefit required 12 months of membership as well as 26 weeks of employment during the last 3 years.

With the reform in 1994 increased weight was put on active labour market programs (ALMP), and the UIB period was divided into a passive and an active period. Further, the possibility of re-earning eligibility to UIB through ALMP was now removed. In 1995 compulsory activation as a criterion for receiving UIB was introduced, with sanctioning of individuals turning down an activation offer. During the late nineties the passive period of the UIB period was reduced from 48 months in 1994 to 24 months in July 1996 and finally to 12 months in 1999.<sup>39</sup> Moreover the employment requirement related to UIB eligibility was increased in 1997 from 24 to 52 weeks within the last 3 years.

The 1994-reform aimed at reducing the open unemployment in general, but there were still some groups that had large unemployment problems. In 1996, a reform directed to cope with the high youth unemployment rate was implemented. The main feature of the reform was to force the target group, young people aged less than 25 and with no formal education, to enter into employment or become enrolled at a formal education. Individuals in this group who had been unemployed for 6 months or more within the last 9 months received an offer of 18 months vocational training. The reform also gave an incentive for the target group to enter into ordinary education, since UIB were cut by 50 percent during the 18 months training. Thus, the compensation was at about the same level as public student grants for ordinary education. Another group that was not affected by the 1994-reform nor the following regulations, was receivers of SA. In 2002 'More in work'<sup>40</sup> was introduced, paying special attention to receivers of social assistance benefit (SAB). One of the main elements was the change in the administrative structure. This implied that the administration of the insured unemployed and the non-insured unemployed with unemployment as their only problem were merged in order to create the same offers and conditions for the two groups. The most discussed part of the reform was the adjustments introduced to increase the economic incentives of the social assistance recipients. This was established by reducing the SAB level and increasing the occupational tax deduction level (*beskæftigelsesfradraget*) mainly affecting families where both spouses are SA receivers. Special attention was paid to unemployed immigrants, by the implementation of start aid, a subsidy replacing SAB for all immigrants who have lived less than 7 out of the last 8 years in Denmark. This subsidy is significantly smaller than the social assistance benefit.<sup>41</sup> Furthermore, for all SA receivers a benefit ceiling was implemented implying a reduction or even termination of additional subsidies, such as housing support, after 6 months of unemployment. With the so-

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<sup>39</sup> Transition rules imply that the real passive periods might have been longer for individuals with previous unemployment spells.

<sup>40</sup> To combat the demographical changes and preserve the welfare provisions an ambitious plan 'More in work' was introduced. The target of the reform was an increase in employment of 85.000 more persons before 2010.

<sup>41</sup> See the Appendix for the exact numbers

cial reform in 1998 the flex job arrangement was introduced as an active part of early retirement. The main purpose of the arrangement is to allow individuals with reduced work ability to take a job with reduced work requirement (fewer task or fewer hours) at a wage equivalent to the wage of the social agreement. The employer will then receive a wage subsidy from the municipality of between 1/2 and 2/3 of the wage. The financing of the flex jobs has changed throughout the period, and by 2001 the state covers 65 % and the municipalities the rest.<sup>42</sup> The arrangement has two parallel benefit systems available for individuals qualified for a flex job: an early retirement benefit (*fleksydelse*) and an unemployed benefit (*ledighedsydelse*). In 2001 the benefit level was increased and the entitlement made easier, and since then there has been a dramatic increase in the use of flex jobs. Part of this increase is blamed to the economic disincentives embedded in the arrangements both regarding job searching and time worked. The municipalities are also subject to disincentives when entitling unemployed persons to the benefit, as the state repays 65 % of the expenses (see Welfare Commission (2005a)).

Throughout the entire period and still today the UIB amounts to 90 % of previous earnings until the maximum amount (DKK 667 per day in 2006). Because of the relative low ceiling most UIB recipients, except low-skilled in the lower part of the wage distribution, have a real replacement rate well below 90 %.

**Table 3.1. The main changes to the Danish UI system since 1990.**

*1994 Labour market reform I*

Eligibility: The right to regain eligibility to UIB through a subsidised job (ALMP) is abandoned

Monitoring and sanctions:

- The UIB period is divided into a passive and an active period (4+3).<sup>43</sup>
- Early job offer or education is given to specially exposed groups with a high risk of ending up in long-term unemployment (subjective evaluation)
- Decentralization of the administration of the labor market policy by establishing regional Labour Market Councils, though the rules and budget still is determined at a national level

Supplements:

- Childcare, educational and sabbatical leave schemes introduced<sup>44</sup>

<sup>42</sup> Prior to 1997 the municipalities and counties were financing the flex jobs jointly, in 1997 the state financed 50 per cent of the expenses, and 1998-2000 the state covered all expenses.

<sup>43</sup> Benefit was reduced by 20 per cent if activation was refused. In 1995 duty to activation was implemented implying that the right to UIB would be lost if activation was refused (Service inspection).

<sup>44</sup> The leave schemes were introduced in 1992 and extended in 1994. Childcare leave was an option for all parents with children below the age of 9 and it has been in force until 2002. The benefit was 80 % of the highest UIB, but within the next years, the compensation rate was reduced to 70% and later 60% until it was abolished in 2002 where it became part of the parental leave scheme. The

- Transition pay offered to unemployed between 50 and 60 who left the work force<sup>45</sup>

#### *1995*

##### Monitoring and sanctions:

- Compulsory activation after 4 years of unemployment
- Sanctioning including quarantine introduced to strengthen the availability rules ensuring that the unemployed person is available at the labour market

#### *1996 Labour market reform II*

##### Monitoring and sanctions:

- Compulsory activation after 2 years on UIB<sup>46</sup>
- Strengthen the use of sanctioning/quarantine if activation is refused
- YUP: Unemployed below 25 without a qualifying education are obliged to take an education of 18 months after 26 weeks of unemployment (receive a yield of half the amount UI benefit )

Duration: UI benefit period down from 7 to 5 years (2 passive +3 active).

#### *1997 Labour market reform II continue*

Eligibility: Work requirement for UIB extended from 26 to 52 weeks of employment.

#### *1998 Labour market reform II continue*

##### Eligibility:

Unemployed have to take a reasonable job after 6 months regardless of special qualifications, and the reasonable geographical areas was expanded. The first 6 months the unemployed is allowed only to accept jobs within his/her own occupation.

#### *1999 Labour market reform III*

Duration: UIB period shortened from 7 to 4 years .

##### Monitoring and sanctions:

- Compulsory activation after 1 in stead of 2 years<sup>7</sup>
- All UI recipients below 25 with a qualifying education are obliged to take up activation after 6 months of unemployment
- Unemployed has to show up at the public employment service the first day of

sabbatical leave was in effect from 1994 to 1999 based on the employer's approval and the employment of a long-term unemployed instead. Educational leave was an option from 1992 to the end of 2000.

<sup>45</sup> Transition pay (overgangsydelser) was introduced in 1992, this was an offer to receivers of UIB between 55 and 59 years old. They could get paid 82 per cent of the highest UIB if they left the labour force. From 1994 until 1999 this offer was expanded to include unemployed between 50 and 54 years old. The rationale between the transition pay was to redistribute the work from the old to the young.

<sup>46</sup> Transition rules imply that the real passive period might be longer for individuals with previous unemployment spells.



## unemployment

## Eligibility:

- Abolition of the special options of receiving UI benefit for people aged 50–54
- UI recipients have to take a reasonable job after 3 months, hence only to accept jobs within own occupation is only accepted during the first 3 months.

## 2001

Supplement: The opportunity to be qualified for flex jobs increases

2002 *More in work reform*

## Supplement:

Start-aid is introduced to new immigrants or immigrants who have only been in Denmark for a limited time. This amount is smaller than the social assistance benefit

2003 *More in work reform continue*

## Supplement:

- Abolition of the subsidy SA recipients could receive while participating in job training
- The sanction aspect of YUP is now expanded to youth receiving social assistance
- Reduction in the social benefit level (and increase the occupational tax deduction )

2004 *More in work reform continue*

## Supplement:

Ceiling on the social benefit is introduced, reducing the housing support of SA recipients being unemployed for more than 6 months

The overall goal of the reform in 1994 was to reduce long term unemployment, and this was mainly done by introducing re-qualification and early activation programs, as well as a wide range of leave schemes (leave for attending further education, childcare or simply sabbatical period) which were also available to unemployed individuals, irrespective of membership of an unemployment insurance fund. Further a new additional early retirement scheme available for long-term unemployed individuals from the age of 50 (*overgangsydelsen*) implied a large immediate reduction in the open unemployment rate from 1995, but at the same time an increase in the number of individuals on public income transfers.

According to the Ministry of Finance, it turned out that it was not mainly the long-term unemployed or low-skilled who took-up the educational leave scheme, and thus, the effect on qualifications and the structural unemployment rate was not as large as it was originally expected (Ministry of Finance (1996)). At the same time, there was a rather large

reduction of the labour force. When the Danish growth rate started to increase from 1995 and onwards, the leave schemes were gradually made less generous and in 2002, the longest lasting of the schemes, the child-care leave, was abolished.<sup>47</sup>

Instead, in the years after 1994 more attention was gradually directed towards the control and sanction aspect of the UIB and SA schemes. Focus was shifted towards the economic incentives problems: Analyses showed that a large proportion of the employed workers did not have any or only very small economic incentives to work, see Pedersen and Smith (1996, 2002). Instead of reducing the compensation rate in the UIB system or reduce the compensation in social assistance, the main focus was on strengthening the activation and test of availability for the labour market. However, for young low-skilled UIB recipients aged less than 25 years, the reforms had focus on economic incentives already in 1996.

During the latest years, reductions of compensation rates have also been introduced in the SA scheme and there has been a gradual reduction of the compensation of the UIB because the benefits are not fully wage indexed. The 2002-reform was introduced to improve the incentives of low-skilled / low-wage individuals to obtain and keep an ordinary job. Earlier goal of activation has primarily been to improve the qualifications of the unemployed by increasing their wage undertaking job, however focus has recently been directed towards increasing the indirect cost of being unemployed.

In summary, the reform process which started in 1994 was implemented to solve the very large unemployment problems which had existed since the mid 1970s. First, the main focus was on reducing the observed open unemployment rate (*'at knække ledighedskurven'*), later on more specific initiatives were taken towards specific groups, mainly the young low-skilled unemployed individuals and later on immigrants. The first reform in 1994 was to a large extent a 'carrot-reform' (except for the abolishment of the right to regain eligibility to UIB in a public job offer) while later on more sticks have been introduced, for instance as the right to activation has been changed to a duty to activation combined with a direct cost of not undertaking the offer. The first reforms in the 1990s did not change the compensations rates in the UIB and SA schemes, except for the youngest UIB recipients, but gradually the economic incentives have also come more in focus in the labour market reforms. However, throughout the entire period the gross compensation rate defined within the UI system has not been changed.

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<sup>47</sup> However, at the same time the public supported parental leave was increased from 26 weeks to 47 weeks.

*The incentive effects of the system design*

Even in a Nordic context, the structure of the Danish UIB system is a fairly generous scheme for low skilled workers because of:

1. the high replacement rate (90%),
2. the combination of a heavily subsidised insurance system and voluntary membership,
3. very long benefit durations.

Since the UIB scheme has a maximum which is quite low, compared to the Danish wage distribution, the potential disincentive effects in the UIB scheme are to a large extent only a 'low-wage workers phenomenon'. However, since the Danish income taxes are also highly progressive starting at low income levels, and since a number of public income transfers and subsidies are means-tested against individual or family income, economic disincentives effects has been a major issue in the Danish labour market debate during the latest decades. Further, for the SA scheme, the compensation rates have in many cases been considerably higher than in the UIB scheme, which has further added to the problem of economic disincentives, see Welfare Commission (2005b) and Ministry of Finance (2004).

The effect of 1) is that individuals with (potential) wages below the maximum ceiling have very low or even negative economic gains from taking up employment. Calculation from Pedersen and Smith (2003) shows that in 1996 around 16 per cent of all employed UI-fund members had less than 500 DKK<sup>48</sup> difference per month between working and receiving UI benefit (net-gap). Pedersen and Smith also show that among individuals with the lowest hourly wages (below 85 DKK in 2001) the net-compensation rate<sup>49</sup> was more than 100%, hence for this wage group there were zero or even negative monetary gains from working. The Ministry of Finance (2002) has made the same kind of calculation on a some what different sample. Even though the reported results of the calculations from the Ministry of Finance show fewer individuals with a very low net gain from work, the main conclusions are the same.

It is a well-established fact that low wage is more prevalent among low-skilled individuals, and it is therefore expected that very low net-compensation rates are more common for this group. Indeed, Smith (1998) finds that a higher fraction of employed members of insurance funds with typically a majority of low-skilled workers (Kvindelige Arbejdere, KAD (*Female Workers*) and Specialarbejdere, SID (*Semi-skilled Workers*)) have less than a DKK 500 net-gap between work and UIB.

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<sup>48</sup> 2001 prices.

<sup>49</sup> The net-compensation rate is calculated as the disposable income when unemployed (net of tax + add. subsidies) divided by the disposable income in a full-time job (net of tax + add. subsidies – cost of work (transportation+child care)).

Even though neither the compensation rate nor the maximum benefit ceiling has changed throughout the period of interest, Pedersen and Smith (2003) find a decrease in percentage of individuals with very low / negative net-compensation rates, from 15.7 per cent in 1996 to 11.7 per cent in 2001. This indicates that the problem of lacking incentives has been gradually reduced during the period, and it might be due to the fact that the minimum benefit level has not increased at the same pace as wages.<sup>50</sup>

The consequences of a voluntary UI system (cf. 2) is that of a standard adverse selection problem: individuals with the highest risk of becoming unemployed, and individuals with the most to gain from the benefit (highest replacement rates) are most likely to insure themselves. In a Danish context, this means that individuals who are typically insured belong to the middle group of individuals who on the one hand have high enough employment rates to make them eligible for UIB, and on the other hand have a significant unemployment risk and relative high replacement rates (Welfare Commission (2005b)). As mentioned above, low-skilled individuals are more likely to belong to this group. The adverse selection effect is further reinforced by the heavy government subsidy, which keeps the price of the insurance artificially low. This makes the unemployment insurance even more attractive to the low-income / low-skilled individuals (see e.g. Mortensen (1977)).

The final feature of the Danish UIB system that makes it especially vulnerable to disincentives among low-skilled individuals is the long benefit durations, cf. 3). This is essentially due to a moral hazard problem of the benefit system, i.e. the fact that individuals who have become unemployed lose their incentives to search for employment (Welfare Commission (2005b)). The moral hazard problem is higher among low-skilled because of lower alternative wages, hence fewer job offers exceeds the reservation wage.

