The Scandinavian Model: not as desirable as it seems

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PREFACE

This study is a background study to the publication Investeren in participeren ('Investing in participation'), which was published at the end of 2006 by the Research Institute for the CDA. It focuses on the question whether the Scandinanvian model is a desirable model for the Netherlands. The study investigates a braod range of international economic literature. Most of the conclusions underline the proposed recommendations in Investeren in participeren. They give us an extra economic underpinning. The study offers the opportunity to look at the Dutch reforms of the last years and at its economic performance form a wider context.

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1 Introduction

Welfare states fulfill an import role in our modern societies if it comes to the protection of the well-being of the inhabitants of countries. More specifically in economic terms, they should take care of issues concerning equity, efficiency and stability (the so-called "Musgravian Triad"). However, because of demographic, political and economic pressures, welfare states in developed countries find themselves under severe pressure. After a period of rapid expansion of the welfare state in the seventies, the economic crisis in the eighties led to soaring budget deficits. It took many years to get back on the right scent; but new challenges are underway. Western population is aging rapidly, while globalisation increases both tax competition and (opportunistic) migration. As a result of these developments, European welfare states will tend to become unsustainable in the future, both in financial terms and in terms of social legitimacy. Not surprisingly, the future of the welfare state, which is relatively generous, is of increasing concern, in the Netherlands as well.

Although the bulk of policy makers agree about the problems, they differ in their proposals to overcome them. Whereas Socialists in general plead for a broad public sector and public jobs, Liberals wants to lower benefits and decrease the role of the State in the economic process, Christian Democrats largely advocate a public sector based on the benefit and on the subsidiarity principle. We see here differences in emphasising the importance of equity, efficiency or stability.

This report tries to add to this discussion, as it will give a close evaluation of the so-called 'Scandinavian model' of the welfare state[1], which is rather popular these days as these welfare states are seemingly able to combine both matters of equity and efficiency. The basic question in this study is whether this claim is true and therefore whether the Netherlands should follow the Scandinavians in their approach to the welfare state.

This chapter will start with a discussion of several welfare state typologies, followed by a general treatise on welfare economics. Thereafter, the Scandinavian welfare states and their historical context will be described. Finally an outline of this report is given.

1   The term 'Scandinavian' or 'Nordic' model is rather blurred; both terms refer to the same sort of welfare state. The term 'Scandinavia' originally only refers to Denmark, Norway and Sweden. Iceland and Finland are also included in the Nordic countries. Throughout this study however the term 'Scandinavian model' will be used-thereby referring to the group of Denmark, Norway, Sweden and Finland, because of the similarities in their welfare policies.

1.1 Welfare state typologies

In the academic literature, one can distinguish between innumerable many typologies of different welfare states. One of the best known classifications in this respect, however, is made by Gosta Esping-Andersen (1990). He distinguishes three types of European welfare states, viz. the liberal welfare state, the social-democratic welfare state and the corporatist welfare state.[2] In this typology, the liberal regimes are featured by fairly limited welfare services and the target group of these limited provisions is restricted to those who cannot provide themselves with primary necessaries. This type of welfare state mainly applies to Anglo-Saxon countries like the United Kingdom and Ireland. Social-democratic welfare states, on the other hand, are characterised by relatively small income differentials, generous and universal social security systems and a labour market policy that heavily focuses on activation, which is necessary to finance this type of welfare state. Scandinavian countries mainly display these features, as a result of which this type is often referred to as 'the Scandinavian model' of the welfare state. Finally, Esping-Andersen also distinguishes a corporatist welfare state that captures countries like Germany, Austria, France and Belgium. These countries are featured by several social insurance schemes, aimed at different occupational groups. Therefore these schemes are mainly funded by premiums instead of taxes, as a result of which there is generally a stronger link between contributions and benefits. The Netherlands is considered a hybrid model, somewhere between the social-democratic and the corporatist model (De Mooij, 2006: 157).

Recently, the Scandinavian model in particular has received considerable attention-both in the Netherlands and in the international literature.[3] The combination of a generous welfare state and good economic performance is remarkable and asks for an explanation. Therefore, this report will henceforth focus on this type of welfare state. Whoever studies Scandinavian welfare states in more detail, however, immediately notices that there are large differences within this group so that the Scandinavian model as such

2   Some authors also make mention of Mediterranean welfare states, present in Greece, Portugal, Spain and Italy (c.f. Ferrara (1996) and Boeri (2002b)). They focus more on unemployment insurance through employment protection legislation instead of unemployment benefits.

3   A glance at the literature list shows this scientific and policy attention.

does not exist[4]; compared to the welfare system of other countries as a whole. However, the Scandinavian welfare states are distinct enough to treat them separately.

The academic literature makes it possible to stylize at least three distinctive features of typical Scandinavian welfare states over the last decades (c.f. Kautto *et al.*, 1999: 13; Swank, 2000; Abrahamson, 2003):
1. A high degree of universalism: all citizens are entitled to basic social security benefits and services, regardless of their contributions and labour market position.
2. A high degree of equality: the income distribution is relatively even (established through relatively high taxation levels), education is often freely provided and both males and females are offered equal opportunities at the job market.
3. The government has a strong and active function in reaching full employment, often via active labour market policies.

From these characteristics, it immediately becomes clear that the Scandinavian countries place relatively large emphasis on an equitable society. Classic economic theory then predicts that this might hamper economic efficiency, as there is generally a trade-off between equity and efficiency. The Scandinavian countries, however, are seemingly able to overcome this trade-off as they can also be characterised as efficient. As can be seen in table 1.1, the group of Scandinavian countries is able to withstand the comparison in terms of GDP per capita growth with Germany, the Netherlands, the United Kingdom and the United States: over the whole period 1970-2000, the group of Scandinavian countries even displays the highest annual economic growth.

4   C.f. Kautto *et al.* (1999) for an analysis of the differences between Scandinavian welfare states. A clear and important difference to be highlighted is their path of economic development: whereas Finland and Sweden were mainly leading the economic rankings as of World War II until the late 1970s (c.f. Lindbeck, 1997), Norway has been popular ever since its oil discovery in the late 1960s (c.f. Roed Larsen, 2006), while Denmark has only become the rage after their mid-1990s reforms (c.f. Madsen, 2002).

Table 1.1: actual GDP per capita growth (percentage change at annual rate) by sub-period in the Scandinavian countries, Germany, the Netherlands, the United Kingdom and the United States

	1970-2000	1970-1980	1980-1990	1990-2000	1996-2000	2005
Denmark	1.9	1.8	1.9	2.0	2.4	0.8
Finland	2.5	3.1	2.7	1.8	5,0	0.8
Norway	3.0	4,2	2.0	2.8	2.0	0.5
Sweden	1.6	1.6	1.9	1.4	3.2	0.8
Scandinavia	*2.3*	*2.7*	*2.1*	*2.0*	*3.2*	*0.7*
(Western) Germany	1.5	2.6	2.0	1.3	2.0	0.4
Netherlands	2.0	2.1	1.6	2.2	3.2	0.6
United Kingdom	2.1	1.8	2.5	1.9	2.4	0.5
United States	2.2	2.1	2.2	2.2	3.3	0.8

Source: OECD database on National Accounts

These high GDP growth rates have also resulted in a high GDP per capita *level*. Table 1.2 compares the GDP per capita levels in purchasing power parities (PPP) for 2005.

Table 1.2: GDP per capita in current PPPs for 2005, OECD average = 100

	GDP per capita in PPPs (2005)
Denmark	118
Finland	107
Norway	149
Sweden	112
Scandinavia	*121.5*
Germany	103
Netherlands	118
United Kingdom	110
United States	144

Source: OECD database on Prices and Purchasing Power Parities

From this table, we can infer that the Scandinavian economies are relatively prosperous: the Scandinavian average lies well above the OECD-average, and is also higher than the levels in Germany, the Netherlands and the United Kingdom. It should, however, be noted that the Scandinavian average is posi-

tively influenced by Norway, which is clearly an exception in this respect due to its oil wealth. If Norway is excluded from the other Scandinavian countries, we find an average GDP per capita in PPPs of 112.3, which is still rather high-albeit lower than GDP per capita in the Netherlands.

Not only do Scandinavian countries have efficient economies, they are also characterised by a high degree of equity. This is shown in a study performed by André Sapir (2005) from the Bruegel Institute, a European think-tank devoted to international economics. In this study, Sapir first makes a distinction for each of the 15 members of the old EU-15 between four types of welfare states.[5] He distinguishes:

1. *Nordic* countries (in this study identified as Denmark, Finland, Sweden, plus the Netherlands): these have the highest levels of social protection expenditures and universal welfare provision, combined with large fiscal interventions in the labour market.
2. *Anglo-Saxon* countries (Ireland and the United Kingdom): these countries feature relatively large social assistance of the last resort and cash transfers are primarily oriented towards people of a working age. Moreover, this model is characterised by a mixture of weak unions, comparatively wide and increasing wage dispersion and relatively high incidence of low employment.
3. *Continental* countries (Austria, Belgium, France, Germany and Luxembourg): countries that rely heavily on insurance-based, non-employment benefits and old-age pensions. Large influence of labour unions.
4. *Mediterranean* countries (Greece, Italy, Portugal and Spain): these social welfare systems typically draw on employment protection and early retirement provisions to exempt segments of the working age population from participation in the labour market. In these countries, the wage structure is covered by collective bargaining and is strongly compressed.

Subsequently, Sapir compares these different welfare states in terms of the employment rate (as a measure of efficiency) and (one minus) the poverty rate (as a measure of equity). The results are shown in figure 1.1.

5   Note the similarity with Esping-Andersen's (1990) classification.

Figure 1.1: employment rates and probability of escaping poverty for the EU-15
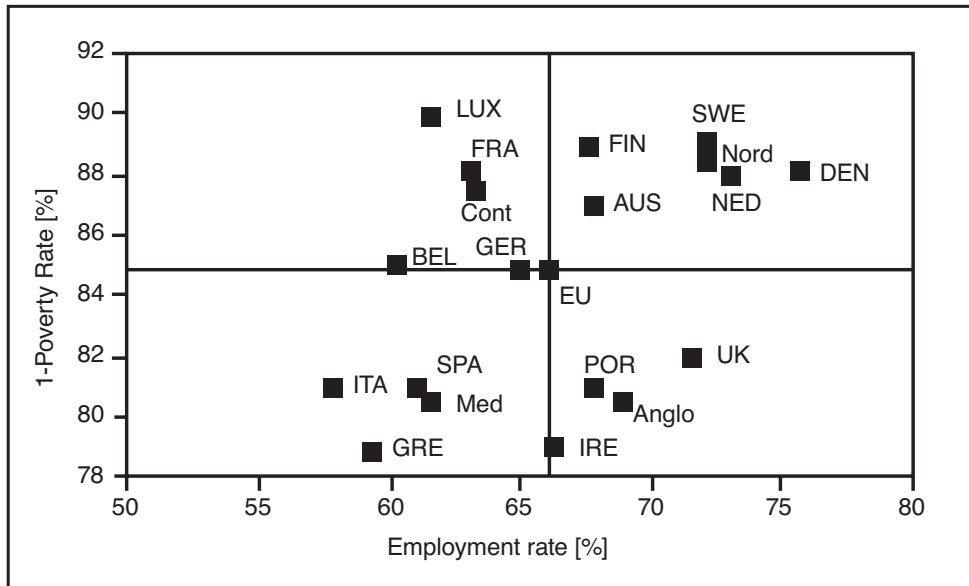
A clear pattern emerges in this figure-both in terms of equity and efficiency: Whereas only the Nordic and continental welfare states can be characterised as 'equitable', only the Anglo-Saxon and (again) the Nordic states are efficient in terms of employment. Note that Mediterranean countries are not characterised by equality or by efficiency either, while the Nordic countries exhibit both favourable features-an observation that boosted the earlier-mentioned popularity of this social model. For this reason, many politicians and scholars plead that existing welfare states (facing the described external pressures) should be reformed in a more Scandinavian way. However, is this model very favourable? This question will be addressed for the Netherlands in the remainder of this report.

1.2 The economics of the welfare state[6]

Welfare economics often starts from the two fundamental welfare theorems. They read that (1) every competitive economy is Pareto efficient and (2) every Pareto efficient resource allocation can be attained via a competitive market mechanism, with the appropriate initial redistributions. In practice, however, the economy is all but competitive due to market imperfections.

6   This section draws upon De Mooij (2006).

Therefore, government intervention is needed to attain Pareto efficient outcomes. Apart from correcting these market failures, generating more equality might also be a rationale for State intervention, as market outcomes are not necessarily viewed as equitable by society. The government can use its compulsory power to establish required redistribution.

The welfare state is the main institution that corrects for the (probably suboptimum) market outcomes. It does so by engaging in three activities, viz. interpersonal redistribution between people who differ in their abilities, insuring risk and reallocating welfare over the life cycle.

With respect to the first pillar of the welfare state (redistribution), it can be noted that this is desirable as society assigns a positive value to equality. The government and social partners try to reach this socio-economic goal via progressive taxation combined with several benefit schemes. As we have seen in the previous paragraph, the Scandinavian welfare states take this task of the welfare state very seriously and provide the less talented with generous benefit levels. Simultaneously the inhabitants of a country are in this way insured against several idiosyncratic risks (the second pillar), e.g. the risk of becoming unemployed or disabled. This, however, puts forward the fundamental trade-off between equity and efficiency, as it introduces serious moral hazard problems. These issues are mainly dealt with in chapter 2.

Regarding reallocation over the life cycle to make consumption smoothing possible, issues like facilitating the combination of work and care and stimulating educational investments are important. Public intervention in these themes is desirable as individuals are often hampered by hyperbolic discounting (assign too little weight to the future) or capital market imperfections (restricting their consumption possibilities early in life). As chapters 3 and 4 will show, Scandinavian countries also strongly engage in this task of the welfare state by heavily subsidising both public childcare and education.

In the remainder of this report, the analysis of the Scandinavian model will be limited to three topics: their labour market policies, their family policies and their education policies, since these are main *welfare state related* elements in which Scandinavian countries are clearly distinct from other types of welfare states.[7] Another limitation is that the analysis is based on eco-

7 The high tax level is also a characteristic of the Scandinavian Model in which it is different from the Netherlands. The high taxation is not treated separately because it is the direct result of the substantial public expenditures for labour market policy, childcare and education, and has apparently not hampered economic growth.

nomic literature and is therefore mainly economic and less institutional or historical in nature. This means that not all aspects of the Scandinavian model can be dealt with in this study.

1.3 Scope and outline of this report

In this report, the separate characteristics of the Scandinavian welfare states will be evaluated and the possibility and desirability to import these features to the Netherlands will be discussed, while taking into account country-specific factors and potential threats to these policies in the distant future.

As noted before, Scandinavian countries differ in several aspects from other European countries and the Netherlands in particular. In the remainder of this report, these distinctive policies will be evaluated by comparing them to their OECD and Dutch counterparts in particular, and the question will be addressed if and to what extent these policy differences have contributed to the apparent success of the Scandinavian model. If the favourable Scandinavian social-economic development cannot be explained by these distinctive policies, what can? Finally, the possibility and desirability of importing (certain elements of) the Scandinavian model into the Netherlands will be discussed.

In summary, *the* Scandinavians can be said to carry out at least three specific welfare state-related policies: the Scandinavian labour market policy, childcare policy and their education policy can all be said to be different. When comparing the Scandinavian model with other welfare state models, these three themes come forward as distinctive and relevant to social-economic policy. The selection of these three measures is confirmed by empirical analysis, in chapter 5.

One marginal note should be made regarding the use of the definition 'Scandinavian model' in this report. Of course, the Scandinavian model as such does not exist in reality. It refers to a cluster of distinguishing marks that the Nordic countries have in common. However, there are differences between those countries, even in the policies they have in common. What is offered in this report is an analysis of three separate social-economic policies, and for two of these policies (labour market and childcare) only one Scandinavian country, the most characteristic, has been compared with the Netherlands. The result of this partial analysis in the next three chapters is primarily a benchmark for the Netherlands, more than an full assessment of the Scandinavian model as such.

The outline of the study is as follows.

Chapter 2 first assesses the distinctive labour market policy of Denmark (which is most popular in international literature), focused at combining both flexibility and security (flexicurity). Special attention is given in this case to active labour market policies as they seem to work quite well in Denmark in ensuring employment incentives.

Chapter 3 discusses the Scandinavian family policy, mainly characterised by extensive public provision of childcare services. In this respect the case of Sweden is highlighted, as this country enjoys great international fame with its high level of children attending formal childcare and combines this with a high female labour force participation rate.

In *chapter 4* their distinctive education policy will be discussed: is it optimum from an efficiency or and equity point of view to provide free education at all levels (as the Scandinavian countries do) or should some levels of education rely more on private funding?

After these partial analyses, *chapter 5* will jointly assess the contributions of all of these characteristics to matters of efficiency and equity empirically (regression analyses). Moreover, this chapter discusses some other factors that might explain the strong economic performance of Scandinavian countries in recent years.

Chapter 6 discusses the desirability of 'Scandinavisation' of the current Dutch welfare state in the light of potential threats to the system. In particular, immigration, strategic policy competition, Baumol's disease and aging may put pressure on Scandinavian-type welfare states and chapter 6 will present some options to deal with this developments.

Chapter 7 contains the most important conclusions.

2 Labour market policy

Nowadays, Scandinavian countries are internationally renowned for their efficient labour markets. Figure 2.1 shows the development of standardized unemployment rates in the Scandinavian countries, which lies well below the OECD-Europe average.[8] Moreover, Scandinavian countries are also characterised by high participation rates: according to OECD data. The average participation rate in the Scandinavian countries is about 78%, while the OECD-Europe average lies about 10% lower. Here, it should be added that the Netherlands even has a lower unemployment rate (see figure 2.1), but the participation rate is also lower (75% in the Netherlands) compared to Scandinavian countries.

Figure 2.1: standardized unemployment rates 1994-2004
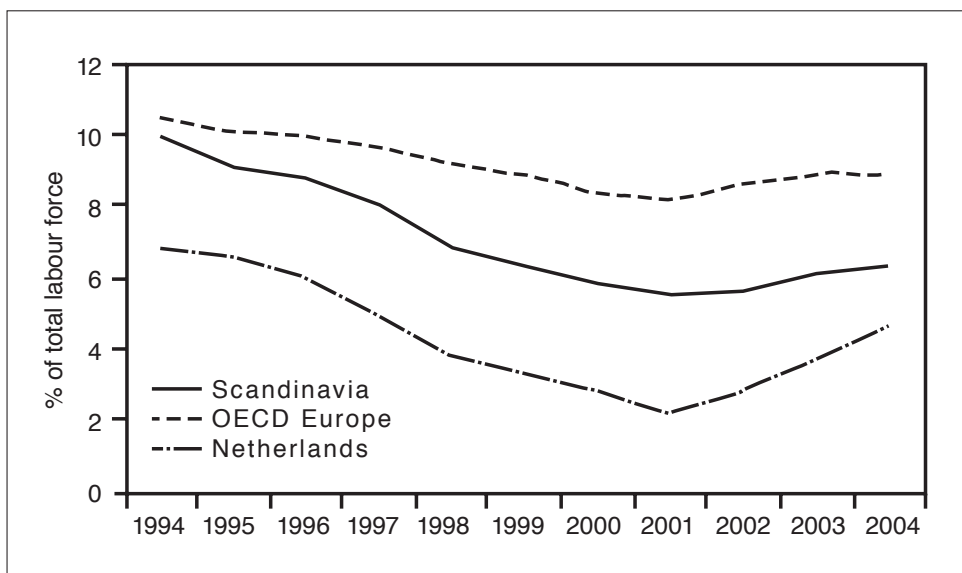
Source: OECD (2006)

How did this Scandinavian job-success come about? To answer this question it is pertinent to look at the distinctive features of the Scandinavian labour markets. In this respect, the Scandinavian focus on active labour market policies (henceforth: ALMPs) immediately pops out (see table 2.1).

8   For reasons of economic comparability Scandinavian rates are compared here with the OECD-Europe averages.

Table 2.1: share of spending on active labour market policies in total spending on labour market policies for 2004

Country	Share of ALMP-spending in total LMP-spending (2004)
Denmark	40.8%
Finland	32.2%
Norway	47.9%
Sweden	48.%
Scandinavia	*42.3%*
Germany	32.9%
Netherlands	39.2%
United Kingdom	642%[a]
United States	2.2

[a] The United Kingdom spends remarkably much on public employment services and administration-possibly indicating an inefficient system. If these expenditures are excluded, the share of ALMP-spending in total labour market spending drops to a meagre 20%.

Source: OECD database on Labour Market Programmes

This chapter tries to assess the contribution of the combination of generous social security systems and ALMPs to the Scandinavian employment miracle. To do so, we start by exploring the nature of unemployment, followed by a survey of studies on the effectiveness of ALMPs around the world. Next, the Danish labour market policy will be evaluated in more detail, since this country is often referred to as pursuing the most successful labour market policy in international perspective for which it receives a lot of attention.[9] The model consists of a combination of a high social benefits, low employment protection and obligatory activation. Finally, Danish labour market policy is compared to that pursued in the Netherlands, followed by a conclusion.