### *The reforms – implications for the labour market situation of the low skilled*

In section 2.2 we described how the labour market position of the low skilled has changed since the beginning of the nineties. In this section we will relate this development to the labour market reforms and how these might have changed the employment incentives for the low skilled.

The 1994-reform of the Danish UI system was to a large extent focused on re-qualifying the unemployed by introducing education leave and right and duty to ALMP. Clearly these features were mainly aimed at the low-skilled unemployed, and also the 1996 youth unemployment reform aimed at up-qualifying the low-skilled youth by giving them high

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<sup>50</sup> Individuals with very low previous wages might hit the minimum floor for UIB, and hence receive replacement rates above 90%. If the minimum benefit level is not regulated with the wage level, the number of people reaching the minimum floor will be decreasing.

incentives to enter education. Whereas the qualification interventions aim to affect the employment rate of the low skilled through increasing their job offers (labour demand), the interventions aiming to change the incentives of the low skilled works through labour supply. Hence, the labour market reforms implemented during the nineties potentially have affected low-skilled unemployed twofold, 1) through qualification (labour demand), and 2) through incentives (labour supply). Whereas both types of effects will tend to improve the employment rates of the low-skilled, the effect on wages and labour market participation rates will tend to differ for the two instruments.

The qualification or labour demand intervention will tend to increase wages of the target group, whereas the labour supply interventions will tend to decrease wages. The reason for this is that, when increasing the incentives to accept a job by decreasing benefit duration or decreasing replacement rates, reservation wages will decrease and hence, the affected group will tend to accept jobs with lower wages. Whereas decreases in replacement rates will tend to affect wages for all (potentially) unemployed, decreases in benefit durations will tend to decrease wages for the (potentially) long-run unemployed. To the extent that low-skilled individuals are more likely to be long-run unemployed we will expect the relative wage between low-skilled and high-skilled to decrease between 1995 and 2002. This is also what we find in Table 2.2. For low-skilled men the relative wage is the same between 1991 and 1995, whereas it drops from 0.77 to 0.75 by 2002. For low-skilled women the relative wage drops both between 1991 and 1995 and between 1995 and 2002, from 0.88 to 0.80.

The effect of the reforms on the labour force participation rate is less clear. The reforms directed at increasing the qualifications of the unemployed will tend to decrease the labour participation rate in the short run to the extent that the unemployed enter formal education. This effect is mainly important among youth below 25 who are affected by the YUP. This age-group is not part of our analysis sample, but Jensen et al. (2003) do indeed find a significant increase in the transition to ordinary education due to the introduction of YUP. The effect of the increased magnitude of activation is, on the other hand ambiguous. The fact that activation has become mandatory, and thereby increased the requirement put on the unemployed, might have increased the transition out of the labour force (Pedersen and Smith (2002)). On the other hand activation may have motivated individuals, who otherwise would have been marginalised, to stay in the labour market.<sup>51</sup> Even though this effect clearly has been one of the intentions of the active labour market policy initiatives

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<sup>51</sup> A significant part of the ALMP and ASP (active social policy – activation within the SA system) programs directed at long-term unemployed are aiming at teaching the unemployed how to function at a workplace.

most research show very low effect or even negative effects especially from these kinds of job training programs (Bolvig et al. (2003)).

All in all, the main effect of all these reforms should be an increase in employment rates for all affected groups, and since the low-skilled are more likely to be affected, the increase in employment rates are expected to be highest for this group. The numbers from Table 2.2 do indeed seem to confirm this prediction when looking at employment rates as fraction of the labour force.<sup>52</sup> This does not prove that the reforms have had the expected employment effect, since these numbers are heavily affected by the business cycle. Several studies have analysed the employment effect of the different reforms, even though to our knowledge none of these have focused on the low-skilled.

The Danish contribution to the empirical evaluation literature has mainly been taking two directions. One approach has been to analyse the effect of shorter benefit periods on the *incentives* regarding mobility out of unemployment. The basic idea is that a reduction of the passive benefit period increases the incentives of the unemployed in a similar way as to exhaustion of the entire benefit duration. This effect is often regarded as the “threat effect” of ALMP. Most studies find considerable effects. That is, the prospects of having to participate in ALMP increases the transition rate from unemployment to employment and the duration of unemployment increases with the length of the passive UIB period (Kyhl (2001), Geerdsen (2006), Geerdsen and Holm (2004), Rosholm and Svarer (2004), and Graversen (2004)). Another approach that has been used is to analyse the direct programme effect of entering ALMP or ASP (Rosholm and Svarer (2004), Bolvig et al. (2003), Graversen (2004), Graversen and Jensen (2006), Munch and Skipper (2004), Danish Economic Council (2002), and Jespersen et al. (2004)). Whereas the summarised findings for the threat effects on employment are found to be positive and large, program effects are found to be either small or insignificant. By programme effect we mean the effect of actually participating in ALMP on unemployment duration. The small program effects are mainly due to large locking-in effect, and in some studies training measures are even found to have negative post-program effects. In general private sector employment programs fare significantly better than public training programs.

According to the most recent analysis of the labour market reforms (Ministry of Finance (2004)), the 2002 reform “More in work” did reduce the incentive problem, especially for those receiving social assistance and mainly among receivers of social assistance married to receivers of social assistance. On the other hand, the ceiling for social assistance affected mainly single parents, as the housing support was reduced or eliminated after 6 months. A recent analysis by Graversen and Tinggaard (2005) contradict this result. They find that the ceiling for social assistance

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<sup>52</sup> Employment rates as fraction of population are likely to be affected by the different leave and retirement schemes, and therefore seem less appropriate for this purpose.

didn't have any employment effect. Mainly due to implementation problems and the weak labour market perspective for this group.

In summary, the way the different reforms of the Danish UI system have affected the low-skilled group has only peripherally been analysed, but the previous studies combined with the descriptive numbers from this report seem to indicate that the reforms first of all have increased the mobility out of the labour force for this group, to some extent by increasing formal education especially among the youngest group.

## 3.2 Norway

### *The main features of the Norwegian UI system to day*<sup>53</sup>

In Norway it is compulsory to be member of the UI system. This means that it is financed over the tax bill and that all members of the labor force will receive benefits (UIB) according to the rules of this system if they meet the general requirements to do so. The benefits are calculated according to the claims each unemployed have accumulated through his or her previous labor market career and not means tested according to their economic needs.

A considerable share of the unemployed registered at the employment office does not qualify for UIB. In 2004 about 37 percent of the unemployed were ineligible in this regard. Two main alternative social security systems exist which provide for this group of unemployed. Given that certain conditions are fulfilled, the ineligible unemployed may receive unemployment assistance (UA, ventestønad). As the UIB the UA is not means tested. The unemployed who don't qualify for benefits within any of these arrangements and is not able to finance their living expenses from other sources will receive means tested social assistance (SA). SA may also be collected as a supplement to the UIB or UA if the are not sufficiently covered by the income from these sources.

*Eligibility rules.* The requirements to qualify for UIB in the Norwegian system are related two main factors: annual earnings in the period before and to behavior as job seeker.

To become eligible for UIB when unemployed the wage income must have exceeded a certain amount (R1) during the last calendar year or a certain smaller amount (R2) on average during the last three calendar years. Only wage income is included in the basis for the calculation of the eligibility amounts. That is, work related transfers like sickness benefits and maternity leave benefits are not included, as well as income from self employment, pay while taking part in ALMP, UA or SA . The values of these minimum income requirements are defined by a basic quantity (G)

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<sup>53</sup>. Only the major structure of the UI- system is described in the main text. A more detailed description is to be found in Appendix.

in the Norwegian social security system, i.e., R1 to day equals 1.5 G while R2 equals 1 G. This basic quantity is then index regulated each year. In 2006 1 G equals NOK 62,161.

In addition to the income requirements the unemployed must fulfill certain demands with regard to his or her behavior as a jobseeker. The main thing is to act as a real involuntary unemployed and thus, as a person who is actively looking for a new job, able and willing to accept job offers or offers of activation programs at short notice.

*Maximum duration.* The *maximum duration* an eligible unemployed may collect UIB is dependent on the value of earlier income from work which is calculated on the basis of the same income definition as the eligibility criteria. If this earlier income exceeds 2G and other requirements are met the person can receive UIB for maximum 104 weeks. If this amount is smaller than 2G the otherwise qualified unemployed can receive benefits in 52 weeks. When the unemployment period expires the rights to a new period with UIB may only be re-obtained by complying with the requirement of a minimum income.

*The compensation rate.* UIB are measured to 62.2 percent of the previous yearly income. The claimant may choose between the income in the last calendar year or the average income in the last three calendar years. UIBs are taxable as ordinary earnings, and counts as basis for sickness payment, pensions etc. In the income definition, used as a basis for the calculation of benefits, work related transfers like sickness benefits and maternity leave benefits, as well unemployment benefits and pay while taking part in ALMP are included. However, previous income above 6G is not included. The amount paid is, accordingly, limited upwards to 62.2 percent of the amount corresponding to 6G. Thus, for higher earnings the compensation rate decreases monotonically. Or with other words labor income above 6G is not compensated at all in the case of unemployment.

Included in the UIB is a child allowance which is given to unemployed parents with dependent children. This supplement is a constant amount per child. The amount of UIB including the child allowances can not exceed ninety percent of the previous income which constitutes the basis for the calculation of UIB.

Since benefits are calculated on the basis of yearly income the absolute level of benefits increases with the wage rate and the number of hours worked during the previous years. Thus, low (absolute) benefits may be the result of low pay (low wage rate) and /or limited periods in employment, i.e., part time work or new arrivals at the labour market.

*Monitoring and sanctions.* The UIB claimants must register at the local employment office every fourteenth day, meet for consultations when called in and to some extent document that he/she really applies for jobs. In principle the "compulsory" job and training (ALMP) offers could be all over the country and of all kinds which the person in question is able to manage physically and psychically. However, in practice considerations



are taken with regard to the unemployed persons' educational background and geographical attachments. Since such practices to some degree rely on the assessment of local employment authorities and individual executives, such considerations may vary over time, among counties, and between employment offices. With regard to training programs, Figure 2.6 clearly indicate that a lower share of the (ordinary) Norwegian unemployed in the early years of 2000 receive ("compulsory") offers of ALMP in 2004 than in the other Nordic countries. The figure also indicates that the probability for a Norwegian unemployed to receive an offer of ALMP has decreased considerably during the nineties.

If the unemployed don't meet the behavioral demands they are exposed to sanctions. Benefits is stopped for eight weeks if the unemployment is self inflicted or the first time the unemployed deny to accept a job offer or to participate in ALMP which the executives at the employment office fined suitable. The benefit may also be stopped for four weeks the first time the unemployed deny to meet for consultations with the authorities or don't document their job search activity properly. The stop – periods are then extended with the number of times the rules are violated.

*Alternative and supplementary social security.* Participants in ALMP who are not entitled to UIB may receive UA. This assistance may also be given to unemployed after their UIB period has expired if they had been working at least 36 months of the last four years before they became unemployed. This support is given as a constant amount a day, with an extra allowance for each child. The long term unemployed receive in addition to these constant amounts extra supplements calculated on the base of their earlier UIB. In both cases the support is tax- free. According to AID (St.melding 9:2006–2007 page 120), the value of the UA, for the long term unemployed, approximately correspond to the earlier net amount they got when eligible for UIB. The same behavioral requirements and sanctions apply to UA as to UIB. However, there is no maximum duration period in relation to the payments of UA. This means that for the long term unemployed that meet the requirement for UA the period they may receive a UIB or a UIB corresponding benefit is indefinite.

People living legally in Norway who are not able to provide for themselves economically are by statutory provision entitled to a means tested social assistance (SA).

This support is administered by the local municipalities and is meant to be temporary but will be provided as long as the local authorities find it necessary. In 2005 the average period of receiving social assistance was 5,3 months (St melding nr 9: 2006–2007). There are no provisions in the law regarding the amount of support to the individual recipient. However, it is supposed to provide for a sufficient minimum living standard. The amount granted is stipulated by an assessment of each individual applicant by the local authorities. The income of cohabitants, housing expenses and the responsibility for children are important factors in this

regard. The procedure leads to unequal treatment among individual recipients. The differences however should be founded on individual considerations in each case. The state department has given guiding rules with regard to the level of SA. In 2004 the average monthly tax-free amount given in SA was about 1,5 G. This was slightly above the amount recommended for a married couple, without children, in 2006.

Many unemployed with a low income level from previous work probably may get a higher income level from SA than from UIB. This implies that for this group the prospect of expiring UIB rights may not work as a threat which increases the job search activity and reduces the reservation wage towards job offers.

The local authorities may give the SA on certain terms. They may for example demand that the recipient is actively applying for jobs and register at the local employment office or take part in ALMP. That is the demands made towards UIB recipients. With regard to SA recipients it may be difficult to apply credible sanctions. It is possible to stop the disbursement of SA benefits and only provide an absolute minimum support. In many cases however this is difficult in particular when the recipients have children.

#### *The main changes in the Norwegian UI system since 1990*

The main changes in the Norwegian UI system since the end of the eighties are summarized in table 3.2.

As illustrated in Figure 2.1, the Norwegian unemployment increased sharply from the late 1980s and – from a Norwegian point of view – reached a very high level in the early nineties. As a result, the number of long term unemployed rose significantly in a few years. This labor market development was the background for a considerable extension of the benefit period during the first years of the 1990s. The first reform which was accomplished in 1990 implied that the eligible unemployed could receive benefits in two periods of 80 weeks, instead of one. In between these two periods was a “lock out period” of 26 weeks when the unemployed could not collect benefits. To be eligible in the second period the unemployed must meet the same income requirements as before with regard to the levels of R1 and R2. However, the basis for calculating these qualifying amounts was changed since UIB from the first 80 week period was included. Thus, only unemployed receiving first period benefits above a certain amount would qualify for a second period. Since income from the UI was only 62,2 percent of earlier wage income the amount of benefits was reduced in the second 80 week UIB period.

Due to the economic downturn in the early nineties an increasing number of Norwegians became long term unemployed and thus ended up inside the “lock out” period without UIB. To improve the economic situation of this growing group the “lock out” period was reduced to 13 weeks

in 1991. In addition the maximum reduction in benefits from the first to the second 80 week period was limited to ten percent.

In 1992 a rule was introduced which in practice gave liberal exemption rules from the 13 week “look out “ period. This rule implied that all eligible unemployed who approached the end of the first or the second 80 week benefit period and did not have a job offer or an offer of participation in a ALMP should be granted 13 additional weeks with benefits at the end of each 80 week period. The implementation of this rule implied that the maximum period of benefit duration from this year was 186 weeks. There were, however interruptions after 80 weeks, 93 weeks and 173 weeks. Interruptions meant that the unemployed in cooperation with executives at the employment office had to apply for the next period and substantiate why it was necessary to continue as a passive receiver of unemployment benefits.