2.1 A short note on the nature of unemployment

It is generally believed in the neo-classical theory that unemployment arises at least partially due to a moral hazard problem from disincentive effects of the social security system (see for example Grossman and Hart, 1981). This theory is seriously challenged by the Scandinavian economies, which are

9   See the extensive literature on the Danish labour market model in the reference list and the introduction of Bredgaard *et al.* (2005) (which includes a lot of other references). Bos (2006) also refers to Denmark in his speech. Interested readers could read Calmfors, Forslund and Hemstrom (2001) for an assessment of the Swedish labour market policy.

able to combine both high employment and high replacement rates, thereby suggesting that the disincentives from an extensive social security system do not hamper economic efficiency. This finding can also be extrapolated to a group of 22 OECD countries[10]: as figure 2.2 shows, high net replacement rates are on average accompanied by high employment rates, thereby indicating that the classical trade-off between insurance and incentives can in fact be overcome. The (partial) correlation co-efficient between the employment rate and the net replacement rate equals +0.35 and is statistically significant at the 5% level. Similar results are found by De Groot, Nahuis and Tang (2004).[11]

Figure 2.2: the relationship between the net replacement rate with social assistance and the employment rate in 2004 for 22 OECD countries
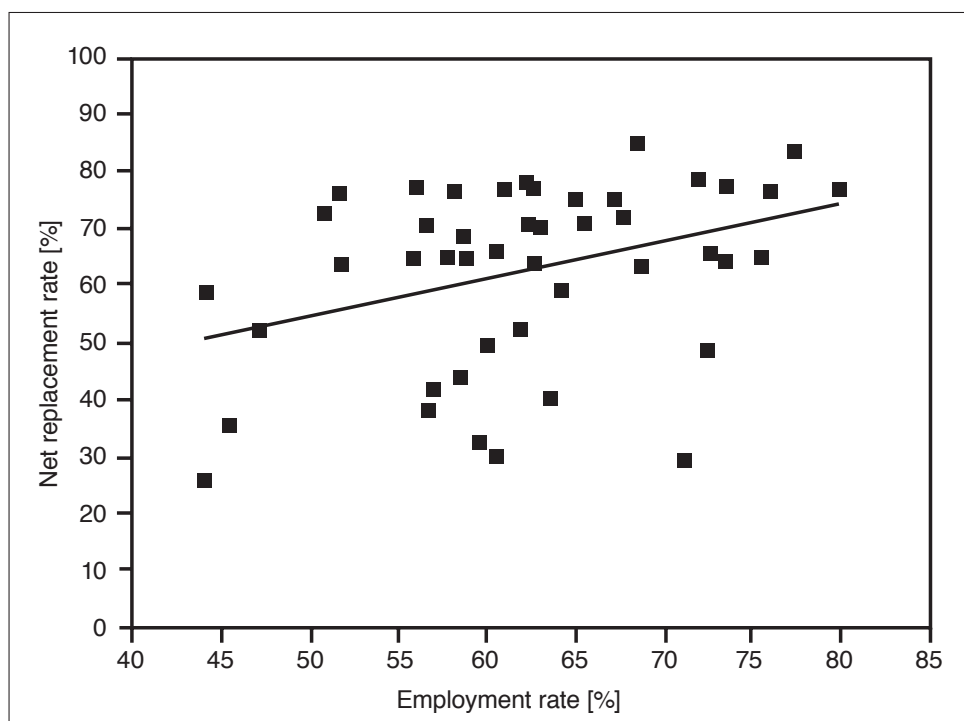
Source: OECD database on Social and Welfare Statistics

10   The group consist of Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Japan, Korea, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom and the United States.

11   This correlation should be taken with caution, as it does imply anything but causation. A more formal econometric analysis will be given in chapter 5.

How can this counterintuitive positive relationship between the net replacement rate and the employment rate be explained? Figure 2.3 might give the answer: as this figure shows, there is also a significant positive relationship for these 22 OECD countries between the net replacement rate and their spending on ALMPs. Here, the (partial) correlation coefficient equals +0.45 and is even significant at the 1% level. This indicates that, in exchange for higher unemployment benefit levels, governments require unemployed workers to be available for new jobs and to participate in various active labour market programmes while they are unemployed (c.f. Nickel and Layard, 1999). Lack of intrinsic motivation and quality seem to be more persistent causes of unemployment than the existence of monetary disincentives (c.f. Smith, Walker and Westergaard-Nielsen, 1993; Pedersen and Smith, 2002; Imbens, Rubin and Sacerdote, 2001); intensifying active labour market programmes would then be more effective than reducing unemployment benefits.

Figure 2.3: the relationship between spending on ALMPs and the net replacement rate in 2002 and 2004 for 22 OECD countries
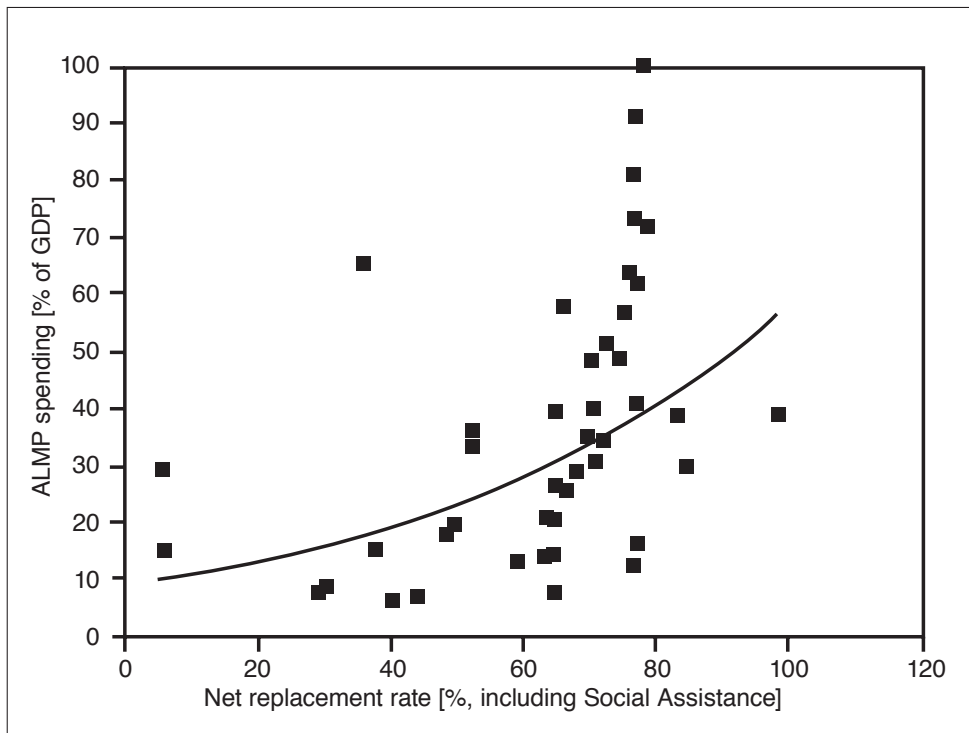
Although caution should be taken when interpreting these figures and partial correlations, one can infer that ALMP could very well be a useful policy instrument in influencing employment. There is more than the net replacement rate in explaining unemployment. The term 'ALMP' however encompasses a broad range of measures, all having different effects on different groups. The next section tries to differentiate within the group called 'ALMP' and tries to indicate its specific effects.

2.2 Active labour market policy: international evidence of its efficacy

The OECD has recently made a few extensive literature studies on OECD countries' experiences with active labour market policies (see Martin, 2000; Martin and Grubb, 2001). In these studies, five types of ALMPs are distinguished:
1. public training programmes;
2. job-search assistance;
3. special youth measures;
4. subsidies for employment (these both include-temporary - hiring subsidies paid to private-sector employers to stimulate the hiring of the unemployed and subsidies for unemployed persons who wish to start their own company);
5. direct job creation in the public sector.

ALMPs may increase employment through at least four channels (c.f. Estevao, 2003): in the first place, ALMPs may generate *more efficient matching between* job vacancies and unemployed workers because of adjustments in job-seekers' skills (through training) or more effective searching. This would result in a smaller ratio between vacancies and unemployment, thereby reducing wage pressure. Moreover, (temporary) subsidies for job creation reduce the information problem (firstly modelled by Spence (1973)), as long-term unemployment is a bad signal (indicating low productivity or laziness) to potential employers. By distributing job subsidies, employers get the opportunity to get more reliable information about the worker than the duration of unemployment, at low costs.[12]

Secondly, labour force productivity may increase owing to training programmes or on-the-job training in the case of subsidies for job creation. This *qualification effect* is primarily important for low-skilled workers, whose initial productivity level is not enough to meet the minimum wage levels.

12   A temporary lower level of minimum wages for unemployed workers will also reduce the information problem for the employer.

Thirdly, ALMPs may result in an *increased attachment to the labour market* of unemployed workers. The resulting stronger competition for jobs would shift the wage-setting curve down, raising employment and reducing wages.

Finally, ALMPs may also encompass a significant threat or *motivation effect*: the threat of having to participate in an active labour market programme (acting as a tax on leisure) might increase the search efforts of out-of-job workers. Evidence that this threat effect may be even larger than the effect of the programmes itself is presented by (among others) Black *et al.* (2003), Geerdsen (2002), and Rosholm and Svarer (2004).

However, ALMPs also include several negative effects: in the first place, expenditures on active labour market programmes (and employment subsidies in particular) are widely believed to encompass sociale welfare losses. This implies that the subsidised employee would have got the job anyway, even without the subsidy. In this case, the subsidy is simply a waste of money. Secondly, there might also be substitution effects present. This implies that the reduction in unemployment among the target group comes at the expense of a higher unemployment in some other group (c.f. the situation where a subsidised, extremely low-skilled unemployed worker is hired at the expense of an unsubsidised higher skilled worker). Moreover, ALMPs might also suffer from locking-in effects, which implies that participants in for example training programmes are unable to present themselves on the labour market and thus will not be able to find a job. They are (temporarily) stuck in a programme. Finally, displacement effects may also be present, which implies that firms who receive subsidies are able to execute cost reductions and thereby are able to win orders at the expense of non-subsidised competitors, leading to lower labour demand in firms that do not tap subsidies.

Lately, a lot of research has been conducted into the effects of ALMPs on unemployment. Martin and Grubb (2001) survey the outcomes of several influential studies. With respect to the first category of ALMPs, public training programmes, they report few promising results: they only appear to help adult women. Moreover, these programmes are among the most expensive active measures, so that they are highly likely to be cost-ineffective. Results regarding job-search assistance are more promising: albeit it usually the least costly measure, evaluations from several countries show consistently positive outcomes-thereby indicating a potential large cost-effectiveness. Evaluations on special youth measures, on the other hand, indicate that these are not effective for disadvantaged youth. With respect to subsidies for private-sector employment, the OECD (1993) notes that they bring large sub-

stitution effects and nett losses of social welfare. As a result, they only create net gains in employment. Richardson (1998), however, argues that employment subsidies could turn out to be more effective in the long-term as they enlarge the labour reserve, thereby exerting a downward pressure on wages. Moreover, their effectiveness regarding net job creation can be enhanced by targeting these subsidies for low-skilled workers (to reduce losses of social welfare) and by restricting the period of the subsidy (to reduce substitution and locking-in effects, c.f. Van Ours (2002)). The precise structure of employment subsidies thus seems to be essential for their effectiveness. Finally, evaluations regarding direct job creation in the public sector are negative: unemployed people eventually do not succeed in getting an ordinary job, and become unemployed again when the subsidy stops.

In addition, De Groot, Nahuis and Tang (2004) show that ALMPs in general are not only effective in increasing efficiency, but also reduce poverty, by decreasing long-term unemployment-thereby solving the classic economic trade-off between equity and efficiency. All in all, enough reasons to accept at least some forms of ALMP as a useful policy tool.

2.3 Labour market policy in Denmark

The Danish labour market has not always served as a model for other countries, as is nowadays the case. During the 1980s and early 90s, Denmark suffered from very high unemployment rates-up to 11.4% in 1983. As a result, the Danish government took several measures during this period to reduce these rates, which have taken two forms (Cox, 1998).

In the first attempt to reduce unemployment, the government took measures to reduce the supply of labour. These measures included early retirement schemes and programmes for paid leave from work, but they were ineffective in reducing unemployment as it is nowadays widely recognized that there is no lump-of-labour (labour demand is endogenous to labour supply). Reckoning with this observation, the Danish government responded to this first (unsuccessful) attempt to reduce unemployment, with a second attempt in the late 1980s, more inspired by liberal principles via which Denmark made a shift from welfare to workfare policies. The universal and unconditional elements of the welfare state were diminished, and the Danes began to rely on ALMPs. Ironically enough, by implementing these liberal policies, the Danes shifted away from the traditional, unconditional Scandinavian-type of welfare state, towards a more liberal one.

Initially, the aim of ALMPs was to offer the unemployed the prospect of regaining eligibility for unemployment benefits after the expiry of the original eligibility period by participating in an activation programme (Andersen and Svarer, 2006). This feature of Danish legislation, however, proved to be highly unfavourable and costly, as it did not reduce unemployment at all: by temporary participation in activation programmes, individuals could receive unemployment benefits infinitely, without relapsing into social assistance (see figure 2.4).

Figure 2.4: structure of the Danish unemployment insurance system before 1994
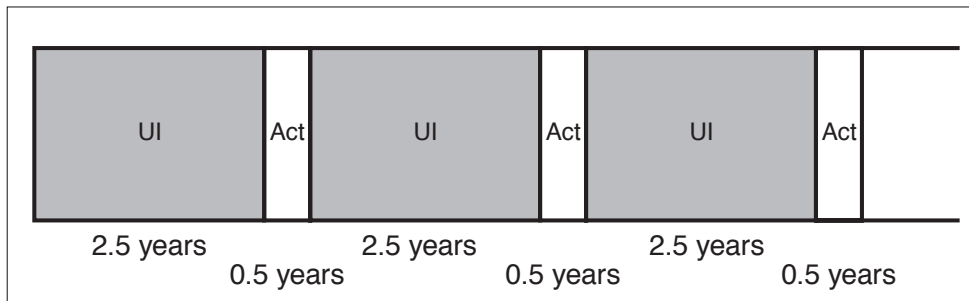
Note: 'UI' stands for Unemployment Insurance; 'Act.' for activation within an active labour market programme

Source: Geerdsen (2002)

As a result, it was not until the introduction of the so-called "flexicurity" model in 1994, which tightened eligibility criteria, that the Danes succeeded in their task to reduce unemployment: The unemployment rate was 10.7% in 1993. The Danes brought it down to 4.6% in 2000 without a significant rise in inflation. In the meanwhile, labour force participation rates remained high in Denmark (around 80%), indicating that there is little hidden unemployment due to leave and disability schemes as is for example the case in Sweden, or in the Netherlands, where the labour force participation rate is substantially lower (around 75%). The "Danish job miracle" was born.

The flexicurity model consists of two core elements: flexible dismissal rules (the flex-part), accompanied by relatively generous and long lasting unemployment benefits (the security-part). Figures 2.5 and 2.6 show that the Danish social security model is indeed distinct with respect to strictness of employment protection legislation (EPL) and the height of the net replacement rates.

Figure 2.5: strictness of employment protection legislation (EPL) for 18 OECD countries in 2003
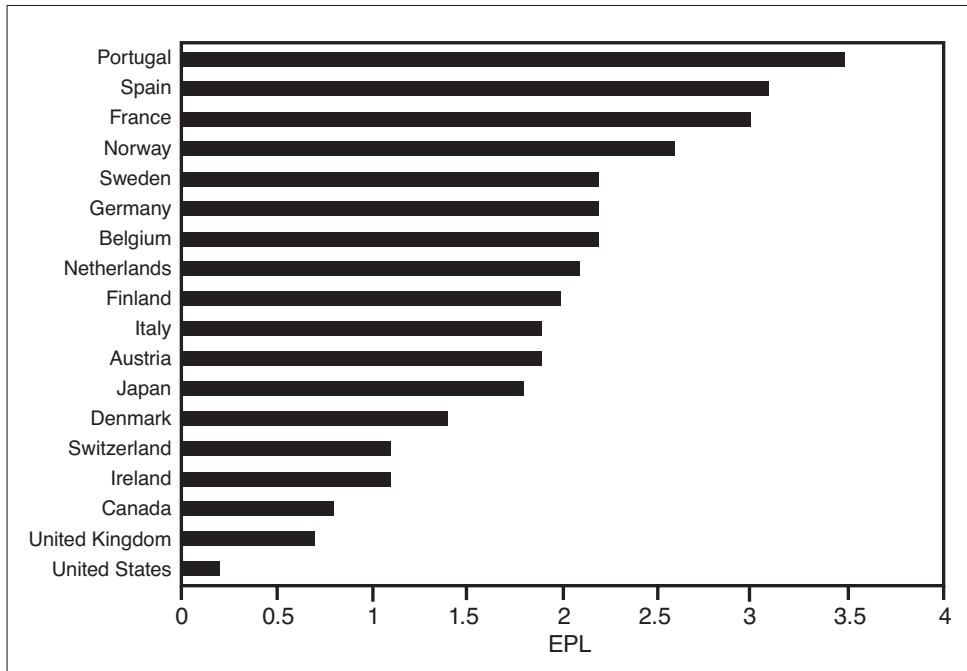
Source: OECD database on Labour Force Statistics; (the higher the EPL-score, the more employment law protection).

Figure 2.6: net replacement rates for 18 OECD countries in 2004
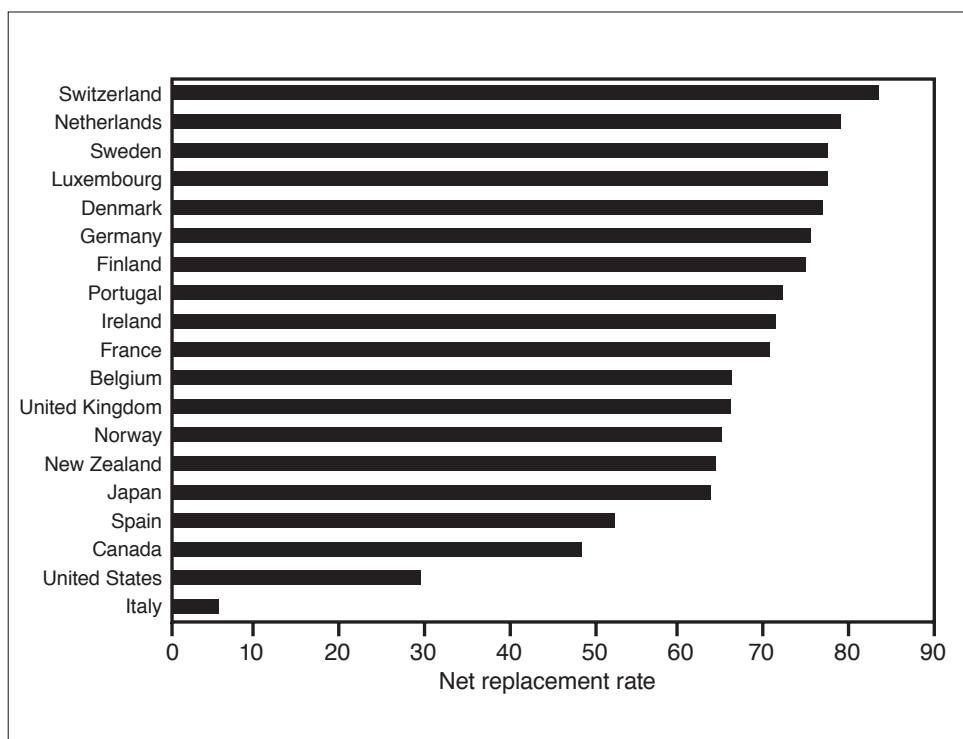
In this way, the Danish flexicurity model is thus a hybrid model, with liberally low levels of employment protection, but with socialist, Scandinavian high levels of social security.[13] But how is Denmark able to combine these two features of both flexibility and security? According to the Danish Ministry of Labour (1999), the key lies in, what they call, the 'golden triangle' (shown in figure 2.7), which heavily relies on ALMPs.

13   Especially regarding the low level of EPL, the Danish labour market is clearly distinctive from those in other Scandinavian countries (c.f. figure 2.5). Although all Scandinavian countries do have high levels of social security in common, the Scandinavian model also does not exist with respect to labour market policy.

Figure 2.7: the golden triangle of flexicurity

The basic flexibility-security nexus

Flexible labour market

The qualification effect of ALMP

Generous welfare system

Active LMP

The motivation effect of ALMP
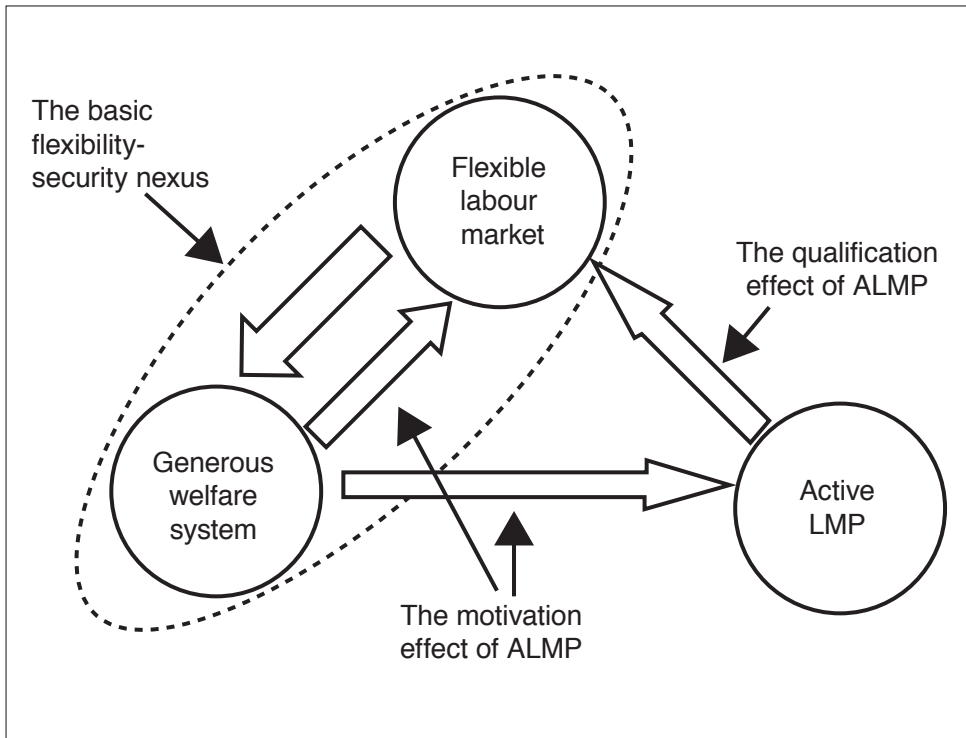
Source: Madsen (2005)

The idea behind this golden triangle of flexicurity is the following: because the Danish social security provisions are very generous, the working force is willing to accept a very flexible labour market (with, for example, little employment protection legislation) as loosing your job has no devastating influence on one's welfare. Both reduce the moral hazard problem, which possibly arises from the generous welfare system, and increase job opportunities. The unemployed have both the right and obligation to participate in active labour market programmes, under the penalty of lower benefits. Such a programme has both a motivating effect, to the effect that the prospect of having to participate in a programme yields enough incentive to find a job, and increases the quality of the labour force to the extent that the unemployed actually participate in a programme (as discussed before in section 2.2).

The next two sections examine these two pillars of the Danish flexicurity model in greater detail.