The main motivation behind the reforms in the UI-system in the first half of the nineties seems to have been to ease the economic situation of the increasing number of long term unemployed.

**Table 3.2. Summary of main changes in the Norwegian UI system and supplementary arrangements.**

1990	Duration: Maximum extended from one period of 80 weeks to two periods of 80 weeks. A “lock out” period of 26 weeks with no UIB between the two periods.
1991	Duration: The “lock out” period reduced from 26 to 13 weeks
1992	Duration: Possible to avoid any “look out” period if the local authorities could not come up with a job or a program after 80 weeks of unemployment. The maximum duration was actually extended to two periods of 93 weeks.
1994	Eligibility: Minimum reduction in work hours to get compensation for lost earnings increased from 20 to 40 percent Duration: Reduced for part time unemployed – from twice as long to just as long as the full time unemployed.
1997	Eligibility: The R1 requirement increased from 0,75 G to 1,25 G and the R2 from 0,75 to 1 G . <sup>1)</sup> Income earned in ALMP is no longer included in the calculation of R1 and R2. Duration: Maximum reduced from 186 to 156 weeks Introduction of a restricted duration period equal to 78 weeks if R1 or R2 < 2G Eligibility: Income earned in ALMP is no longer included in calculation of R1 and R2 which constitutes the basis for calculating the benefit amounts. Supplements: The introduction of UA to support participants in ALMP not eligible for UIB and long term unemployed who’s UIB period is expired.
2003	Duration: Maximum reduced from 156 to 104 weeks. Eligibility: - The R1 requirement increased from 1,25 G to 1,5 G. - Minimum reduction in work hours to get compensation for lost earnings increased from 40 to 50 percent. Monitoring and sanctions: The legal basis for demanding participation in ALMP as a condition for benefit assignment is reinforced Replacement rate: Reduction from 68,6 to 62,4 (for many claimants) due to the abolishment of vacation money for UIB recipients.
2004	Duration: Restricted duration reduced from 78 to 52 weeks.
2006	Replacement rate: Increased from 62,4 to 68,5 (for many claimants) due to the re introduction of vacation money for UIB recipients.

Notes: 1) To become eligible for UIB when unemployed the wage income must have exceeded a certain amount, R1, during the last calendar year or a certain smaller amount, R2, on average during the last three calendar years.

As is apparent from Figure 2.5 and Figure 2.6, the emphasis on ALMP in the Norwegian labour market policy was high during the late 1980s and early nineties. In 1991 the share of ordinary unemployed participating in ALMP was close to forty percent. From 1994 this share decreased sharply and in 2004 it was around fifteen. Until 1997, benefits or earnings while taking part in ALMP were included in the calculations for UIB eligibility and UIB compensation.

The unemployment level in Norway decrease from 1993 to the end of the decade.

In 1997 a major reform of the UI system was implemented. The rules related to the duration of unemployment benefits was once again changed and this time in a seemingly more restrictive direction. The maximum duration of 93 weeks – with interruptions – was replaced with one uninterrupted period of 156 weeks for everybody who meet the income requirements in the first place. At the same time these requirements were changed. To become eligible for UIB in 156 weeks the previous income of the unemployed (R1 or R2) must from that on exceed 2G. If income during the last calendar year was in the interval between 2G and 1.25G or income on average during the last three calendar years was in the interval between 2G and 1G than the maximum duration was only 78 weeks. Thus, from this year the very lowest income groups eligible for UIB were granted a lower maximum duration the rest of the employed who were eligible for benefits. Income from participating in ALMP was excluded from the income definition used to determination eligibility and benefit duration (R1 and R2).

As a part of the 1997 reform the unemployment assistance (UA), described above, was introduced. This was done to ease the economic situation for the long term unemployed that lost their UIB as a result of the tightening of the maximum duration. Since the level of the amount paid as UA more or less corresponded with the net amount paid as UIB the reform in 1997 seem to imply a liberalization of the maximum duration provision for the group of long term unemployed who qualified for this new social support. According to Røed (2006) this concerned about 60 percent of the unemployed eligible for UIB in 1997.

The main reason given by the authorities for the tightening of the eligibility requirements in 1997 was that the old rules implied that UIB were given to individuals with a very marginal attachment to the labor market. The main reason given for the shortening of the benefit duration was that this would improve the job search incentives among the unemployed and thereby reduce the length of their unemployment periods (St.melding 9:2006-2007). The introduction of the UA at the same time may have worked in the opposite direction of this intention.

Røed and Westlie (2006) evaluate the effect of the reduction in the duration of the benefit period from a maximum of (actually) 186 weeks to 156 weeks as a result of the reform in 1997. Quite surprisingly they found

that this reform increased the duration of expected unemployment spells by 1,6 months. One of their explanations to this finding is related to the institutional shaping of the system before and after the reform took place. In the old system the unemployed was brought in for consultation after the first 80 weeks had expired. Even though additional weeks on IU benefits was granted quite liberally, this consultation may in it self be regarded as a “treat” among the unemployed which make them intensify their job search to avoid it. Results from randomized experiments in UK indicate that the transition rate to employment increases considerably when the unemployed approach a consultation “check point” of this kind (Dolton and O’Neill, 1996). The consultation after 80 weeks in the pre 1997 system might also imply an offer of participation in ALMP which at least for some could not be refused without the loss of UIB. Røed and Westlie (2006) document that the use of sanctions against UIB recipients who did not satisfy the behavioral demands from the labor market authorities were fare more extensive before the reform in 1997. The same was true with regard to the use of ALMP. As described in the previous section about the Danish UI system, studies from Denmark have documented the “threat effect” of compulsory participation in ALMP after a certain period as passive UIB recipient.

However, the introduction of the UA at the same time as the shortening of the ordinary maximum duration period may also contribute to explain the increase in the duration of average unemployment found by Røed and Westlie (2006).

The next major reform in the Norwegian UI system was carried through in 2003. The maximum duration rules were once again tightened. The maximum duration for those with previous income (R1 or R2) above 2G was reduced to 104 weeks. For the eligible unemployed with previous income below this threshold the maximum duration was reduced to 52 weeks in 2004. Also the income requirements determining eligibility were once again increased. Minimum annual labor income last calendar year was increased to 1.5G, while the alternative requirement, average income during the last three calendar years was not changed from 1G. These measures continued to change the UI system in the same direction as started on in the 1997 reform and the motivations given was the same. However, the UA was not touched.

In addition to the tightening of the duration and eligibility rules, the legal basis for forcing benefit recipients to accomplish certain activities was strengthened in 2003. That is, if they did not meet to consultations at the employment office, documented their job search activity, accepted offers of ALMP, the legal basis for sanctioning this kind of behavior by stopping the benefit payment was established. This was the result of OECD recommendations to introduce activity demands which reduced the length of leisure time the unemployed had to their disposal (St. melding nr 9: 2006–2007).

The lack of changes in the gross compensation rate has complicated the analysis of its casual effect on labor supply. There are, however, a few Norwegian studies which have managed distinguish variation in this rate among individual unemployed which seems to be independent of un-observable individual characteristics that affect labor market performance.

To identify the casual effect of the level of compensation on the employment probability Røed and Zang (2003, 2005) explore a peculiar outcome of the Norwegian system for calculating the UIB. Given some particular circumstances the use of income from the last calendar year to calculate benefits may result in different replacement rates for otherwise similar individuals. If, as an example, we compare two individuals who becomes unemployed in June and January, who both worked exactly the same twelve months before they became unemployed and earned the same income from work. However, their basis for the calculation of UIB are quite different, since the one who started on the unemployment period in June is only compensated for the income earned during six months of last calendar year, while he or she who became unemployed in January got compensated for the income earned during the complete last year. Røed and Zang (2003, 2005) argue that the variation in replacement rates caused by this mechanism may be considered as completely random.

Based on this individual variation, they find that an increase in the compensation rate by ten percent decreases the transition probability from unemployment to employment by approximately 6.5 percent. According to the authors, this result is in line with international research on this issue.

Røed et al (2002) explore differences in the Norwegian and Swedish UI system to analyse the effect of changes in the replacement rate on the employment probability of the unemployed. In Norway the replacement rate is quite similar for different income levels below 6G. In Sweden the variation in the replacement rates between high and low income levels is much higher than in Norway. If there is a negative causal effect of the replacement rate on the employment probability of unemployed the expectation is that the difference in this probability between high and low income groups is higher in Sweden than in Norway. This expectation is clearly verified by the study in Røed et al. (2002).

#### *The incentive effects of the system design*

As outlined in the introduction the (economic) work incentives are determined by the net total compensation rate, i.e., the rate between the disposable income as fully or partly unemployed and the disposable income as fully or partly employed. This real rate is affected by the gross compensation rate within the UI system, the tax rules, as well as the supplementary benefits received by the unemployed.

Conditional on number of children, the gross compensation rate in the Norwegian UI system is strictly proportional to previous annual earnings

– except for the cut of at 6G which means that earnings above this level is not compensated at all. Since the child allowances are granted as flat constant amounts per child they increases the compensation rate relatively more for the low – compared to the high – income earners.

In isolation, the progressiveness of the Norwegian tax system works in the direction of a positive relationship between the level of earnings as employed and the real compensation rate if unemployed. That is, the difference between the net and gross compensation rate tends to be more positive for the high income earners.

For the unemployed who receive a low – or no – UIB, SA is available to secure an “acceptable living standard”. This arrangement obviously increases the net total compensation rate among claimants who tend to locate at the lowest end of the earnings distribution when having a job. Norberg and Westlie (2004) show that approximately 12 percent of the UIB recipients in 1997 also received SA in some period during the same year. Among the registered unemployed who were not eligible for UIB approximately 35 percent received SA. (St.melding 9: 2006–07). Table 2.2, in the Norwegian section of Chapter 2, shows that in the prime age group the population share of SA beneficiaries is considerably higher among the low skilled, particularly in the mail group.

In St. melding 9 (2006–2007) the net compensation rates – within the UI system (gross UIB rate net of taxes) in 2006 – are calculated for different family types and income levels. For a single person with no children and an annual income equal to 2G (=124322 in 2006) this rate is close to 73 percent. The corresponding rate for a single person with the same income and two children is close to 80 percent. However, for neither of these family types do this net compensation rates decrease (more than insignificantly) with an increasing income level until the cut of value of 6G (=372966 in 2006) is reached. From 6G to 8G (=497 288) the rate decreases from around 72 to around 58 percent for the single individual without children and from 80 to 60 percent for the single breadwinner with two children. This pattern, of course, is mainly the result of the income profile of the gross compensation rates in the UIB system.

In St. melding 9 (2006–2007) the net corresponding compensation rate in temporary disability pension is also calculated for 2006. With regard to this public transfer the negative relationship between this compensation rate and the income as employed is much stronger than in the UIB. This is particularly the case when the beneficiary has children. For the low income earners this replacement rate is considerably higher within the temporary disability pension than within the UI system. This is the case for all family types, but particularly for the single parents.

Using panel data from administrative registers Fevang et al. (2005) calculate the real net return to a move from a state as completely unemployed to a state as fulltime employed in 2001 (net of taxes and including supplementary benefits). These registers give data on the complete Nor-

wegian population with regard to their history in the labor market and as receivers of UI benefits as well as other welfare transfers. To calculate this return it is necessary to predict an income as employed for those who are unemployed. This is done using information about previous income – in the last five years before unemployment. For those who have no such income the expected income as employed is estimated in a model which accounts for the fact that it is not random who appears in this group. Income two years later for those who have a job on that stage is used to adjust the income predictions for 2001.

These calculations indicate that around one percent of the unemployed in 2001 end up with a lower disposable income if they work full time compared to being full time unemployed. Around two percent earn 20 thousand or less and around seven percent earn less than fifty thousand for getting a job.

With regard to the relationship between the level of the predicted income as employed and the real return to a transfer from unemployment to a full time job, the analysis of Fevang et al.(2005) indicate a non – monotonic pattern. This return; disposable income as employed relative to as unemployed, increases up to about 270 thousand in potential yearly income and then falls until around 350 thousand. After that it increases again. The positive relationship detected in the lower part of the income distribution is mainly due to the allocation of gross compensation rates in the UI system, i.e., the loss of UI benefits have relatively strong implications for the disposable income among the unemployed low income earners. The turn to a negative relationship between potential income and the return to start working if unemployed is due to the progressiveness in the formal tax system. The next turn in this relationship occur when this progressiveness is exhausted.

In the Norwegian UIB system both *eligibility* and *duration* are determined according to certain threshold values of annual earnings in previous calendar year(s). When it comes to eligibility this means that *low paid* and *part time* workers would have to be employed for a longer period than high paid and full time workers to become eligible. This is illustrated in table 2.

As can be seen from Table A (Appendix), low paid part time workers, i.e. 15 hours per week and 12 Euros per hour, will not be eligible for UIB even if they work 52 weeks per year. High paid part time workers, i.e. 15 hours per week and 30 Euros per hour, will be eligible for UIB if they work at least 25 weeks per year. Low paid full time workers, i.e. 35 hours per week and 12 Euros per hour, will be eligible for UIB if they work at least 31 weeks per year. High paid full time workers, i.e. 35 hours per week and 30 Euros per hour, will be eligible for UIB if they work at least 11 weeks per year.

Thus, if we use benefits relative to earnings in period of employment (previous year) as an indicator of disincentives, disincentives are weaker



for those with a short employment period – than for those with a long. This is illustrated in Table A. For full time low paid workers this “corrected compensation rate” is 48.0 or 62.4 per cent depending on duration of employment last year being 40 or 52 weeks. Similar applies for high paid workers.

At present about 62 per cent of (full time) unemployed (registered at PES) receives UIB. Thus 38 per cent are not eligible. Most of these are new-comers and re-entrants, and some are part-time workers. Presumably very few have been working close to full time for a whole year. Full time employees in low paid occupations (unskilled shop assistants, cleaning assistants etc) earn twice – or more – compared with the minimum requirement (Statistics Norway, wage statistics). Thus most full time, all year workers are also eligible for a full period of UIB (D=104 weeks). However, if you are low paid and work part-time for a whole year you may risk not being eligible for UIB at all.

#### *The reforms – implications for the labour market situation of the low skilled*

The level of gross compensation in the UI system has been (more or less) stable during the last 16 years. With regard to the duration of benefits the system first became more generous in the early nineties. From the late nineties the system apparently developed in a more restrictive direction both with regard to eligibility requirements and with regard to the duration of benefits. In the first part of the nineties the share of public expenditure for labor market purposes allocated to ALMP was close to forty percent. From 1994 this share has decreased and in 2004 it was only around fifteen percent. All in all, the composition of different policy measures reflects that the labour market authorities – during the early nineties – emphasised the effect of training and re-educating on the demand for labour, rather than the supply side effect of improving the work incentives of the unemployed. In the second part of the 1990s the emphasis in the Norwegian labour market policy was moved away from the skill upgrading and re-educating measures towards the improvement of work incentives.