2.3.1 Flexibility[14]

Flexible dismissal rules constitute an important characteristic of the Danish flexicurity model. As figure 2.5 shows, the strictness of employment protection legislation (hereafter called 'EPL') is rather low in Denmark.[15] But is this "flex-part"-reducing labour market rigidities-really a favourable feature of the Danish labour market, as many advocates of this model claim?

The impact of low EPL on the unemployment rate is limited. Research by Nickell (1997) and De Groot, Nahuis and Tang (2004) shows there is no statistic significant relation between EPL-strictness and the unemployment rate. Deelen, Jongen and Visser (2006) conclude in an international survey that there is a limited but small effect of high EPL on unemployment. It is rather the composition of unemployment that is affected through a reduction of insider/outsider contradictions: lowering EPL reduces long-term unemployment (as it increases the job-turnover rate and therefore job-finding opportunities in the long run) at the expense of short-term unemployment (as it becomes easier to fire people). Because of, among other things, the low level of EPL in Denmark, the share of long-term unemployment in total unemployment is indeed low at 25.9%, whereas the OECD-Europe average amounted up to 45.3% in 2005. In addition, a low level of EPL also contributes to the flexibility of the economy and increases its ability to adapt to new technologies and reallocate human capital (Deelen, Jongen and Visser, 2006).

EPL does however also affect economic growth: as Teulings and Hartog (1998) argue, employment protection could help stimulating firm-specific investments as it decreases the hold-up problem for the worker. Firing costs increase the average job duration, through which investments have more time to pay their way. Especially for higher skilled workers it stimulates learning by doing. Through this channel, EPL is likely to increase labour productivity growth as findings by Nickell and Layard (1999) indeed suggest. On the other hand, when reallocation of resources is important, a high EPL has

14 Minimum wages also greatly determine flexibility on labour markets, but it is ignored in this comparative analysis as the level of these wages does not greatly differ between the Netherlands and Denmark..
15 This measure (which has a value lying between 0 and 6, where a higher score points at more stringent employment protection) is constructed by the OECD and takes into account several factors that express the ease of dismissal, such as the situation of a regular employee who is fired on grounds of poor performance, required notice and severance pay, conditions under which dismissals are regarded as 'fair'. See Grubb and Wells (1993) for an extensive discussion.

a negative impact on productivity. Productivity opportunities will not be utilized and the productivity level at which workers are fired will be lower, because the employer has to pay firing costs. Belot, Boone and Van Ours (2004) have modelled these effects and find evidence that EPL is actually too low in Denmark from this point of view.

Moreover, as for example Blanchard and Tirole (2004) argue, EPL also plays an important role in internalizing the negative external effect of layoffs. As unemployment has several negative effects that the employer does not take into account (e.g. the financial costs borne by the unemployment insurance and ultimately the tax-payer and the psychological costs borne by the dismissed worker), the market will generate a too high job-turnover rate from a social point of view.

Layoff taxes could internalize these negative external effects of layoffs. It could be either a fixed amount, possibly indexed on relevant variables like age, or a variable tax, levied ex post depending on the actual length of the unemployment caused. Such a system of 'experience rating' really confronts employers with the financial consequences of their firing decisions; therefore, the undifferentiated, general payroll premium (that currently finances unemployment benefits) could go down by compensation. Moreover, experience rating stimulates employers to provide their employees with better training so that they can find a job more quickly after a possible layoff. Simultaneously, these employers might supply the employment centres with an incentive to get the unemployed worker back to work. Several simulation studies (c.f. Albrecht and Vroman (1999) for the US; Alessie and Bloemen (2004) and Cahuc and Malherbet (2004) for Europe) and empirical studies (c.f. Anderson and Meyer (1994; 2000)) find favourable labour market implications (e.g. in the form of higher employment rates) of experience rating in unemployment insurance. Currently, experience rating in unemployment insurance is largely imperfect or absent in Europe (De Mooij, 2006: 113). Denmark however, does have some form of experience rating at the firm level, although its level is very low (as is the case with the overall level of EPL).

The low Danish EPL seems to be over the top from an economic point of view, but has contributed to reducing insider/outsider contradictions and the low level of long term unemployment in Denmark, thereby converting the solution of this trade-off into a political question to be answered by policy makers. In addition to the low EPL, Denmark has adopted the concept of experience rating.

2.3.2 Active labour market policy

The other characteristic of the Danish flexicurity model is formed by the extensive use of ALMPs, which seem to play a crucial role in keeping the generous Danish welfare state financially sustainable. But exactly how is this organized in Denmark since the major 1994-reform? Madsen (2002) lists the following main characteristics of the post-reform ALMP in Denmark in 1994:

1. A two-period benefit system, with an initial passive period of four years (during which the unemployed person receives unconditional benefits, but is eligible for activation) and a subsequent activation period of three years. After this eligible period for unemployment benefits, the unemployed person will receive social assistance, which implies that he will receive a lower benefit, which is also dependent on family circumstances.
2. A change in the assistance provided to the long-term unemployed persons from a rule-based system to a system based on an assessment of the needs of the individual (with individual action plans).
3. The decentralization of policy implementation to regional labour market councils, which are empowered to adjust programmes to local needs.
4. The ending of the possibility for the unemployed to renew entitlements to unemployment benefits by participating in a programme. This had the effect that subsidised employment no longer increased the duration of the period for which the unemployed are eligible for unemployment benefits. Those who are still unemployed after participation in an activation programme no longer receive unemployment benefits, but have to manage things with social assistance.
5. The introduction of paid leave schemes for childcare, education and sabbatical leave.

Since 1994, the composition of the two-period benefit system (listed under point 1 above) has been adjusted several times, as the Danish government found the initial relatively generous provisions not stringent enough. As a result, both the activation and passive period have been reduced several times, which has resulted in the current situation (since July 2003) in which the passive period is fully absent, while the activation period lasts only 4 years (see figure 2.8). So far, the abolishment of the passive period has not yet shown the desired increase in the number of persons who found a job immediately (Andersen and Svarer, 2006). This can be explained by the locking-in effect, since well- qualified, unemployed workers (who are able to find a job quickly by themselves) are 'locked-in' an activation programme for some time-not able to present themselves on the job-market. Moreover, by implicitly obliging well-skilled unemployed workers to participate in activa-

tion programmes, the Danes have also increased the social welfare losses associated with ALMP.

Figure 2.8: Development in the social security system-eligibility and periods of activation
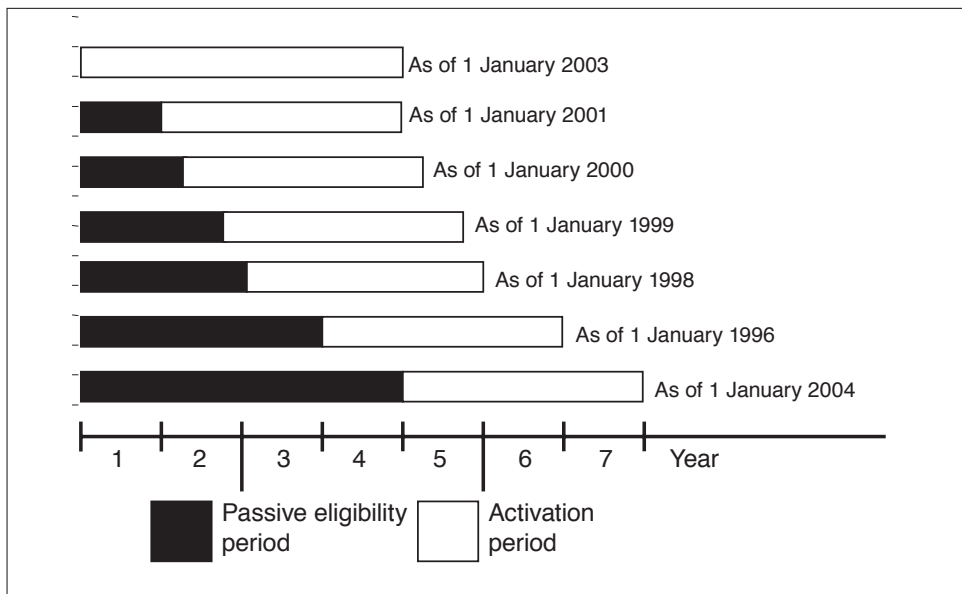
When we look at Danish ALMP in more detail and compare this policy with those pursued in other countries (see table 2.2), we can infer that the main differences between Denmark and its reference countries lie in the spending on (institutional) training and employment incentives. These policies in particular seem to be highly effective in Denmark. The Danish Ministry of Labour (2000) has conducted research into the reduction of unemployment after taking part in different active programmes. The results are presented in figure 2.9.

Table 2.2: spending on ALMP as percentage of GDP in 2004

	DK	GER	NL	UK	US
1. PES and administration	**0.32**	**0.29**	**0.32**	**0.36**	**0.04**
1.1 Placement and related services	0.05	0.12	0.07	0.27	0.01
1.2 Benefit administration	0.15	0.06	0.24	0.09	0.03
2. Training	**0.54**	**0.36**	**0.36**	**0.13**	**0.05**
2.1 Institutional training	0.52	0.24	0.01	0.01	0.02
2.2 Workplace training	–	–	0.05	–	–
2.3 Integrated training	–	–	0.10	0.02	0.03
2.4 Special support for apprenticeship	0.02	0.07	0.04	0.10	–
3. Employment incentives	**0.46**	**0.09**	**0.03**	**–**	**–**
3.1 Recruitment incentives	0.46	0.08	0.03	–	–
3.2 Employment maintenance incentives	–	–	–	–	–
4. Integration of the disabled	**0.52**	**0.15**	**0.56**	**0.02**	**0.03**
5. Direct job creation	**–**	**0.13**	**0.18**	**–**	**0.01**
6. Start-up incentives	**–**	**0.13**	**–**	**–**	**–**
Total active measures	**1.83**	**1.14**	**1.44**	**0.52**	**0.16**
Categories 1.1 + 2-7	1.56	0.97	1.20	0.43	0.13
Categories 2 -7 only	1.52	0.85	1.12	0.16	0.12

Source: OECD (2006)

Figure 2.9: reduction in unemployment after taking part in different programmes (post-programme effect), averages for 1996–1998
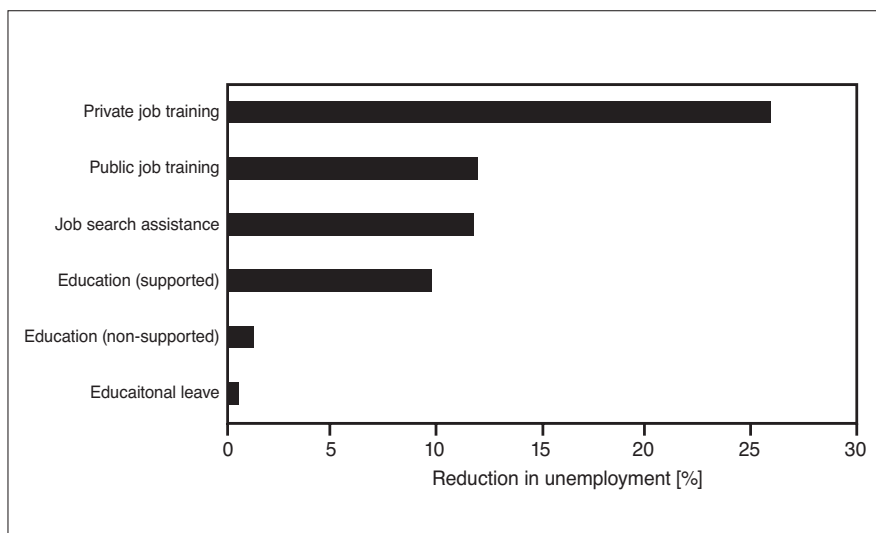
Source: Danish Ministry of Labour (2000)

From this figure, it appears that establishing re-employment via ALMP in Denmark has been most effective by private job training. In such a programme, a private employer receives a wage subsidy of up to DKK 52.32 (which equals about EUR 7) per hour to employ a participant for a 6 month period (employment incentive), during which he has to pay the participant the average wage for this type of job. The success of this policy instrument can largely be explained by the fact that these temporary subsidies reduce the information problem in Spence's (1973) sense as employers are able to acquire more information about the worker's productivity at relatively low costs. As a result, an activated person often continues in the subsidised job even after the subsidy has been stopped: outflow to ordinary jobs is thus established because of these programmes (Rosholm, 1999).