One of the main intended effects of ALMP is to increase the productivity of the participants and thereby improve their employment probability and wage development. Norwegian evaluation studies of ALMP indicate that such effects are weakly positive (se Dale-Olsen et al. 2006 for a review of the Norwegian literature this regard).

Table 2.3 shows that the share of unemployed in the prime age population participating in active measures falls considerably from 1995 to 2005. Measured in percent points the reduction is more or less equally distributed among the skill groups. However, due to the compressed Norwegian wage structure low productivity probably is a relatively

greater hindrance against employment among the low skilled. Thus, if ALMP have a positive influence on productivity, the reduced public investment in such measures may affect the employment probability and wage development in this group much more strongly. Table 2.3 shows that the relative wage of low and medium skilled – compared to high skilled – fall from 1995 to 2003. During the same period the employment share of population, and the labour force participation, also fall relatively more in these two groups than among the high skilled. These reductions, however, are considerably more pronounced in the low skilled than in the medium skilled group.

As part of both the 1997-reform and the 2003-reform the eligibility requirements with regard to previous income (R1 and R2) increased – potentially excluding a fraction of the unemployed from UIB. The group excluded from UIB due to these changes obviously tend to be among the lowest income earner of the pre reforms eligible. Another part of the reforms, both in 1997 and in 2003, has been to shorten the maximum duration periods in which UIB can be collected. These changes exclude those with the longest unemployment periods from the UIB. Since level of education is positively related to yearly income and negatively related to the length of the unemployment periods these reforms both should affect the low skilled relatively hard. The numbers in Table 2.3 indicate that this apply since the group of unemployed who are not receiving UIB increases among the low skilled from 1995 to 2003, but not among the groups educated on a medium- or high level of education.

Thus, if we look at the UI system only these reforms should have improved the work incentives of the low skilled relatively more. According to the theory this, in turn, should have improved their relative employment situation and lowered their relative wage. The descriptive statistics in Table 2.3 indicate that only the last prediction applies. Yet, as already discussed in length, the UI-system does not work in isolation from the alternative social welfare systems which are available. The introduction of the UA in 1997 may have worked in the opposite direction of the reform limiting the maximum duration period, with regard to the work incentives for some of the long term unemployed. The tightening of the UI eligibility rules may also have canalized some of the more relatively marginalized unemployed into temporary disability pension.

### 3.3 Finland

#### *The main features of the Finnish UI system to day*<sup>54</sup>

Finnish legislation guarantees a right for comprehensive social protection for every resident in Finland. The system is characterized by universality of benefits. The main aim of social security is to protect people's income by providing a comprehensive system of basic security and earnings-related benefits which guarantee a reasonable standard of living in different risk situations. In Finland all residents are covered by social security schemes for unemployment benefits, for sickness and maternity benefits, and pensions (national pensions).

The rules of unemployment security and preconditions of receiving unemployment security in Finland are stipulated by law (Unemployment Benefit Act, 1290/2002). The present UI – system in Finland consists of one compulsory and one voluntary part. The Social Insurance Institution (KELA) distributes a basic unemployment allowance (BUA) to all eligible unemployed. Unemployed who have chosen to be members in an insurance fund may in addition receive an earnings related unemployment allowance (ERA). Unemployed who are not eligible for neither of these financial supports are entitled to a means tested labour market subsidy. Both the basic unemployment allowance and the labour market subsidy are flat-rate. The BUA and the labour market subsidy are financed by the State. The ERA is financed by premiums from the members to separate unemployment funds, the State, and the Unemployment Insurance Fund (Työttömyysvakuutusrahasto). Although social insurance system is obligatory and statutory in Finland, a considerable part of the social insurance system is managed by private insurance institutions. Finnish social security is financed by employers' contributions and contributions by the insured (employees), and through taxes. Earnings-related benefits are financed by salary-based payments.

*Eligibility rules:* To day the rules regulating the entitlement to BUA and ERA are the same except for the membership requirements which must be fulfilled to receive the last type of benefits. To become eligible for benefits (BUA and ERA) the unemployed must fulfill a condition related to earlier employment and conditions related to behaviour as unemployed. The present *employment condition* requires that an unemployed job seeker has been employed for at least 43 weeks (at least 18 hours a week) during the last 28 months before becoming unemployed. For persons who have previously received unemployment allowance the condition for renewal of benefits is 34 weeks of employment during the last 24 months. As in the other Nordic countries, the behavioural requirements are meant to secure that the unemployed are real job seekers.

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<sup>54</sup> Here we only point out the major structure of the UI- system in the main text. A more detailed description is to be found in Appendix

They must register at the employment office, make an effort to seek full time employment and be available for job offers. To be eligible for the ERA an unemployed job seeker must – in addition the employment and behavioural demands – meet the membership condition. This requires membership in an unemployment fund for at least 10 months. To receive the ERA and BUA it is also required that the monthly wage in earlier employment must be in line with the collective agreement or at least 40 times the amount of the basic unemployment allowance (23,50 €/day), i.e. 940 €/month.

As a whole unemployment benefits also include income security during labour market training. People entitled to an unemployment benefit can receive a training allowance during a training course. An additional requirement is that this training course is provided by the labour authorities. The training allowance is paid as part of the basic unemployment allowance or as an earnings-related allowance if the person is a member of an unemployment fund.

*Maximum duration:* The payment of both the BUA and the ERA is restricted to a maximum of 500 days. An exception to this rule is the payment of additional days to older allowance recipients aged 57 or more.

*The compensation rate:* The BUA is distributed as a basic daily flat rate amount to all eligible unemployed. In 2006 this was 23,50 euros a day. Those who qualify for ERA receive this flat rate allowance and also an earnings-related part the amount of which is 45 percent of the difference between the daily wage and the flat rate. For the part of the monthly wages which is higher than 90 times the flat rate, the rate for the calculation of the ERA is only 20 percent. This procedure considerably reduces the gross compensation rate for the relatively high income earners. During the recession of the early 1990s the compensation rate of ERA was reduced so that the rate to calculate the earnings-related part was reduced from 45 percent to 42 percent (in 1992). The rate was raised back to 45 percent in 2001.

Those UIB recipients who also have dependent children get a flat rate child allowance added to the UIB. The UIB are taxable as ordinary income.

In 2002 the coverage of unemployment funds was 70 percent. In 2005 the gross compensation rate was 52,7 for a median wage earner without children. For a low-wage worker earning 1500 euros a month this rate was 61 percent and for a high-wage worker earning 4000 euros per month 39 percent.

*Monitoring and Sanctions:* If the unemployed without any just cause refuse to accept an offer of employment or an offer to participate in ALMP the UIB is stopped for 60 days. If an unemployed job seeker repeatedly refuses to accept an offer of employment or an offer to participate in ALMP the payment of UIB is stopped and he/she is not entitled to the UIB until he/she has been in employment or in ALMP for at least

three months. The unemployed job seekers must obey the instructions given by employment offices as regards activity of the unemployed in job seeking and with regard to participation in ALMP.

*Alternative and supplementary social security:* Those unemployed job seekers (aged 17–64) that do not fulfil the employment condition or have received unemployment allowance for the maximum period of 500 days are paid the labour market subsidy. The economic terms related to this benefit more or less correspond to the BUA, but the payments are means tested against household income. The means-testing is applied if the household income exceeds 536 euros a month. The full labour market subsidy is paid if the combined monthly wage of the recipient and his/her spouse is less than 848 euros. This amount is raised by 106 euros for each dependent child. Just like in the case of basic unemployment allowance certain social benefits paid to the recipient can reduce the allowance. After a waiting period of five days the labour market subsidy is payable as soon as the claimant has been registered as an unemployed job seeker. The means testing does not apply during first 180 days following the lapse of the maximum UIB period for long-term unemployed and there is no waiting period before this group gets their labour market subsidy. The payment of the unemployment subsidy has no maximum duration.

It is common for the unemployed, especially if they are not qualified for earnings-related unemployment benefit, to get supplementary insurance from means-tested social insurance such as housing allowance and social assistance. For example, of all recipients of the general housing allowance over 60 percent are unemployed, and of all the recipients of social assistance their share is around 50 percent.<sup>55</sup>

The low-income households living in a rented, right-of-occupancy or owner-occupied dwelling, or just a part of a dwelling can receive general housing allowance which covers 80 percent of reasonable housing costs exceeding a basic deductible (which the household must pay itself), the rates of which the Government sets annually. The amount of this deductible depends on the location of the dwelling, the size of the household and the household's gross annual income. The allowance is not paid if it is less than 16.81 euros per month. The income levels above which one is not qualified for housing allowance are quite low.

In Finland social assistance is a last-resort financial assistance paid under social welfare to a household from municipal funds when no ordinary sources of income are available or they do not suffice to ensure the person or family the minimum level of living needed for a life of human dignity. The amount of social assistance is determined on the basis of incomes and expenses of the household during each month. If an unemployed job seeker refuses of work or of ALMP without a justifiable cause, the size of the basic social assistance could be reduced up to 20

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<sup>55</sup> In 2000 (see Asumistuen yhteensovitusryhmän muistio, 2001).

percent. If the refusal is repeated, the basic benefit could be reduced up to a maximum of 40 percent.

#### *The main changes in the Finnish UI-system since 1990*

The main motivation behind the changes made to the unemployment insurance and other social insurance particularly since the mid-1990s has been to increase the incentives of unemployed to get employed (Keskitalo et al. 1999). Despite the positive economic development unemployment went down painfully slowly in Finland after the recession of the early 1990s. The unemployment problem was to some extent seen as a structural problem that could not be solved without structural changes. It was stated in the government programme in 1995 that work incentives should be increased by co-ordinating taxes, social transfers and fees so that they always encourage working instead of living on social benefits. As regards unemployment insurance this meant that the eligibility conditions of the unemployment insurance were tightened during the 1990s.

In 1994 there was a significant change in the unemployment insurance system. The BUA, which earlier had no maximum duration, was restricted to the maximum period of 500 days during four successive calendar years.<sup>56</sup> The same maximum duration provision applied to the ERA since 1985. Within the reform process in 1994 the employment condition granting entitlement to ERA was applied to the rules granting entitlement to BUA as well. From that year it was required that the unemployed job seeker – to receive BUA – had to be employed for at least at least 26 weeks (at least 18 hours a week) during the last 24 months before becoming unemployed. In other words, those unemployed job seekers who fulfilled the employment condition but who were not members of an unemployment fund could receive the BUA.

Another significant element of the reform process in 1994 was the introduction of a new means-tested labour market subsidy for labour market entrants who did not fulfil the employment condition and for the unemployed persons who had received unemployment allowance for the maximum period of 500 days. For the latter group labour market subsidy was not a means-tested during first 180 days. This subsidy was neither means-tested for those unemployed who participated in some active labour market policy measures such as e.g. labour market training and job training. From the beginning the purpose of the new labour market subsidy was to improve the employability of the unemployed job seekers by encouraging them to participate in the active labour market policy measures. This benefit was of equal size as BUA.

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<sup>56</sup> As an exception those basic unemployment allowance recipients aged 55 or more exhausting their right to the allowance got an automatic extension of the reciprocity to the age of 60. At the same time means-testing of the allowance was removed.

The means-testing was applied to the recipient's own income and as at year-end 1994 their spouse's income exceeding 50.4 euros (FIM 300) a month. The full labour market subsidy was paid if the combined monthly wage of the recipient and his/her spouse was less than 931.7 euros (FIM 5,540) (or in the case of single recipients, 622.3 euros (FIM 3,700)). Income exceeding these limits reduced the benefit with 75% of the excess being deducted from the benefit. The extension of means-testing to take into consideration of the spouse's income meant a deterioration of the minimum unemployment insurance.

In the law change in 1996 (which came into force from the beginning of 1997) the employment condition for both ERA and BUA was tightened. In order to be eligible the unemployed job seeker from now on had to be employed for at least 43 weeks (at least 18 hours a week) during the last 24 months before becoming unemployed compared to the earlier 26 weeks. In addition, the unemployed job seeker had to be a member of an unemployment fund for at least 10 months instead of earlier 6 months in order to get an ERA. The waiting period between unemployment occurrence and benefit payment was also extended from 5 days to seven days.<sup>57</sup> One motivation behind this reform was to prevent subsidized employment from being used as a means to renew eligibility to the earnings-related unemployment benefit).

As regards the recipients of the labour market subsidy in the latter half of the 1990s the conditions were tightened especially for the young. From the beginning of 1996 job seekers aged 17 to 19 years who entered labour market for the first time and who did not have any occupational training were not entitled to labour market subsidy unless they participated in active labour market policy measures. They gained the right for the labour market subsidy only after being unemployed or employed for five months. In 1997 this tightening of the labour market subsidy was extended to the uneducated unemployed job seekers aged under 25 years. The main motivation behind these reforms was to reduce youth unemployment caused by the lack of skills and to move young unemployed from passive benefit reception to activity, i.e. to employment or to education.

However, the means-testing of the labour market subsidy was eased in 1997 as regards the impact of spouse's income on the deduction of the subsidy. The reform meant that for the majority of the labour market subsidy recipients unemployment insurance was improved. The reform also improved the work incentives of the spouses of the unemployed (Laine and Uusitalo, 2001).

Since the minimum unemployment insurance amounts, i.e. BUA and the labour market subsidy were frozen for many years in the 1990s the purchasing power of the unemployed was increasingly reduced compared

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<sup>57</sup> In 1997 the eligibility rules were also tightened by raising age limit for the benefit extension from 55 to 57. years. From 1997 onwards allowance recipients aged 57 or more exhausting their right to the allowance get an automatic extension to the age of 60.

to that of the wage earners. That is, the compensation rate within the Finnish UI system and supplementary arrangements was significantly decreased during these years. In addition to the law reforms, described, this was another important element influencing the work incentives of the employed and unemployed affected by this development.

During the latter half of the 1990s the eligibility conditions for the unemployment insurance were tightened. In the early 2000s the reforms made in the unemployment insurance to some extent went in the opposite direction. From the beginning of 2003 the employment condition for the renewal of benefits was eased so that the unemployed job seeker had to be employed for at least 34 weeks during the last 24 months before becoming unemployed instead of the earlier 43 weeks. For others the employment requirement stayed at 43 weeks but the reference period was extended from 24 months to 28 months.

At the same time the level of earnings-related daily allowance was raised for those employees dismissed for economic or production related reasons who had a work history of over 20 years and had been a member of an unemployment fund for at least five years. This raised allowance was paid for the maximum period of 150 days and it was compensation for abolishing a severance pay system.

In July 2005 a new law came into force which improved the position of an employee when he or she is under threat of dismissal – or has already been dismissed – due to economic or production related reasons. An employee who is affected by the law has a right to an employment program, raised unemployment allowance and paid time off during the notice period for seeking a new job. The precondition is that the employee has work at least 3 years. Also temporary workers are entitled to this ‘change security’ if their employment relationship has lasted interruptedly for at least three years or several employment relationships with the same employer at least 36 months during last 42 months.

From the beginning of year 2006 a reform of labour market activation was introduced. The employment office is obliged to offer work or active measures to unemployed persons who have received a labour market subsidy for 500 days. If an unemployed person refuses to participate in these measures, he loses his right to labour market subsidy.

In the reform the funding of benefits between the state and the municipalities was also changed. The aim of the reform is to cut long-term unemployment and prevent the rise of new long-term unemployment.



**Table 3.3. Summary of main changes in the Finnish UI-system and supplementary arrangements since 1990**

Year	Changes in unemployment insurance
1994	<p>Duration: The maximum length of the period BUA is restricted to 500 days (same as for ERA since 1985). Earlier there was no maximum duration.</p> <p>Eligibility/Replacement rate: Means-testing of level of BUA is abolished. The same employment condition which regulated the entitlement to ERA is introduced in relation to BUA; employed for at least 26 weeks (at least 18 hours a week) during the last 24 months before becoming unemployed. Earlier those unemployed who did not fulfil the employment condition received BUA</p> <p>Supplements: A new means-tested labour market subsidy introduced, has no limited duration</p> <p>Not means-tested with regard to access or benefit amount during the first 180 days for those unemployed who had received unemployment allowance for the maximum period + for those who participated in some active labour market policy measures</p>
1997	<p>Eligibility:</p> <ul style="list-style-type: none"> <li>- Employment condition ( ERA and/or BUA) is extended to at least 43 weeks (at least 18 hours a week) during the last 24 months before becoming unemployed.</li> <li>- Have to be member of an unemployment fund for at least 10 months instead of 6 months in order to get an ERA.</li> </ul> <p>Replacement rate: The waiting period between unemployment occurrence and benefit payment (ERA and BUA) was extended from 5 days to seven days.</p>
2003	<p>Eligibility:</p> <ul style="list-style-type: none"> <li>- Employment condition for <i>the renewal</i> of benefits was eased so that the unemployed job seeker had to be employed for at least 34 weeks during the last 24 months before becoming unemployed instead of the earlier 43 weeks.</li> <li>- For fresh unemployment spells the employment condition stayed at 43 weeks but the reference period was lengthened from 24 months to 28 months.</li> </ul> <p>Replacement rate: ERA raised (in a maximum of 150 days) for those who become unemployed due to dismissal for economic or production related reasons + who had a work history of over 20 years + had been a member of an unemployment fund for at least five years.</p>
2005	<p>Replacement rate: An employee who becomes unemployed due to production related downsizing + has a work history of totalling at least 3 years has a rights to an employment programme, paid time off during the notice period for seeking a new job and raised unemployment allowance.</p> <p>The precondition is that the dismissed employee has a work history which is longer than 3 years<sup>1</sup></p>
2006	<p>Monitoring and sanctions/supplements: the employment office is obliged to offer work or active measures to unemployed persons who have received labour market subsidy for 500 days</p> <p>If an unemployed person refuses to participate in these measures, he loses his right for labour market subsidy</p>

In the case of temporary workers: a fixed-term employment relationship that has lasted uninterruptedly for at least 3 years or several fixed-term employment relationships with the same employer which have lasted for at least 36 months during the past 42 months

The labour market policy in Finland consists of the passive part (unemployment insurance) and the active part, i.e. active labour market policy measures. The latter can be divided into three sections: public employment service, subsidised employment and labour market training.

As far as active labour market policy is concerned, two prominent reform processes were carried out in the late 1990s and early 2000s in line with the other activation policy measures. In 1998 the so called first wave of the labour market policy reforms was introduced. Main policy changes implied that the volume of employment subsidies and direct job creation was reduced and the volume of short-term job-search training was in-

creased. An obligation was placed on the job seeker to draw an individual action plan together with the PES officials. In addition, labour market subsidy could from 1998 onwards be paid to employers in combination with wage subsidy.

The aim of this reform wave was to form a more coherent whole of the separate labour market measures by improving the employment service process, by activating the flat-rate passive labour market subsidy scheme for job creation, by reforming the active measures, and by defining the rights and the obligations of the unemployed job seekers (Räisänen, 2005).

The main motive of the second reform wave – introduced in 2002 – was to tackle structural unemployment and improve the functioning of the labour market. This time the emphasis was on further improving the employment service process by dividing them for open labour market job-search purposes and more in-dept upgrading of activation and skills for those who face a more difficult situation in the labour market (Räisänen, 2005). The reform of the public employment service has been carried on in 2004–2006. It has entailed placing the services for the lowest employment capacity job seekers at new employment service centres, which are expert networks of local and regional authorities and other service providers. At the same time the employment office service supply is more clearly shifted towards serving the open labour market and promoting enterprises' access to labour.

In the latter half of the 1990s, changes were also made in taxation and in social security arrangements not directly attached to the UI system – to improve work incentives. It was stated in the government programme (in 1995) that work incentives should be increased by co-ordinating taxes, social transfers and fees so that they always encourage working instead of living on social benefits.

During years 1996–1998 a so called “Work-incentive-trap-reform” (kannustinloukku-uudistus) was introduced which included several reforms in different fields of social security benefits and taxation. In order to remove incentive traps and disincentive effects changes were made to taxation, benefits and fee systems. The aim of these reforms was to encourage active participation in working life so that working would always be profitable compared to living on social security. The most important policy changes were the following: 1) The means-testing of the labour market subsidy was eased in 1997. 2) The municipal tax allowance was increased in 1997 and 1999 in order to encourage low-paid and temporary work. 3) From the beginning of 1997 social assistance and housing allowance was better coordinated. 4) The housing allowance of the low-income workers was increased in order to decrease the need for social assistance. 5) In 1997 the determination of municipal day-care fees was changed so that the fees were determined as a percentage of the family income instead of the earlier income brackets. 6) As regards social assis-

tance a major reform of the "Act on Social Assistance" (30.2.1997/1412) was introduced from the beginning of 1998, which also included new sanctions for refusal of activation (work or employment policy measure). A seven per cent own liability of the housing expenses was included in the basic benefit of the social assistance. For families with more than one child, the amount of basic benefit was reduced: basic benefit was five per cent lower for the second child and ten percentage point lower for the third and every subsequent child. This also applied to children under ten years old. At the same time the housing allowance for singles and childless couples was raised.

*The reforms – implications for labour market situation of the low skilled*

In the Finnish 'getting people back to work policy' there has been two different strategies; activation and tightening. Activation measures have aimed to improve the employability of those out of work by offering opportunities such as labour market training and connection into working life. Sanction elements have also often been included in these measures so that the recipients of the benefits have been obliged to participate in activation measures or risk losing their benefit (Heikkilä, 1999).

As far as the impact of active labour market policy is concerned, there is relatively much research in Finland on how well it has worked in terms of succeeding in getting unemployed back into work. According to the Finnish research (e.g. Aho, Nätti and Suikkanen (1996); Aho, Halme and Nätti (1999); Aho and Kunttu (2001); Hämäläinen (1998a, 1998b, 1999, 2002); Hämäläinen and Ollikainen (2005); Kauhanen, Lilja and Savaja (2006)) labour market training and job placements in the private service sector have improved the employment prospects of the participants whereas the subsidised employment in the public sector has not been that effective.

These studies have not had a special focus on the low-skilled. There is some evidence (Hämäläinen 1998a) that in the era of high unemployment labour market training has been most useful for those participants whose labour market position is weakest, i.e. the low-skilled, whereas in the era of low unemployment the high-skilled have benefited more.

The other part of the policy in the 1990s was tightening of the eligibility to earnings-related unemployment insurance, increasing the means-testing of the minimum level of labour market subsidy and also changing the other supplementary social insurance so as to increase incentives to work. The evaluation studies (e.g. Kyyrä 1999, Laine and Uusitalo 2001, Saarela 1999) have concentrated on the impact of the reforms on the labour supply. These studies have not had a special focus on the low-skilled either. In general, results show that the unemployed are getting employed only when there is financial gain from employment, i.e. when there are no

unemployment traps. Saarela's (1999) results imply that higher social security, i.e. higher net replacement rates may decrease labour supply and lengthen unemployment.

Kyyrä's (1999) study using large micro data set showed that 43 percent of the unemployed who got a job increased their income by 25 percent or less, and 12 percent did not increase the disposable income of the household at all. This suggests that other factors than short-term economic incentives influence labour supply. Among them are non-financial rewards e.g. social status and social contacts and the negative stigma being unemployed. Accepting a low-wage job also acts as a signal of willingness to work and may act as a stepping stone to a better job in the long run, even if the financial gain was poor in the short run.

Eriksson et al.'s (2002) study on the determinants of job search intensity imply that the replacement ratio and its components do not seem to influence the intensity of individual's search, and that the replacement ratio may not be a good measure of the economic hardship individuals are suffering as a consequence of unemployment. In addition, unemployment benefit recipients were more likely to search actively for a job than the non-claimants in Finland and Norway. The study also found out that by educational attainment level, low-skilled job seekers, even when active, search less intensively for a job than other educational groups.

Laine and Uusitalo (2001) studied the impact of different parts of "the incentive trap reform" on the labour supply in Finland. According to the results, the reforms lowered the effective marginal tax rates, i.e. increased the net additional income. As a whole the impact on labour supply was positive but small. However, the study does not show whether the reforms increased labour supply of the unemployed or the labour supply of those already employed. As regards the easing of the means-testing of the labour market subsidy it had a positive impact on the labour supply of the spouses of the unemployed, who received labour market subsidy.

Hämäläinen (2006) studied the impact of tightening of conditions of labour market subsidy for the uneducated young. According to the results the reform had only a modest positive impact. It reduced youth unemployment and increased studying, but also increased non-participation.

In summary, the statistics (in Table 2.3a) show worsening of the labour market position of the low-skilled in Finland from 1990 onwards. Their labour force participation and employment shares have decreased both absolutely and relative to the other skill groups, and their unemployment is still high. At the same time their dependency of public transfers has increased e.g. due to their prolonged unemployment spells. Thus, it seems that the implemented employment and activation policy has not totally succeeded in reducing the labour market problems of the low-skilled. This combined with the fact that the level of minimum unemployment insurance (i.e. basic unemployment allowance + labour market subsidy) and of other social insurance was not raised for nearly ten years

(only from 2003 there have been some increases) has also caused more economic hardship for the low-skilled who are more frequently dependent on the minimum insurance compared to the higher educated. This suggests that perhaps more emphasis should also be put on the labour demand side to promote employment of the low-skilled.



## 4. Changing UI systems and the low skilled labour supply

### 4.1 The changing labour market position of the low skilled

During the observation period, i.e. from early 1990s to 2003, the labour market position of the low-skilled has deteriorated to some extent in all Nordic countries. They have become more marginalised than the rest of the labour force with respect to the labour force participation and dependency on public income support and social transfers. As regards the development of employment rates and unemployment rates the development has been somewhat divergent in the four Nordic countries. In Denmark and Norway the position of the low-skilled has improved as regards employment and unemployment rates. In Finland and Sweden, employment rates of the low-skilled are still at a remarkably lower level and unemployment rates still at a remarkably higher level than before the recessions of the 1990s that hit these countries.

Behind this marginalisation there are several explanations most relevant of which are related to the skill-biased technological change and globalisation. At the same time it is, however, good to remember that the share of the low-skilled category has decreased considerably over the period in all the Nordic countries (e.g. in Finland from around 30 percent in 1990 to 17 percent in 2003, in Norway for prime age females from 57 percent in 1992 to 34 percent in 2003, in Sweden for prime age females from 23 percent in 1990 to 11 percent in 2003).

In all countries the differences between labour force participation rates for the prime age low-skilled and for the high-skilled were larger in the early 2000's compared to the level of the early 1990's. For high-skilled there has only been minor decreases in the participation rates, ranging from 0 to 3 % point depending on country and gender, whereas for the low-skilled decreases in the participation rates have been notably larger. To an increasing extent, a larger share of the low-skilled workers, who are outside the labour force have joined different welfare support measures. This tendency is seen for all four countries. There are also marked differences in employment rates between the low-skilled and the high-skilled workers. The differences by educational attainment level are larger for females in all Nordic countries.

The risk of unemployment for low-skilled workers compared with high-skilled workers is also higher in all Nordic countries: about three times higher in Finland, and about two times higher in Denmark, Norway

and Sweden.<sup>58</sup> An indication of the poorer labour market situation of the low-skilled in Finland is that their relative share among the unemployed is also much higher than among the employed.<sup>59</sup>

A widening of the earnings differentials between the low-skilled and the high-skilled has taken place in most EU countries from the beginning of the 1970's and over the following twenty years. This trend was a result of increased wage gain at the top of the earnings scale and stagnant real wages at the lower end of the distribution (Machin and Van Reenen, 1998). This development was less accentuated in the Nordic countries than in several of the other European countries. This is, at least partly, due to the fact that Nordic countries are characterized by more regulated economies that keep wages of the low-skilled relatively higher than in less regulated economies. The price is a lower demand for the low-skilled labour than would have been the case otherwise. Consequently, the low-skilled are more likely to experience spells of unemployment than had wages been more flexible.

As regards the relative wages of the low-skilled compared to the high-skilled workers the development has been divergent in different Nordic countries. In Denmark and Norway there is evidence of the slight widening of the earnings gap between the low-skilled and the high-skilled over the period, especially for women. In Finland the figures<sup>60</sup> would seem to suggest that earnings gap between the low-skilled and high-skilled workers has narrowed from the early 1990s to 2003. Despite the increase in the earnings gap due to skill differences the gap is still narrower in Denmark than in Finland.

The low-skilled also work more frequently in part-time jobs. This work-time difference will matter for the overall earnings differentials and does not show in the comparison of the full-time workers' monthly income (see Hardoy and Schøne, 2006, on the part-time wage gap in the case of Norway).

In Denmark and Finland the low-skilled unemployed are to a more limited extent eligible for earnings-related unemployment insurance and the share of those eligible for UIB has deteriorated over the inspection period. One reason behind the lower eligibility of the low-skilled in these countries is that there are more unemployed in this group who have received earnings-related benefit for the maximum period and have therefore exhausted eligibility for earnings-related unemployment insurance. Another reason is that the low-skilled workers are less frequently members of unemployment funds which is a prerequisite to qualify for UI

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<sup>58</sup> For Sweden refers to unemployment rate for both sexes together.