Public job training also yields positive results with respect to the reduction in unemployment after participation. Here, the process is similar to private job training, but the participants are placed in public institutions. The average duration of public job training equals 39 weeks, which is considerably higher than private job training. However, after the subsidy has stopped, most of these jobs also disappear again, which limits its success.

However, the above two programmes incorporate large substitution effects and social welfare losses as a result of which the net macro-reduction in unemployment will be a lot lower (possibly up to 95%).[16] They are however also effective for equity reasons: as these programmes are targeted towards the long-term unemployed at the bottom of the labour market, they greatly reduce poverty (c.f. De Groot, Nahuis and Tang, 2004).

Job search assistance and supported education also display positive results, with a reduction in unemployment of about 12 and 10% respectively.[17] Less promising results are found for non-supported education and educational leave, which typically involve training in very basic skills (Madsen, 2002).

In addition, it should be noted that the numbers presented in figure 2.8 do not take account of the threat effect, discussed before in section 2.2. The real reduction in unemployment because of ALMPs may thus be even much higher, as research by Rosholm and Svarer (2004) shows that the threat effect in Denmark is even greater than the post-programme effect.

16   See Calmfors, Forslund and Hemstrom (2001) for a detailed overview of several studies on deadweight losses and substitution effects of ALMPs.
17   Supported education can be defined as targeted education, with support from the employment services.

ALMP has thus been a very useful tool in Denmark in reducing unemployment and poverty. It should however be recognized that ALMP is a very expensive method to bring down unemployment. Cost-effectiveness therefore is not evident. However, conducting a cost-benefit analysis with respect to active labour market policies is rather hard to do for at least two reasons. With respect to the cost-side of the analysis, it is hard to find the correct and necessary data (the administration costs in particular); regarding the benefit-side. It is almost impossible to measure the resulting non-monetary gains in well-being due to lower unemployment. In practice, the latter point is therefore usually neglected in most studies. In addition, it is also difficult to construct the counterfactual: what would have happened, if ALMPs had not been implemented?

For these reasons, only a few cost-benefit analyses have been ,made on active labour market policies (Kluve and Schmidt, 2002). Jespersen, Munch and Skipper (2004) have conducted such a study for the Danish case. In their analysis, they measure the benefit of ALMP simply as the discounted earnings gain of lower benefit expenditures (thus ignoring the increase in overall well-being as a result of higher employment and the motivation effect) plus the value of output produced during participation in job training programmes, while their cost-side consists of administration costs, costs of education and training expenditures (ignoring potential substitution effects and loss of social welfare)-corrected for marginal costs of public funds. Accordingly, the net social return is measured by the change in aggregate output attributable to the programmes by subtracting the programme's costs from the discounted stream of benefits.

The results of their analysis are presented in table 2.3. According to this table, private job training (through temporary employment subsidies) is the best programme with a surplus of about € 37,000 per participant.[18] Lower, albeit significant positive effects are found for public job and classroom training. Residual programmes (consisting of individual job training, entrepreneurship subsidies, targeted courses and public employment programmes) end up with a big deficit of over € 18,000 per participant. ALMP in Denmark has thus been fairly successful, with the exception of the residual programmes.

18   Obviously, these amounts should not be interpreted too strictly, as they are surrounded by uncertainty and incompleteness. It is more the mutual, ordinal relation between the specific programmes that matters.

Table 2.3: the economic value of Danish ALMPs per participant in 2002; effects for 1995 - 2000

Programme type	Net benefit (present values, in euros)
Private job training	37 190
Public job training	9 450
Classroom training	2 870
Residual programmes	−18 430

Source: Jespersen, Munch and Skipper (2004)

As noted before, this study only measures post-programme effects and thus neglects the probably more important threat effect. On the cost-side substitution and deadweight loss are neglected. Using other studies, it is possible to adjust the above figures for substitution, deadweight loss and threat effects. Knowing that only 5 to 33% of subsidised jobs represent additional jobs (OECD, 1993), while research by Rosholm and Svarer (2004) indicates that the threat effect is about 2.85 times as large as the initial pure-programme effects of ALMP, we get the following (indicative) net benefits, (which still neglect the non-monetary gains in well-being from lower unemployment):

Table 2.4: the economic value of Danish ALMPs per participant in 2002 accounting for substitution, an inefficient allocation of resources and threat effect; effects for 1995-2000

Programme type	Net benefit lower limit (present values, in euros)	Net benefit upper limit (present values, in euros)
Private job training	5 300	34 977
Public job training	1 347	8 888
Classroom training	8 180	8 180
Residual programmes	−6 467	−6 467

Source: own calculations[19]

19 Example: in this table the lower limit for the net benefits of private and public job training programmes is calculated by taking the unadjusted net benefit (from table 2.3), multiplying this by 0.05 (which represents the net reduction in unemployment in the pessimistic scenario) and 2.85 (the threat effect). The multiplication factor was 2.85 for classroom training and residual programmes, as these programmes do not incorporate substitution effects.

Accounting for these additional effects, the main conclusions do not alter: in Denmark, private job training is most effective, whilst residual programmes only create net losses.

To complete the cost-benefit analysis for Denmark as a whole, the adjusted net benefits from table 2.4 are finally related to the magnitude of each programme type, listed in table 2.5. This leads to the conclusion that ALMP in Denmark on average over the period from 1995 to 2000 has yielded between € 3.518 and € 7.918 per participant in present value. All in all, the conclusion is that ALMP in Denmark has not only been effective in reducing unemployment and poverty, but has also been cost-effective due to lower benefit expenses.

Table 2.5: distribution of programmes, averages for 1995 - 2000

Programme type	Relevance (% of total)
Private job training	10
Public job training	19
Classroom training	50
Residual programmes	21
Consisting of	
Individual job training	6
Entrepreneurship subsidy	4
Targeted classroom training	4
Targeted courses	2
Public employment programmes	4
Other programmes	1

Source: Jespersen, Much and Skipper (2004)

2.4 Labour market policy in the Netherlands

Dutch labour market policy has considerable resemblance to its Danish counterpart: unemployment benefits in the Netherlands are also rather high (although the duration of the unemployment benefit is longer in Denmark), while we also spend considerable amounts on ALMP. Therefore, in most international studies Denmark and the Netherlands are included in the same 'Nordic' group regarding labour market policy (c.f. Sapir, 2005; Aiginger and Guguer, 2006). Nevertheless, great differences are seen when looking at employment protection . The discussion in the Netherlands is whether the EPL should be diminished and the activation should be less without engagement and be more compulsory. The major differences regarding flexibility and active labour market policy are discussed.

2.4.1 Flexibility

As figure 2.5 shows, the level of EPL in the Netherlands is considerably higher than in Denmark (2.1 versus 1.4).[20] The procedural inconveniences and the difficulty of dismissal are above average (Deelen, Jongen en Visser, 2006). Especially older workers who have worked for the same firm for a long time are favoured by strict EPL in the Netherlands. This has a number of negative effects. The labour market for older worker is very inflexible, and labour market participation of people between 55 and 64 is low (59.5% in Denmark, 46.1% in the Netherlands). The insider-outsider problem exists especially for older workers. This dichotomy will become a bigger obstacle in the coming years because of the fundamental changes that took place in social security. Those reforms make it more difficult for older worker to leave the labour market earlier. The length of the maximum unemployment benefit has been shortened from 7 years to a maximum of 3 years and 2 months. The criteria for the disability insurance have become stricter, and pre-pension schemes have been partly abolished.

The positive effect of a high level of EPL in the Netherlands is that it stimulates firm-specific schooling (c.f. Belot, Boone and Van Ours, 2004). On the other hand, it can reduce investments in employability in general. The relatively high level of EPL at least does leave room for improvement regarding the reduction of insider-outsider contradictions. Women and immigrants will profit from a lower EPL for older workers.

Although the unemployment rate in the Netherlands is about the same as in Denmark, the share of long-term unemployment in total unemployment is rather high in the Netherlands: it amounted up to 40.1% in 2005, compared to only 25.9% in Denmark.

Moreover, in contrast to Denmark, experience rating in layoff taxes at the firm level[21] is currently absent in the Netherlands as a result of which both employers and employment centres have no incentive to get unemployed workers back to work.[22]

20   In the late '80 the difference was smaller because Denmark had a EPL level of 2.3 and the Netherlands of 2.8. Both countries currently have a substantial lower level than twenty years ago.
21   Premiums for unemployment paid by employers are differentiated at sector level. The premiums paid by employees are levied on the national level.
22   The Netherlands has positive experiences with experience rating at a company level in disability insurance (c.f. Koning, 2004), where the premiums paid by employers are a function of their firm-related disability inflow in previous years (PEMBA).

Although the EPL in Denmark and the Netherlands do differ substantially, the unemployment rates in both countries are among the lowest in the EU. Lowering EPL in the Netherlands to more Danish levels thus cannot be justified on the grounds of the level of unemployment, although it might contribute to the fight against long-term unemployment, reduce insider/outsider-contradictions and enhance the flexibility of the labour market, especially for older workers. An alternative for simply lowering the EPL would be a system in which the severance pay is lower, the more the employer has invested in the employability of the worker.

2.4.2 Active labour market policy

Active labour market policy in the Netherlands has taken several forms in recent years: it includes direct job creation in the public sector, employment subsidies, job search assistance and educational training.

When we look at the composition of ALMP-spending in the Netherlands (see table 2.2), it appears that relatively much money is spent on direct job creation, while most studies find no positive effects for this policy, which suggests that these funds could be allocated more efficiently. The effectiveness of Dutch ALMP has been investigated in greater detail by some studies to be discussed below.

Jongen, Van Gameren and Graafland (2000) for example have studied the macroeconomic effects of *relief jobs* (mainly direct job creation in the public sector, 'Melkert-banen') and *vouchers* (subsidies for a maximum period of four years for private firms, which hire previously long-term unemployed workers, covered under the VLW-programme ('Afdrachtvermindering Langdurig Werklozen' or 'Reduction Long-term Unemployed').[23] In the former programme participants earned an income of 130% of the minimum wage level; in the latter programme participants are not allowed to earn more than 130% of the minimum wage In 2003 the number of relief jobs has strongly been reduced and the VLW-programme abolished.

The reported effects of the introduction of relief jobs are numerous: in the first place, as more vacancies for relief jobs come onto the market, the search-intensity from low-skilled workers for private sector jobs will go down. Moreover, as relief jobs yield a higher compensation relative to the state of unemployment, the outside option of workers in the wage bargaining process will go up, which will raise labour costs. In these two ways, relief

23   The VLW-programme was abolished in 2003.

jobs thus partly crowd out regular employment, decreasing unemployment on balance but simultaneously increasing the inactivity rate (defined as the sum of unemployment, relief jobs and training jobs). As a result of mainly the increase in inactivity, Jongen *et al.* find very disappointing results for this type of ALMP in the Netherlands: starting with an *ex ante* impulse of 115 million euros, the government runs a net loss of no less than 95 million euros *ex post*. This disappointing result can merely be explained by the very low outflow from relief jobs to regular employment: in 1997. This percentage only amounted 4% (Gravesteijn-Ligthelm *et al.*, 1998). The explanation for the limited outflow can be found in the relatively high compensation levels for these jobs in combination with the infinite duration, as a result of which participants had very little incentive to continue a search for a job in the private sector. This result lies completely in line with findings in international literature, as direct job creation in the public sector is hardly positively evaluated (see section 2.2).

Results for the voucher-programme are more promising: as a result of the subsidy, low-productive job seekers become more attractive to firms as they experience lower labour costs; labour productivity falls r by more than costs however (since less-productive workers are activated), indicating a slight increase in wage pressure as workers claim part of the subsidy. On balance, both private sector production and employment rise while inactivity drops; Polanen Petel *et al.* (1999) estimate that between 13 and 43% of subsidised jobs in the Netherlands represent additional jobs, which is rather high in international perspective (where estimates lie between 5 and 33%). Moreover, the VLW seems to reduce long-term unemployment by one or two-thirds. As a result of these promising figures, net effects on the government budget are also promising: Jongen *et al.* report a net loss of 41 million euros (starting from an impulse from 115 million euros), but they do not reckon with savings on transfers and additional receipts due to the rise in the tax base. As they acknowledge, these effects are substantial as a result of which the net effect on the government balance is very likely to become positive. In any case, the voucher-programme is much more effective than relief jobs. Its efficacy could however be increased further by reducing the relatively long period of the subsidy (currently up to four years) to more Danish levels (where the maximum duration of an employment subsidy is currently 6 months), to limit the substitution effects.

In addition to these two programmes, the Netherlands also provides part of the unemployed with job-search assistance. As noted in section 2.2, this type of ALMP is often very positively evaluated since it is both effective and cheap. In the Netherlands, job-search assistance mainly consists of coun-

selling and monitoring provided by the regional labour market agencies (called 'Centrum voor Werk en Inkomen' or 'CWI' in Dutch) to benefit recipients with relatively good labour market prospects. Van den Berg and Van der Klaauw (2004) investigated the effectiveness of counselling and monitoring in the Netherlands, but remarkably found no evidence that this measure affects the exit rate to work.[24] This can be explained by two flaws in the Dutch design of job search assistance: in the first place, it focuses on unemployed workers with relatively good labour market prospects, whilst international studies point out that mainly the effect of monitoring rises as the labour market prospects deteriorate. Moreover, Dutch counselling can be qualified as rather passive, whilst e.g. Heckman, LaLonde and Smith (1999) only report positive findings for intensive counselling.

In addition, education of unemployed people also forms a substantial part of Dutch ALMP. According to the Dutch statistics bureau 'CBS', almost 15% of the unemployed participated in such a programme in 2002. De Koning *et al.* (2004) surveyed all Dutch studies that have investigated the effectiveness of these programmes. They concluded from these studies that education of the unemployed did not have any significant short-term effects-a result which is in line with international findings. Although little is known about the long-term effects, most studies conclude that other forms of activation are more effective.

2.5 Is the Danish flexicurity model suitable for the Netherlands?

As argued in section 2.4, current Dutch labour market policy comes in some way very close to the Danish model of flexicurity. The level of benefits is almost equally high, and the focus is on ALMPs. Only the level of EPL is higher in the Netherlands. But is this model of flexicurity really suitable for the Netherlands? The sustainability of the Danish model relies heavily on the public-spiritedness of the country, because the generous unemployment benefits raise a moral hazard problem: if free-riding on social benefits is not considered as morally wrong by a countries' inhabitants, the welfare state is doomed to become unsustainable in this country. Moreover, Algan and Cahuc (2006) show that civic attitudes are merely determined by cultural background and cannot easily be changed by country-specific institutions. It is thus a task of the government to develop the right institutions given a countries' civic attitudes.

24   Olieman *et al.* (1998) found similar results.

An attempt to measure these civic attitudes is made in figure 2.10: it displays the mean answer to the question Is it justifiable to claim government benefits to which you are not entitled?-thereby providing an indication regarding moral attitudes with respect to free-riding on social benefits.

Figure 2.10: mean answer to the question 'Is it justifiable to claim government benefits to which you are not entitled?' in 1999, where 1 represents 'never justifiable' and 10 represents 'always justifiable'
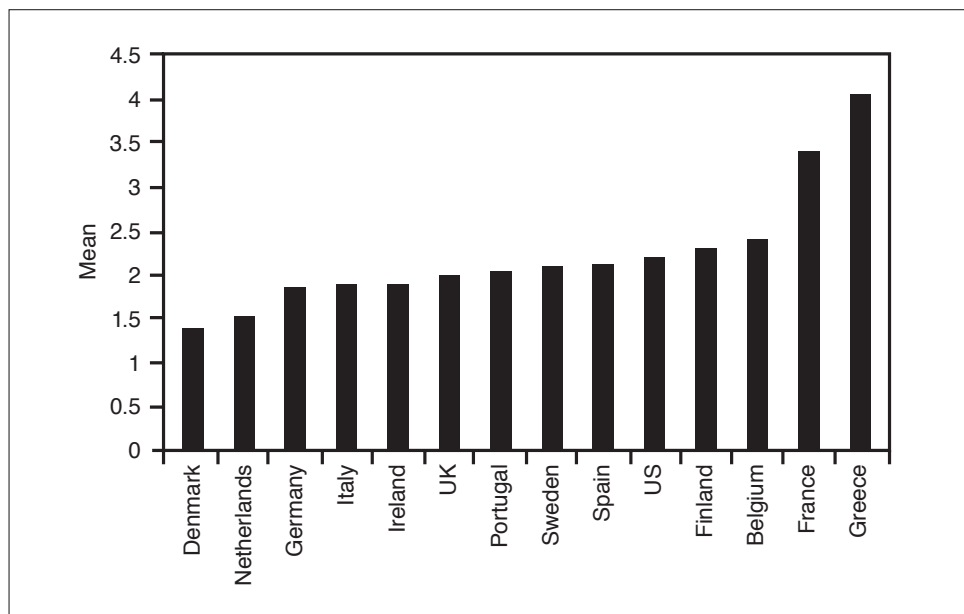
Source: World Values Survey (www.worldvaluessurvey.com)

As can be seen from this figure, Denmark shows the strongest public-spiritedness as almost all respondents reject the possibility to abuse the social security system. The Netherlands is also displaying strong civic attitudes. This indicates that the Danish model of flexicurity indeed could be suitable and thus sustainable for the Netherlands, as potential threats of moral hazard play no significant role. Implementing the model of flexicurity in for example France or Greece seems unwise, as their low public-spiritedness will make the system suffer from moral hazard issues; as a result protecting inhabitants against unemployment in those countries in a financially sustainable way seems only possible through high employment protection-not via high unemployment benefits.

2.6 Conclusion

Dutch and Danish labour market policies are not very dissimilar, nor does their labour market performance differ a lot. Both countries show that it is possible to combine relatively generous benefit levels with rather low figures for unemployment. Labour market institutions, and ALMPs in particular, seem to play an important role in this respect.

Regarding these ALMPs, the Dutch can learn something from the Danes. In the first place, spending on *temporary* employment subsidies in the *private* sector, tailored towards the long-term unemployed, should be increased. These policies show rather effective results in Denmark and various other OECD-countries as well-probably by diminishing the information problem of the employer. Moreover, spending on job counselling should also be augmented in the Netherlands to increase its intensity and thereby its effectiveness. Job search assistance should be focused more on the unemployed with a poor labour market prospective. In one aspect, the Dutch have already learnt from the Danes. The creation of direct jobs in the public sector was stopped, as the Danes did before, whilst there is ample evidence that these programmes are not effective.

With respect to the level of EPL, it can be concluded that the level of employment protection is not exceptional and the effect on the level of productivity and employment is limited. But there is an insider-outsider problem, which is connected with the low job changing of older workers. Therefore, especially the high severance payments for workers with long tenures and the procedural inconveniences are considered for reform.

All in all, there is little reason to carry out a major, Danish-style labour market reform in the Netherlands: the Dutch labour market is doing quite well currently, demonstrated by the fact that the Netherlands faces a very low unemployment rate (albeit that the Dutch participation rate lags a bit behind). However, both countries can finely tune their labour markets further by "shopping" cleverly out of the labour market design of the other.

3 Childcare policy

Scandinavian countries are characterised by the relatively cheap provision of public childcare.[25] This specific Scandinavian policy finds its climax in Sweden, where the fees charged by childcare centres per two-year old only amount to 6% of the gross earnings of an average production worker (Immervoll and Barber, 2005). As a result, no less than 65% of the Swedish children younger than 3 years old (a record in international comparisons) are registered in a purchased childcare programme, compared to only 17% in the Netherlands. Therefore, Sweden will be taken as the model-country for this characteristic of the Scandinavian model in the remainder of this paragraph.[26]

Support for childcare may be granted for several reasons. It may be given to increase female labour force participation and gender equality, to improve the financial positions of families and to promote child development.[27] In the next section, a more formal economic reasoning will be given for subsidising household activities in general, followed by evaluations of the current Swedish and Dutch childcare policies. In these paragraphs attention is paid to the causality between childcare and female labour force participation, (which is crucial to the earlier mentioned analysis), and also to part-time employment possibilities, as this is also a very important factor in explaining female participation. Paragraph 4 concludes.

3.1 The economics of house holding[28]

Over the years, private and state provision of household services and childcare in particular, has grown throughout the world. This can be explained by following Becker's (1965) classical analysis of the allocation of time: since the market value of women's time has increased (due to increased female education levels and accordingly wages and work

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25 Note that the final form of childcare, also known as pre-school education, is primarily dealt with in chapter 4.

26 The fertility rates do not make a difference while they are about the same in the Scandinavian countries and in the Netherlands (around 1.8). In Europe only Ireland has a higher fertility rate; the European-25 average is 1.5.

27 An extensive discussion of this issue would go beyond the scope of this study, but there is evidence that mother's employment, combined with good-quality childcare, contributes to child development for those over one year old (c.f. James-Burdumy, 2005; Kamerman *et al.*, 2003).

28 For a review of the mathematics behind the Rosen-model referred to in this chapter, see Rosen (1997).

opportunities), the opportunity costs of producing household activities oneself have risen. Because of the risen opportunity costs, people are less inclined to produce household activities themselves. The demand for it has therefore declined, whilst simultaneously the demand for privately or publicly provided household services has increased (Rosen, 1996).