<sup>59</sup> This information is based on calculations from Ministry of Labour's statistics.

<sup>60</sup> However, the figures referred here between 1995 and 2003 which are from wages and salaries statistics published by Statistics Finland are not totally comparable because in this statistics an ISCED 1997 (a new classification of education) was adopted from 1998 onwards. And the figures we calculated from Income distribution statistics imply that the earnings gap between the low-skilled and the high-skilled has remained about the same or slightly widened between 1995 and 2003.



benefit in Denmark and Finland. For this reason they also have to resort more often to other social insurance such as social assistance.

## 4.2 The impact of the reforms on the low-skilled group – future research

From the late eighties/early nineties unemployment rates rose in all the Nordic countries. As a response to this development the Nordic governments redesigned the UI systems and to some extent also other social security systems. The motivation behind these changes was to some extent ambiguous. At first and in some of the countries, the reforms were mainly initiated to ease the economic situation of the growing numbers of unemployed. For example, in Norway with regard to the duration of UI benefits the system first became more generous in the early 1990s. In the other countries the emphasis was, from the very beginning, to improve the work and job-search incentives of the unemployed. Thus the type and the direction of reforms have changed over time and between the countries.

Despite the differences, it can be said that in the latter half of the 1990s common to all Nordic countries was the tightening of the eligibility conditions of the UI. In both Finland and Denmark the minimum period of insured employment, which was required to qualify for earnings-related benefits, was lengthened: from 26 weeks to 52 weeks (during the last 36 months) in Denmark and from 26 weeks to 43 weeks (during the last 24 months) in Finland in 1997. Also in Sweden the employment requirement was raised from 4 to 5 months within a 12-months period in 1995. In 1997 it was further lengthened from 5 to 6 months within a 12-month period. In Norway the previous income requirement for UI was increased, the R1 from 0.75G to 1.25G and the R2 from 0.75G to 1 G.<sup>61</sup>

In the latter half of the 1990s increased emphasis was placed on activation and active labour market policies (ALMP) in some Nordic countries and greater efforts were made to improve the effectiveness of these measures. In Denmark since 1994 there were a series of reforms which placed more focus on activation and test of availability for the labour market. In Finland, one of the most significant reforms were carried out in 1998. In this so called first wave of the labour market policy reform the active measures were reformed and the rights and obligations of the unemployed job seekers (such as e.g. obligation for individual action plans) were defined. In Norway the emphasis on ALMP increased considerably in the late 1980s, participation in ordinary labour market programmes reached a peak in 1993 and decreased thereafter. By the end of the 1990's it was ten times lower compared to the level in 1993. Vocational rehabilitation programs, on the other hand, experienced the precisely the opposite

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<sup>61</sup> R1 = Annual wage income the previous calendar year. R2 = Average annual wage income during the three previous calendar years. G = Basic insurance/pension sum unit updated annually

trend: participants in vocational rehabilitation programs ten doubled from the middle to the late 1990's. In Sweden as a response to the unemployment crisis the diversity of activation programmes and the expenditure for the ALMP were increased in the 1990s (Bergmark, 2003). Sweden also introduced activation measures that tied eligibility for means-tested benefits to participation in the programmes.

So, for job-returning policies two different, often combined, strategies have been used in all the Nordic countries.<sup>62</sup> The first type of measures adopted has focused on increasing work incentives by tightening the eligibility conditions and cutting the level of benefits and the maximum duration. These measures have acted as push factors pressuring people from out-of-work situations towards employment. The second type of measures can be characterised as activation measures, which aimed to increase the employability of people and also to make working life more attractive to them. These measures have acted as pull factors. Sanction elements have also often been included in these measures so that the recipients of the benefits have been obliged to participate in activation measures or risked losing their benefits. So both "sticks" and "carrots" have been used.

How have these reforms in the unemployment insurance and other related social insurance and in activation strategies affected the labour market development of the low-skilled?

Behind the chosen policy strategies in some countries the question arises of whether the structure of social assistance or the combination of unemployment benefits and social assistance is the main cause for the increase in unemployment and persistence of welfare dependency (Heikkilä, 1999). This question has been considered to be the most relevant in the case of work incentives of the low-skilled and low-income workers.

Potentially labour market reforms have affected low-skilled workers twofold, through incentives (labour supply) and through qualification (labour demand). Both these types should increase employment rates of the low-skilled, whereas the effects on wages and labour market participation rates are ambiguous. The qualification measures tend to increase wages of the target group whereas increasing incentives by tightening conditions can decrease wages, since these factors are likely to decrease reservation wages of the unemployed.

The impact on the labour force participation rate is less clear. Qualification measures such as attending education can, in the short run, decrease the participation rate. The effect of increased mandatory activation and therefore increased pressure on the unemployed might also increase transition out of labour force. On the other hand, activation measures may motivate some of the unemployed to remain in the labour market and thus prevent marginalisation.

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62 This is also the case in wider European level (see Heikkilä, 1999).

As regards incentives, the calculation of gross and net replacement rates give information about the income security and work incentives for different groups. Both gross and net replacement rates have tended to be higher – compared to the level of income from work – among the low-income earners in all the Nordic countries, and thus also among the low-skilled group, as low wage is more prevalent among this group. As pointed out in Pedersen and Smith (2002) and Røed et al. (2003) in cases when UI benefits are relatively more generous for low-income workers, they may also lead to relatively longer unemployment spells.

Besides the reforms, the tightening strategy and increasing incentives strategy has also meant frozen levels of minimum unemployment insurance and of some other supplementary social insurance benefits in some Nordic countries (for example, in Finland), which have also had impact on the net replacement rates. This has affected the low-skilled unemployed most because among them there are more recipients of minimum unemployment insurance and other social insurance. The Norwegian UIB system, where both eligibility and duration are determined according to certain threshold values of annual earnings in recent years, implies that those in low paid and part-time jobs (which in many cases are low-skilled) have to work for a longer period to become eligible for the UIB.

There is some evidence that the reforms carried out in order to increase incentives to work have reduced disincentive problems at least to some extent. The average employment tax rate (which describes how large share of the wage goes to taxes and to reduction of other social transfers when an unemployed person gets employed) lowered by eight percentage points in Finland from the mid-1990s to 2004 as caused by policy changes during this period (Honkanen et al. 2006). In Denmark Pedersen and Smith (2003) find a decrease in percentage of employed individuals with very low/negative compensation rates, from 15.7% in 1996 to 11.7 % in 2001.

But despite the policy changes aiming to improve incentives to accept work, incentive traps still exist in all the Nordic countries, and they are more common among the low-income households. In Finland around 17 percent of the unemployed (around 50,000 people) were in unemployment trap in 2004, i.e. the additional disposable income from getting employed was less than 20 percent. Around 4 percent of the unemployed would not benefit at all from becoming employed. For Norway Fevang et al. (2005) calculate that around one percent of the unemployed in 2001 end up with a lower disposable income if they work full-time compared to being full-time unemployed. In Denmark, according to Pedersen and Smith (2003), about 26% of the unemployed individuals in 2001 who were eligible for UI benefits would experience a reduction in disposable income if getting a full time job (compared to 12% of the employed individuals).

Have these reforms actually increased the labour supply of the low-skilled/low-income workers? Most evaluation studies have investigated

the impact of these reforms on the labour supply in all groups without a special focus on the low-skilled group. In general, the results show that the unemployed get a job only if there is a financial gain from it, i.e. if it leads to increased disposable household income. But some studies (e.g. Kyyrä 1999) also show that getting employed does not in all cases increase the disposable income of the household. This suggests that also other factors influence labour supply incentives. Among them are non-financial rewards e.g. social status and social contacts and the negative stigma associated with being unemployed. Accepting a low-wage job can also act as a signal of willingness to work and may act as a stepping stone to a better job in the long run even if the financial gain of that first job was small in the short run, see Pedersen and Smith (2002) who analyses and compares financial and non-financial incentives to work for Danish workers in the mid 1990s.

As regards the impact of changes in the employment tax rates on employment, Honkanen et al. (2007) estimated for Finland that a one percentage point reduction in the employment tax rates increases labour supply about 0.3 percent.<sup>63</sup>

As far as the activation programs are concerned, the introduced reforms in some countries such as the right and duty to ALMP, education leaves and strongly increasing incentives for the uneducated young people to participate in ALMP measures can be interpreted as mainly targeted at the low-skilled unemployed.

Several studies have evaluated the impact of the activation reforms in different Nordic countries although they have not solely focused on the impact on the low-skilled group. One approach, especially in the Danish studies, has been to focus on the incentives regarding mobility out of unemployment by looking at the shortening of the passive benefit duration. The shortening of the passive period should act as the threat effect of the ALMP and make individuals behave in the same way as in the case of the exhaustion of the unemployment benefit period. Most studies have found large positive effects on employment (see e.g. Rosholm and Svarer (2004) and Gerdson (2006)).

Another approach has been to look at the direct employment effects of the activation measures. As regards the direct employment effects of the measures, it has been found in the Finnish studies that labour market training, and vocational training in particular, has improved the employability of the unemployed, whereas the subsidised employment particularly in the public sector has not been that effective. The effect of Swedish ALMP have not been encouraging. In Norway, the effect of programmes have been comparably considerably more positive, except for

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<sup>63</sup> See more closely Honkanen et al. (2007). They also remark that it is difficult to estimate the impact of changes in employment tax rates on employment, because the employment tax rates have changed very evenly over time.

employment programmes in the public sector and youth programmes that have had little or not effect.

Despite increased incentives and increased qualifications, especially among the low skilled, our numbers clearly showed that the employment rates among low-skilled individuals have not increased during the observation period, on the contrary. The fall in employment rates among low-skilled individuals combined with the increased mobility out of the labour force is likely to be a result of changes in the labour demand. During the period of interest all Nordic countries, as well as most industrialised countries, have been witness to a large shift in the labour demand from low-skilled to high-skilled workers. This shift is caused by a combination of an increase in high-tech production methods, which tend to substitute low-skilled labour and complement high-skilled labour, and the increasing globalisation with wage pressure and outsourcing of the low-skilled jobs as a consequence. Since the improved employment incentives mainly have been directed at the different UI systems and less (if at all) at the welfare systems, the increased pressure on the low-skilled workers both from the UI system and from low labour demands, is likely to have resulted in the increased mobility out of the labour force.

In summary, both increasing incentives and activation measures have increased the incentives of the low-skilled to move from unemployment to work, but the other side of the story is that job seekers despite their efforts are not necessarily always able to find employment due to labour demand shifts. In some of the Nordic countries this combination has therefore also increased the social hardship of the low-skilled unemployed group as reflected for example in increased poverty among the long-term unemployed (e.g. Kauhanen, 2005).

Activating the low-skilled workers is a challenging task. They have a markedly higher than average risk of working in low paid jobs and - when unemployed - are more likely to need other social insurance benefits than just unemployment insurance. This means that incentive structures that are inherent in unemployment insurance systems do not always apply to the unemployed job seekers with low skills and low potential earnings.

It is of utmost importance to include the impact of the whole benefit 'package' when studying the incentive effects of net compensation ratios on the duration of unemployment spells among the low-skilled unemployed job seekers. This is not a straightforward task and requires simulation models that can take into account changes in all received social insurance benefits in case a low-skilled unemployed job seeker gets a job instead of remaining unemployed. This partly explains why there is very little empirical evidence using this type of a 'holistic' approach (including the whole variety of benefits that unemployed job seekers receive), even though policy makers would - no doubt - find this kind of information very valuable.

In the next phase of the project we will do comparable cross country analyses of the effects of UI and other social insurance benefits on the probability of obtaining a job. Our special focus is on the impact of the compensation rates on the labour market performance of the low-skilled unemployed individuals, i.e. on their probabilities of exit from unemployment to employment or to states outside the labour force, their unemployment duration, length of subsequent employment and their economic well-being.

As a measure of compensation ratio we use the net household based compensation rates, which give information about the work incentives for different groups and also take into account taxes and the other social security besides unemployment insurance<sup>64</sup>. When considering work incentives it is important that the measure reflects the fact that people are concerned about their total net incomes. The net household compensation rate also takes into account other benefits independent of work status and the incomes of other members in the household.

The focus is on differences between skill groups. Is the job probability of low skilled unemployed more sensitive to changes in the net compensation rate, i.e. changes in the UIB, taxes and supplementary social benefits, compared to the high skilled. How do such relationships differ across the Nordic countries in our study, Denmark, Finland, Sweden and Norway? Have the tightening in unemployment insurance and other complementary subsidies affected the economic well-being of the low-skilled compared to the high-skilled? For example, have the changes increased poverty among the low-skilled?

The possibility to have results from four Nordic countries, instead of just one, improves the reliability of the estimations. Comparing potential differences of the estimation results gives us insights on the role of different institutional features of the different unemployment benefit systems on the job seekers' behaviour and employment prospects.

From the early nineties a series of institutional changes have taken place in the design of the Nordic UI systems and supplementary social arrangements. There are also quite substantial differences in the system designs among the four countries. Thus, with regard to the Nordic UI systems we observe differences both between countries and over time. Our intention is to utilise differences in UI system design and differences in the welfare systems between countries and over time to analyse how changes in the net compensation rates affect the labour market career of the low skilled unemployed as opposed to medium and high skilled unemployed.

The results of the analyses may then be used to simulate how changes in the different features of the social welfare and UI benefit systems influence low-skilled job seekers' income levels relative to the high-skilled,

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<sup>64</sup> We will attempt to correct the gross compensation rate for tax rules and supplementary social support systems given the limitations of the data available.

taking changes in employment rates into consideration. This will enable us to investigate whether lower replacement rates lead to higher levels of poverty, because the unemployed then have lower income, or to lower levels of poverty because the lower replacement rates increase the mobility from unemployment to employment and thereby increase the income of the unemployed.

The empirical analyses will be primarily based on *estimating competing risks duration models for unemployment spells* with panel data from each country (1990–2003). The data sets are collected from administrative registers. In all three Nordic countries register-based panel data will provide a highly reliable basis for this purpose. Each data set is detailed enough making it possible to create comparable variables for all important policy variables for all the countries. (Sweden is a bit uncertain in this respect, since the data has not been put together yet).

For Denmark, a ten percent panel register sample of the Danish population covering the period 1985–2000 is available to researchers. The sample contains extensive information on incomes, wage rates, unemployment and other related matters, and the data is structured as a spell data set with labour market spells on a weekly basis. As a supplementary feature, this data links each employed individual to his/her employer enabling the researcher to exploit the effect of job changes, firm characteristics etc.

For Finland, a data set from Statistics of Finland that consists of information on 350,000 individuals (a 7% sample of population) from years 1987–2000 from various separate registers is used. Besides normal employment statistics the data include information on the unemployed person's individual unemployment spells, participation in retraining schemes, subsidised employment, and marital and family status. It also includes income information from tax registers, information on different kinds of social transfers from the registers of the Social Insurance Institution of Finland, information on social assistance from the National Research and Development Centre for Welfare and Health (STAKES) statistics, and on the length of employment contracts from the register of the Finnish Centre for Pensions.

Norwegian data is based on a panel database covering the entire Norwegian population. FD-Trygd, as it is called, is compiled by Statistics Norway. The statistical unit is the individual and information in the data base comprises all registered events in the person's life and her/his family per 1.1.1992 and onwards. It is updated continuously. It is build on the basis of a series of administrative registers, covering information on areas from demography, education, income and employment to unemployment, social assistance and social security.

For Sweden, similar data sets will be extracted from Swedish administrative registers. The establishment of the Swedish data set will be a part of this next project.





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# Norsk sammendrag

Bolvig et al.

## *Hovedhensikter*

Denne rapporten beskriver og diskuterer forandringene i systemene for arbeidsledighetstrygd i de nordiske landene. Fokuset er spesielt rettet mot kjennetegn ved de nasjonale trygdesystemene, og spesielt endringene i disse systemene som kan ha påvirket lavt utdannedes posisjon på arbeidsmarkedet.

Denne rapporten har to hovedhensikter: For det første å konstruere en deskriptiv, empirisk basis for en diskusjon angående forholdet mellom systemene for arbeidsledighetstrygd og ytelseevnene på arbeidsmarkedet for lavt utdannede sammenlignet med høyt utdannede. For det andre å legge grunnlaget for en mer systematisk, økonometrisk analyse angående hvilken innvirkning systemene for arbeidsledighetstrygd har for arbeidsincentivene til lavt utdannede sammenlignet med høyt utdannede i Norge, Sverige, Danmark og Finland. Denne fremtidige analysen bør være basert på data fra administrative registre som inneholder informasjon om hver enkelt arbeidstakers historie på arbeidsmarkedet i de fire landene.<sup>65</sup>

## *Vanlige kjennetegn ved arbeidsmarkedene og velferdssystemene i Norden*

Arbeidsmarkedene i de nordiske landene har noen felles trekk som kan legge et visst press på lavt utdannede og deres posisjon på arbeidsmarkedet. Arbeidsmarkedsinstitusjonene og den nordiske politiske strategien med fokus på jevn fordeling av velferd har medført et komprimert inntekts- og lønnsfordelingen. Kombinert med en høy gjennomsnittslønn gjør lønnsstrukturene de lavt utdannede i Norden til de best betalte i verden. Dette gjør at det hviler høye produktivitetskrav på den relativt sett mindre produktive arbeidskraften. De nordiske landene har til felles velferdsordninger som bidrar til relativt sjenerøse utbetalinger til personer som av forskjellige grunner ikke er i jobb. Sykelønn, uføretrygd, bostøtte og sosialhjelp er eksempler på slike ordninger. I tråd med det allmenne målet om fordeling i de nordiske landene er erstatningssatsene klart høyere for lavtlønte enn for høytlønte. Derfor, fører fordelingsprofilen i de nordiske velferdssystemene til at arbeidsincentivene for lavt utdannede blir relativt

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<sup>65</sup> For Norge, Danmark og Finland har relevante data blitt beskrevet i rapporten fra prosjektet "Labour market outcomes of low-skilled adults. The impact of unemployment benefits. A comparative analyses based on three Nordic countries", som ble sendt til NMR 03.03.06.

svakere enn for andre grupper. Flere studier indikerer at mottakere av forskjellige former for trygd blir fanget i såkalte trygdefelle, der deres fortjeneste ved å komme seg i arbeid blir relativt sett liten sammenlignet hvor mye de mottar i trygd. Dette gjelder først og fremst lavtlønte arbeidstakere med lite utdanning.

Samtidig har de nordiske landenes engasjement når det gjelder kampen mot fattigdom hindret bruken av kraftige og effektive sanksjoner mot trygdemisbrukere.

### *Ufaglærtes endrede arbeidsmarkedssituasjon*

For Norge, Finland og Danmark presenterer vi deskriptiv statistikk som i gjennomsnitt beskriver utviklingen i arbeidsmarkedssituasjonen for lavt, medium og høyt utdannende i aldersgruppen 25-49 år, i perioden fra tidlig 1990-tall til tidlig 2000. Disse dataene er utviklet spesielt for dette prosjektet, og har ikke blitt publisert tidligere. Når det gjelder Sverige måtte vi klare oss med offentlig tilgjengelig data. Følgelig er beskrivelsen av utviklingen i Sverige noe grunnere.

Arbeidsmarkedssituasjonen for lavt utdannede har blitt forringet i alle de nordiske land fra tidlig 1990-tall til tidlig 2000-tall.

Faren for å bli arbeidsledig var gjennom hele denne perioden høyere for personer med lavere utdanning. Dette gjaldt for samtlige av de nordiske landene. Den relative posisjonen for de lavt utdannede i Norge og Danmark ble noe bedre i andre halvdel av 1990-tallet, noe som hadde sammenheng med konjunkturoppsvinget i denne perioden. I Finland og Sverige er fortsatt ansettelsesraten for personer med lav utdanning betydelig lavere, og arbeidsledigheten betydelig høyere, enn de var før nedgangstidene tidlig på 1990-tallet.

Arbeidsstyrkedeltakelsen er også relativt lav blant de lavt utdannede i hele perioden. De har i økende grad blitt omfattet av forskjellige trygdeordninger. Det er særlig andelen av befolkningen som har blitt uføretrygdet som har økt markant blant de lavt utdannede i forhold til de andre gruppene.

Med hensyn til lavt utdannedes relative har utviklingen vært ulik i de nordiske landene. Undersøkelser av de månedlige tallene for heltidsansatte viser at lønnsgapet mellom lavt og høyt utdannede har blitt mindre i Finland, mens det i Danmark og Norge er tegn som tyder på at lønnsgapet mellom disse to gruppene har blitt større, og da spesielt for kvinnene.

I Danmark og Finland har arbeidsledige med lite utdanning begrenset tilgang til lønnsbasert arbeidsledighetstrygd, og andelen av de som har tilgang til dette har gått ned i perioden. Denne utviklingen har ikke funnet sted i Norge, og andelen lavt utdannede som har rett på arbeidsledighetstrygd er relativt høy. Denne forskjellen kan ha sammenheng med at forsikring er frivillig i Finland og Danmark, mens det i Norge er obligatorisk.



*Systemer for arbeidsledighetstrygd: Forandringer i de nordiske landene*

Systemene for arbeidsledighetstrygd i de nordiske land kan beskrive i forhold til fire hovedvariabler: Dekningsgraden i ledighetstrygden, hvor lenge de som har rett til ledighetstrygd kan motta slik stønad, reglene for hvem som er berettiget til trygd og hvor strenge sanksjonene og kontrollen er for å hindre utilstrekkelig jobbsøking blant trygdemottakerne.

Med hensyn til alle disse karakteristikene er det systemvariasjoner mellom de nordiske landene. Siden tidlig på 1990-tallet har det vært gjennomført store reformer innefor trygdesystemene i alle disse landene. I denne rapporten beskriver vi dagens utforming av arbeidsledighetstrygdsystemene i Norge, Danmark og Finland, og hvordan dette har forandret seg siden tidlig på 1990-tallet.

Arbeidsledigheten økte i alle de nordiske landene fra slutten av 1980-tallet/tidlig 1990-tall. Som en reaksjon på denne utviklingen reformerte myndighetene i trygdeordningene for arbeidsledige. Motivasjonen bak disse forandringene var ikke entydige. Når de norske myndighetene utvidet perioden ledige kunne ta i mot trygd tidlig på 1990-tallet, var det for å lette den økonomiske situasjonen til det stadig økende antall arbeidsledige. I de andre landene lå fokus, helt fra begynnelsen, på å forbedre arbeidsincentivene til de arbeidsløse. Fra slutten av 1990-tallet var reformprosessen i alle de nordiske landene innrettet mot å gjøre tilgange til ledighetstrygd mer restriktiv. I både Finland, Danmark og Sverige ble f.eks. lengden på perioden man måtte ha vært i jobb før man har rett på ledighetstrygd økt. I Norge ble krav til tidligere inntekt økt.

I både Danmark og Norge ble det innført betydelig reduksjon i støtens varighet, og i Sverige dekningsgraden i trygden redusert. I alle landene har man tatt grep for å hindre misbruk av systemet. Til en viss grad har dette betydd at programmene for arbeidsmarkedstiltak har blitt en del av systemet for sanksjoner og kontroll.

Andre halvdel av 1990-tallet var en periode preget av satsing på arbeidsmarkedstiltak, og grep ble tatt for å gjøre disse mer effektive. I Danmark har det siden 1994 vært en rekke reformer som fokuserte mer på aktivisering som en test på tilgjengelighet på arbeidsmarkedet. I Finland ble en av de viktigste reformene gjennomført i 1998. I denne såkalte første bølge av arbeidsmarkedsreformer ble rettighetene og pliktene til arbeidsledige jobbsøkere definert. I Norge økte fokuset på arbeidsmarkedstiltak betydelig på slutten av 1980-tallet, og deltagelse i regulære arbeidsmarkedstiltak nådde en topp i 1993, med hensyn til antall arbeidsledige deltagere, for deretter å minke betraktelig. På den andre siden opplevde yrkesfaglig opplæringsprogrammer det stikk motsatte. Som en reaksjon på den høye arbeidsledigheten ble omfanget og utgiftene til arbeidsmarkedstiltak økt betraktelig på 1990-tallet (Bergmark 2003).

*Har reformene virket inn på lavt utdannedes posisjon på arbeidsmarkedet?*

Som beskrevet ovenfor, så har arbeidsmarkedssituasjonen for lavt utdannede utviklet seg i negativ retning siden tidlig 1990-tall. Gruppens store nedgang i deltakelse i arbeidslivet, samtidig som andelen uføretrygdede har økt, er de klareste kjennetegnene ved denne utviklingen. I Norden, som i de fleste industrialiserte land, har man sett et skifte i etterspørselen etter arbeidskraft fra lavt til høyt utdannede arbeidstakere. Dette skiftet har kommet som et resultat av to faktorer. For det første en økning av høyteknologiske produksjonsmetoder, som vrir etterspørselen fra lavt til høyt utdannet arbeidskraft, og for det andre en økt globalisering, som fører til at nedadgående press på lønninger, via flytting av arbeidsplasser til lavkostland.

I denne situasjonen har reformene i ledighetstrygden hatt som mål å forbedre arbeidsmarkedet fra tilbudssiden. To hovedstrategier har blitt valgt:

- Å gjøre det vanskeligere å få arbeidsledighetstrygd, og i enkelte tilfeller også gjøre trygdeutbetalingene mindre, for gjennom dette å øke arbeidslediges arbeidsincentiver.
- Å øke produktiviteten og ansettelsesmulighetene for de arbeidsledige gjennom arbeidsmarkedstiltak.

Enkelte funn tyder på at de gjennomførte reformene har redusert farene for at ledige havner i trygdefeller. Men, tiltakene har bare vært rettet mot arbeidsledighetstrygden. Andre trygdeordninger, som for eksempel sosialhjelp, bostøtte, barnetrygd og lignende, som er vanlige i de nordiske landene, kan derfor ha nøytralisert effektene av reformene. Siden slike trygdeordninger er utformet for å sørge for en minimums levestandard, er det først og fremst personer med lav inntekt og lav utdanning som rammes av slike nøytraliserende effekter. Samtidig kan innstramningene i ledighetstrygden ha økt mobiliteten ut av arbeidsstyrken ved å gjøre velferdsordningene for yrkespassive relativt mer attraktive.

Flere studier har evaluert effekten av arbeidsmarkedstiltak i de nordiske landene, men ingen har fokusert på gruppen med lav utdanning. Finske studier har vist at arbeidsmarkedstrening, og yrkestrening spesielt, har økt arbeidslediges muligheter for å skaffe seg jobb, mens subsidiert sysselsetting i offentlig sektor har vist seg lite effektivt. Effekten av danske og svenske arbeidsmarkedstiltak har i denne sammenheng ikke vært særlig oppmuntrende. I Norge har tiltakseffektene vært mer positiv, bortsett fra offentlige sysselsettingsprogrammer og ungdomsprogrammer som har hatt liten eller ingen effekt.

### *Videre forskning*

Det er av avgjørende betydning å inkludere hele trygdesystemet når man studerer incentiveffekter av endringer i trygdesystemet for arbeidsledige. Det er også viktig å analysere effektene av reformene på overgangen fra ledighet til andre tilstander enn jobb; utdanning og ut av arbeidsstyrken.

Å inkludere hele «velferdspakka» i slike analyser er ingen enkel oppgave, og innebærer at man må ha tilgang på modeller som kan ta hensyn til hvordan forandringer i en type ytelser påvirker støtten fra andre velferdsordninger

Ved en eventuell ny fase av dette prosjektet vil vi gjøre analyser av hvordan endringer ledighetstrygden påvirker sannsynligheten for å komme i jobb innenfor et slikt holistisk trygdeperspektiv.



# Appendices

## Key information on the UIB system

### *Notation*

<b>M</b>	membership (compulsory or voluntary), coverage (per cent of working population)
<b>Q1</b>	qualifying conditions related to previous employment or earnings
<b>Q2</b>	qualifying conditions related to present status and activity in the labour market
<b>Q3</b>	additional qualifying conditions related to ...
<b>Q4</b>	additional qualifying conditions related to ...
<b>Q5</b>	conditions to regain benefits i.e. to obtain a new period of UIB after the first has expired
<b>W</b>	waiting period (days after registration till benefits start)
<b>R</b>	basis and rules for calculating benefits, floor and ceiling, etc
<b>C</b>	compensation rate (compared with R), before taxes and supplements; typical, maximum and minimum
<b>D</b>	duration of benefits (in weeks)
<b>Sanc</b>	sanction if some of Q2-Q4 are not met
<b>Addit</b>	additional benefits for breadwinners (while on UIB)
<b>Sup (SA)</b>	supplements (need tested) if UIB is not sufficient
<b>Alt (UA)</b>	alternative benefits for those not eligible for UIB or when UIBs are depleted
<b>SA</b>	social assistance
<b>UA</b>	unemployment assistance

## Denmark

### *Present, main rules UIB*

<b>M</b>	Voluntary membership. Coverage is 84% (2002)
<b>Q1:</b>	Qualifying requirement related to previous conditions Members are categorized into three groups: 1. Graduated students who recently completed their education

2. Wage earners
3. Self-employed.

Ad1 Graduated students who recently completed a ‘qualifying’ education (= *erhvervskompetencegivende uddannelse*, education of at least 18 months’ duration). Member of a UI fund at least 2 weeks after graduation

Ad 2 and 3: Wage earners and self-employed:

- Membership of unemployment insurance fund for at least one year is required.
- Minimum age of 18 is required for membership of unemployment insurance fund.
- One year of full-time employment in a period of 3 years is required.

**Q2:** Requirements relatet to present conditions Available for the labor market. This means:

- -Have residence and live in Denmark
- -Be registered at an employment agency (*AF=arbejdsformidling*) and have regular contact (at least every three month)
- -Be actively job searching
- -No legal or physical hindrance to start in a job
- -Be able to start in a job or active labor market program with one days warning.
- -Read email daily
- -Accept jobs that require up to four hours of daily transportation time.

- During the first year of unemployment there is a right to participate in ALMP.
- After one year of unemployment the right is a duty to participate in ALMP.
- If younger than 30: Passive period is only 6 months
- If younger than 25 and no formal education: Duration of regular UI benefits is only 6 months, then the individual is supposed to start a formal education.
- If older than 55 and member of early retirement scheme, *efterløn*, special rules

ALMPs are categorized into four types:

- Private sector employment subsidies
- Public sector temporary jobs
- Education/Training
- Other programs, these typically consist of job search

assistance, programs of competence analyses, building-up-self-esteem courses, etc.

- Q3:** Degree of unemployment  
If partly unemployed, the UI benefits are reduced hour by hour (there is a lower and an upper limit on the amount and duration of supplementing UI benefits, see below)
- Q5:** Conditions for renewal of benefits  
12 months employment during the last three years. Employment in ALMP programs does not count. If duration period expires, the right to UI benefits can be regained if 6 months employment (non-ALMP) during the latest 3 years.
- W** No waiting period in general, only for students and self-employed, see below
- R:** Basis for calculating UIB  
Maximum 667 DKK per day (5 days in a week) =A  
1. Graduated students who recently completed their education  
UIB per day =  $0.82 * A$   
1 month waiting period  
2. wage earners:  
Rw = Former income, Calculated as average of earnings (daily) in the last three months.  
UIB per day =  $\text{Max}[B ; \min(A ; 0,90 * R_w)]$   
Young individuals < 25 who are insured and eligible for UIB: After 6 months UIB is reduced to a maximum of  $0.5 * A$   
3. Self-employed:  
Rs = Former income, calculated as (daily) average based on (skattepligtig overskud) for the two years with highest profit during the last five years. Only years with membership of unemployment insurance fund counts.  
UIB per day =  $\text{Max}[B ; \min(A ; 0,90 * R_s)]$   
Self-employed have a waiting period of 1 week in the case of bankruptcy or suspension of payment (betalingsstandsning), else 3 weeks.
- C** Compensation rate of 90% of R  
If weekly working hours are less than 30 it is possible to choose part time insurance.  
Part time insured receive a maximum of 436 DKK per day (5 days in a week) =C  
If unemployed < 7,4 hours a given week, UIB=0 in that week  
UIBs are taxable as ordinary earnings.  
Periods on UIB counts for collecting ATP pension points  
Sickness and maternity leave payments are regulated as

UIBs

UIBs are independent of number of children, spouse income etc.

**D** Duration 208 weeks (4 years) (exception for younger people, and people older than 55 who are eligible for early retirement scheme, *efterløn*)

**Sanc** UIBs stop for 5 weeks if

- The unemployment is self-caused.
- Refusal of job or ALMP offer without reason.
- In case of repeated refusal the UIB is stopped

**Addit** No supplementary benefits (main rule) due to children or other family responsibilities

**Alt** An uninsured unemployed or a person not eligible for UIB has the right to social assistance (SA) – *kontanthjælp* - if:

- register at the employment agency (AF=arbejdsformidling)
- do not refuse job offers or ALMP
- Private capital < 10.000 DKK
- Residence in DK (or EU, or Nordic countries) at least 7 years during the latest 8 years, else *Starthjælp*, which is lower than *Kontanthjælp*

Legally married spouses: means-testing against family income (spouse's income). No means-testing for cohabiting.

Individuals with other problems besides unemployment might also be eligible for social assistance even though they are not available at the labour market.

Compensation:

I. Duration < 6 months (temporary social welfare):

*Under 25 years:*

5.527 DKK per month

2.668 DKK per month if you live with parents

8.577 DKK per month if pregnant

11.397 DKK per month if responsibility for 1 or more children

*25 years or older*

8.577 DKK per month

11.397 DKK per month if responsibility for 1 or more children

II. Duration > 6 months (Permanent social welfare)

A maximum of total social payments (social welfare + housing subsidies + other help), monthly (*kontanthjælpsloftet*):

11.397 DKK married or cohabiting individuals with responsibility for 1 or more children



8.577 DKK married or cohabiting individuals, no kids  
 14.218 DKK single parents  
 11.397 DKK single individuals, no kids  
*Starthjælp*: If less than 7 years of residence in Denmark during the last 8 years. Mainly relevant for immigrants.  
 Compensation:  
*Under 25 years*:  
 4.675 DKK per month  
 2.324 DKK per month if you live with parents  
*25 years or older*  
 5.638 DKK per month if single  
 4.675 DKK per month if married or cohabitant  
*Children below 18*:  
 Additional child responsibility assistance:  
 1.410 DKK per month per child if single  
 1.169 DKK per month per child if married or cohabitant  
 Additional assistance is utmost paid for two children.

## Norway

### *Present, main rules of UIB*

- M** Compulsory membership all persons living in Norway  
 Coverage: 100 per cent of working population  
 About 62 per cent of the unemployed meet the qualifying requirements
- Q1** Qualifying requirements previous conditions– related to annual earnings R (not employment)  
**Main rule**: labour income previous calendar year, at least =  $R_{-1}$ , or  
**Alternative rule**: labour income average last three years, at least =  $R_3$   
 R= earnings (not wages earned in employment programmes), plus UIB (unemployment insurance benefits, but not UA and SA), plus sickness benefits and maternity benefits etc.  
 $R_{-1}$ ,  $R_3$ : minimum values of R are related to basic amount G in the Norwegian Social Insurance Scheme (NSIS) (see appendix)  $R_{-1}= 1.5 G$ ,  $R_3= 1.0 G$   
 At present (since Jan 1<sup>st</sup> 2003 and then indexed last time May 1<sup>st</sup> 2005)  
 $R_{-1} = \text{NOK } 91\,050$  (Euro 11 100) (1.5 G last year)  
 $R_3 = \text{NOK } 60\,699$  (Euro 7 400) (1.0 G average last 3years)
- Q2** Requirement related to present conditions:

Involuntary unemployed. Registration, actively searching for a job, willing to and able to take any job immediately, accepting offers of relevant jobs (all over the country, with some exceptions), and accepting offers of programmes

- Q3** Degree of unemployment  
Working hours reduced by at least 50 per cent (since Jan 1<sup>st</sup> 2003) Partly unemployment is compensated proportionally
- Q5** Conditions for renewal of benefits: as for eligibility the first time.(earnings for a given period qualify for only one full-time period of UIB)
- W** Waiting period (karensdag) 5 working days of last 15 working days (since Jan, 1st 2003)
- R** Basis for calculating UIB: annual earnings (same income concept as for the minimum requirement Q2) labour income etc previous calendar year  $R_{-1}$ , or average last three calendar years  $R_{-3}$  (if this gives a higher compensation)
- C** Compensation rate 62.4 per cent (main rule), per working day: 0.24 per cent of  $R = 62.4$  pct of previous average daily income.

If working hours are reduced from 100 per cent of full time job to 30 per cent of full time job, 70 pct of the compensation is disbursed

NB: only annual earnings up to 6G (Euro 44 400, NOK 364 194) is compensated

Minimum (eligible for UIB)

- a. 62.4 per cent of  $R_{-1}$  (=1.5 G) = Euro 6 926 per year
  - b. 62.4 per cent of  $R_{-3}$  (=1.0 G) = Euro 4 618 per year
- Maximum - 62.4 per cent of 6 G (= NOK 364 194 /Euro 44 400) = Euro 27 705 per year. For higher earnings, compensation rate decreases monotonously  
Income over 6 G is not compensated at all

NB: UIBs are taxable as ordinary earnings, and counts as basis for sickness payment, pensions etc (give points in NSIS).

- D** Full benefit period (D= 104 weeks) iff  $R > \text{Euro } 14\ 800$  (rule: 2G)

Reduced benefit period (D=52 weeks) iff  $R_{-1} / R_{-3} < R < \text{Euro } 14\ 800$

- Sanc**
- UIBs are stopped for 8 weeks (and waiting period extended to 8 weeks) if
  - unemployment is due to fault of one's own
  - the claimant does not accept offers of employment or programmes
  - NB: similar sanctions for 12 and 26 weeks for second

- and third time these rules are violated ...
- UIBs are stopped for 4 weeks if
  - claimant refuses to meet at the employment service for consultations
  - NB: similar sanctions for 8 and 12 for second and third time these rules are violated.
- Addit**
- Child allowances: NOK 17.0 per day per child, 5 days per week
- Sup**
- Social assistance (SA), means tested against family income, wealth and expenditures
- Alt**
- Unemployment assistance (UA, introduced in 1997 = ventestønad)
  - Who: participants (not eligible for UIB) in training programmes and certain employment programmes, as well other unemployed after expiration of UIB (conditional on long term employment during a four year period before the UIB period)
  - Compensation:
    - not previously eligible for UIB: NOK 245 (Euro 30) per day (only NOK 180 (Euro 22) if 19 years or younger) – plus NOK 27 per day per child
    - previously eligible for UIB: same as above plus extras related to previous UIB. Maximum extras NOK 335 (Euro 41) per day
    - Duration: as long as the recipient is active in programmes or is considered actively searching, willing and able to take any job.
  - Not eligible for UIB or UA: Social assistance (SA), means tested against family income, wealth and expenditures

NB: UA and SA are *not* taxable, and do *not* count as basis for sickness payment, pensions etc (do not give points in NSIS).

## Finland

### *Present, main rules of UIB*

- M** Compulsory UIB insurance for all workers, membership of an unemployment fund is voluntary  
Coverage (of unemployment funds): over 70 per cent (year 2002)
- Q1** Qualifying requirements related to previous conditions

- A. (Employment condition) Employed for at least 43 weeks (at least 18 hours a week) during the last 28 months before becoming unemployed, earnings: according to collective agreement or earnings from a full-time job at least forty times the amount of basic unemployment allowance
- B. A member of an unemployment fund for at least 10 months.
  - fulfils A + B => earnings-related unemployment allowance
  - fulfils only A => basic unemployment allowance
  - does not fulfil A or has received unemployment allowance for the maximum period of 500 days => labour market subsidy

**Q2** Requirements related to present conditions

- registered at an employment office as an unemployed job seeker
- seeks full-time employment
- is available for the labour market
- has not found employment and has not been offered training
- those on partial disability pension are also entitled to unemployment allowance even if they are not seeking full-time employment
- age limit: 17-64 years

**Q3** if partly employed: adjusted unemployment allowance

- weekly hours of work **must not** exceed 75 per cent of a full-time employee's maximum working hours in the sector concerned
- adjusted unemployment allowance is paid in such a way that unemployment allowance and 50 per cent of income received may during the adjustment period rise to the amount which would otherwise have been paid as unemployment allowance
- adjusted unemployment allowance paid for the maximum period of 36 months

**Q5** conditions for renewal of benefits:

- employed for at least 34 weeks during the last 24 months before becoming unemployed
- if has been working as an entrepreneur for over 16 months but under 18 months the review period is 26 months and not 24 months

**W** waiting period

- unemployment allowance (both basic and earnings-

- related): seven working days during the period of eight consecutive calendar weeks
- labour market subsidy: five working days during the period of eight consecutive calendar weeks
- R** basis for calculating: benefits, floor and ceiling, etc  
An earnings-related daily allowance is calculated:
- on the basis of the person's regular wage during the period just preceding unemployment when the person has fulfilled the employment condition
  - on the basis of the annual income if the work is seasonal or irregular
    - Earnings-related daily allowance= a basic daily allowance + an earnings-related component
    - Basic daily allowance: 23,24 euros/day (year 2005)
    - If (monthly wage – 4,85 %) is smaller than 2091,60 euros:
      - earnings-related daily allowance= 23,23 e + 0,45x(daily wage –23,24 e) + child increase
      - If (monthly wage – 4,85 %) is over 2091,60 euros:
        - earnings-related daily allowance= 56,56 e + 0,2x(daily wage –97,28 e) + child increase
        - daily wage= (monthly wage – 4,85 %\*)/21,5 ,
        - \*=employees' pension and unemployment insurance fees
  - Labour market subsidy:
    - a full labour market subsidy: 23,24 euros/day (year 2005)
    - The daily allowance of the recipients who have custody of children under 18 years of age is raised by a child increase
    - is means-tested: the mean test applied to the recipients' own income and their spouses' income exceeding 536 euros a month
  - the full labour market subsidy is paid if the monthly income of the recipient and his/her spouse as less than 848 euros (in the case of a single recipient: 253 euros a month). For each dependent child this amount is raised by 106 euros.
  - if this monthly income exceeds these limits: the subsidy is reduced by 50 % or 75 % (single recipients)
  - the subsidy is not means-tested if:
    - during the first 180 days for persons whose

- eligibility for unemployment has exhausted.
    - for recipients aged 55 or more who, at the time they become unemployed, satisfy the employment condition
    - during participation in labour market measures or during rehabilitative work activity
  - C** compensation rate (compared with R), before taxes and supplements;  
Typical: 52,7% (for a median wage earner without child increase) Maximum: 90 %
  - D** duration of benefits (in weeks)
    - Basic unemployment allowance and earnings-related allowance: 100 weeks (exception: the payment of additional days to older allowance recipients)
    - labour market subsidy: no maximum duration
  - Sanc**
    - an unemployed job seeker is not entitled to an unemployment allowance for 60 days if she/he refuses to accept employment without any just cause or refuses to accept a job seeking plan or an active labour market policy measure
    - the sanction is 30 days if the offered job would have lasted five days at maximum
  - Addit**
    - the daily allowance of the recipients who have custody of children under 18 years of age is raised by a child increase: - one child – 4,4 euros/day
    - two children – 6,46 euros/day
    - three or more children – 8,34 euros/day
  - Sup**
    - Social assistance (SA), is means-tested against family income
    - General housing allowance, is means-tested against family income
  - Alt (UA)** Alternative benefits for those *not* eligible for UIB or when UIBs are depleted:
    - see earlier: those who do not get a basic unemployment allowance or earnings-related allowance are paid a labour market subsidy
- SA=social assistance  
UA=unemployment assistance