The economic reasoning behind subsidising household services departs from the theory of the second best[29]: as female labour supply is rather elastic, the existing tax wedge initially reduces female labour supply to an inefficiently low level. Consequently, there is excessive self-production of household services (Sandmo, 1990). By subsidising market provision of household services, (which stimulates female labour supply), the government tries to solve this production distortion. These subsidies themselves must however be financed by even greater taxes on income.[30] As a result, demand for purchased inputs in household production such as childcare rises (because these are subsidised), while simultaneously the necessary tax increase to finance higher subsidies, reduces female labour supply which increases demand for household-produced goods at the expense of market goods.

There is however another effect that limits the desirable level of household subsidies: besides the existing *production distortion* regarding female labour force participation (that the subsidies try to correct), these subsidies introduce a *consumption distortion* since they reduce the implicit price of household goods provided by the market-thereby promoting excessive consumption of them.

As Rosen (1996) puts it, *cross-hauling* is the inevitable outcome: household subsidies stimulate woman to work outside the home, but to a certain extent they find employment in someone else's home-not in the material goods sector. In this manner, household services are taken out of the informal, tax sheltered sector, into the market sector where these activities generate tax revenues, necessary to finance the subsidies that induced them to find a job in the first place. In this way, cross-hauling restricts the efficient amount of household subsidies.

29   The Theory of the Second Best (of Lipsey and Lancaster) holds that when the optimum conditions are not met in an economic model, the second best option can only be reached by departing from optimum conditions.
30   Up to a certain level, household subsidies might pay for themselves as they induce in general more women to join the labour force, where they generate taxable income.

Accounting for all these effects (of production and consumption of household goods), it can be noted that the larger the optimum subsidy is, the greater the degree of substitution between own and hired labour in household production (σ_p). If it is easy to substitute, household activities can relatively easily be outsourced and women can offer themselves on the labour market. On the other hand, the smaller the optimum subsidy , the larger the degree of substitution between market and household goods in consumption (σ_c).[31]

With respect to these substitution elasticities, it should be noted that it is only justified to subsidise market provision of household services if $\sigma_p > \sigma_c$. This means that the ability to substitute own time for purchased time in household production is greater than the ability to substitute material goods for household goods in consumption, which implies that the production distortion that you solve is greater than the consumption distortion that you cause. If, on the other hand $\sigma_p < \sigma_c$ it is actually better to *tax* purchased household activities as the consumption distortion that is caused by distributing subsidies is then larger than the production distortion that is solved. When $\sigma_p = \sigma_c$ it is better to do nothing.

By applying this theory to the childcare sector, it is possible to calculate the loss of social welfare[32] associated with childcare subsidies as a fraction of total expenditures on household goods and assess the dynamics of it. The ultimate goal is to find an optimum subsidy (or tax) rate on childcare that minimizes this loss of social welfare due to an inefficient allocation of resources in interaction with the tax rate on market activities that balances the government budget. This will be done in section 3.2 for Sweden and section 3.3 for the Netherlands.

31   This is the case since the initial reduction in female labour supply through the existing tax wedge is larger if own and hired labour are more easily substituted in household production, thereby asking for a higher subsidy. A larger degree of substitution between material and household goods on the other hand promotes over consumption, thereby reducing the optimum subsidy.

32   The technical term for this loss of social welfare is deadweight loss or excess burden. The term deadweight loss can be applied to any deficiency due to an inefficient allocation of resources.

3.2 Assessment of the Swedish childcare policy

3.2.1 Efficiency analysis

Childcare in Sweden is very heavily subsidised. In 2002, only 11% of the true costs were borne by the parents involved (OECD, 2005c). Through these extensive subsidies, every Swedish taxpayer shares in the costs of raising children so that-as Lindbeck (1988) puts it-"Sweden has nationalized the family". But has this policy been successful over the past few decades?

Simply looking at figure 3.2. the answer would be "yes": the very high female labour force participation in Sweden is often attributed to its child-care policy. It is however anything but clear whether extensive childcare facilities are either the *cause* or *result* of high female labour force participation and economic growth-a question that will be returned to in section 3.2.2. For the remainder of this part it is assumed (in line with most conventional literature and the Rosen-model) that causality indeed ran from the availability of childcare facilities to higher female labour force participation.

Figure 3.2: labour force participation rate for woman aged 15 - 64 in 2005[a]
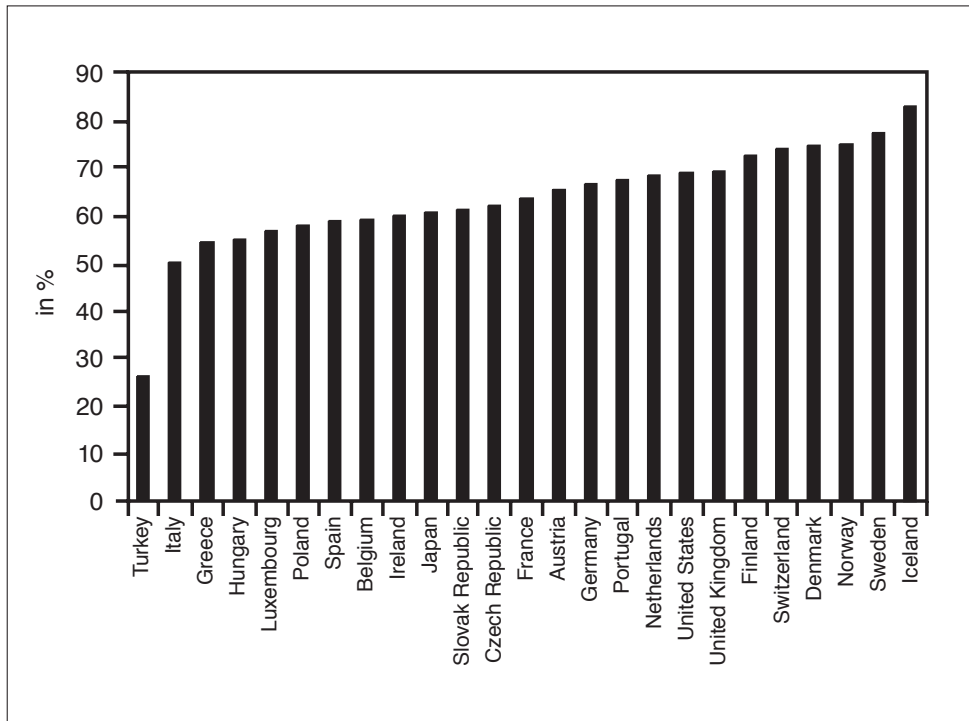
[a] This figure does not reckon with the number of hours worked, due to limited availabili-
ty of data. If we adjust female labour force participation to the number of hours worked
for women by taking the annual hours worked by females as a percentage of 2080 hours
(which represents a full year of working 40 hours a week), differences between Sweden and
the Netherlands become even larger as Dutch females work more often part-time.
According to calculations in this study based on ILO-data, the Netherlands has an effective
female labour supply of 41.6%, while Sweden has an effective female labour supply of
63.1%. See paragraph 4 for a treatise on part-time employment.

Source: OECD database on Labour Force Statistics

From an economic point of view, high female labour force participation is
important for several reasons: in the first place, it increases labour supply
and thus exercises a downward pressure on wage growth, which stimulates
employment. Secondly, high female labour force participation is also highly
desirable to keep the acquired social security systems financially sustainable
in the light of the current aging problem, as a result of which increasingly
more non-participants are resulting. This is especially true in the
Netherlands where many tax credits are dependent on the household

income (and not on the individual income), including the credits for housing and childcare. Thirdly, high female participation is also very important for the labour market to work. Scarcity of qualified personal is a real threat to the functioning of collectively financed sectors like health care and education. Last but not least, participation of women is desirable because of the economic independence of women.

The analysis above however only takes account of the reduction in the production distortion that childcare subsidies establish; as was explained in the previous section, this reduction comes at a cost as childcare subsidies also give rise to a consumption distortion, which has been ignored up until now.

The Rosen-model (see section 3.1) takes both the production and consumption distortion into account and is therefore very suitable to make a calculation of the social welfare losses concerned - the reduction in consumer and producer surplus resulting from stimulating output above its efficient level.

Performing a Rosen-analysis for Sweden, it turns out that the current level of childcare subsidies in Sweden is too high: the social welfare loss amounts to 56% of the total expenditures on household goods in Sweden.

Figure 3.3: evolution of the social welfare loss in Sweden over different values of ρ (rho[a]) under the balanced budget constraint
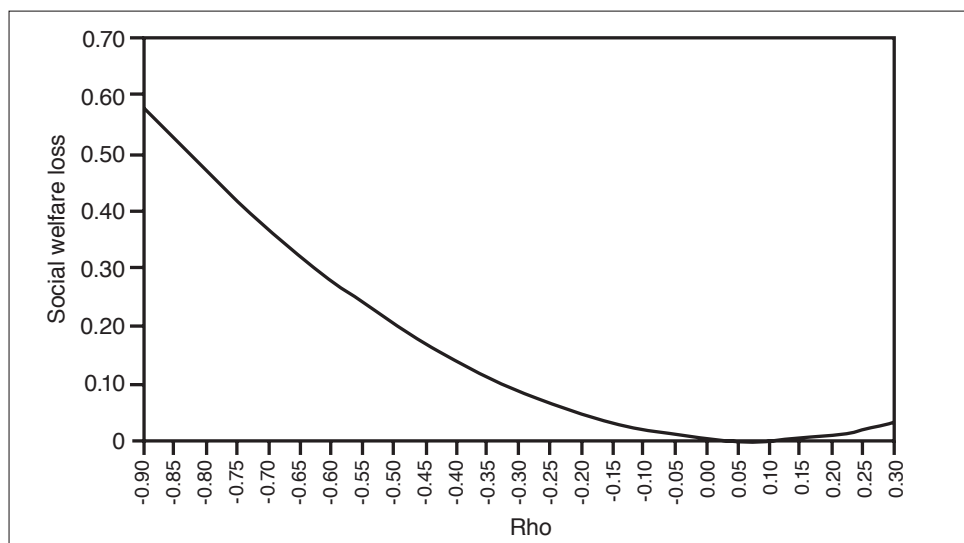
[a] Rho is the subsidy rate, which is equal to one minus the percentage parents have to pay themselves.

Source: own calculations

Several other facts also show that the childcare sector in Sweden is over sub-sidised. If we take a closer look at the nature of female employment, it appears that a very big part of all woman are employed in the local government sector, where they are involved in the education, health or childcare sectors (Rosen, 1997). The economies of scale of this policy are however limited: in the childcare sector, there are only four children per server (which is only double the average number of children per household), which implies that roughly half of the working mothers with young children are employed in the childcare sector itself. And what about the other half? They are largely employed in the elderly care sector. It is an often neglected fact that a high female labour force participation also demands an extensive formal elderly care sector, as both sons and daughters (in law) are working full-time in this case-not able to care for their parents within the family. Rosen (1997) strikingly puts it that in Sweden "women work in the public sector to take care of the children of other women who also work in the public sector to care of the parents or children of the women who are looking after their children". All this, with the well-known high Swedish tax rate (necessary to pay for all this national care) as a result, crowds out regular private employment. Lowering childcare subsidies (and relying more upon private-formal or informal-childcare initiatives to retain the current high level of female participation) shall therefore boost the creation of more productive private jobs in Sweden.

The Swedish government currently does offer women an opportunity to participate in the labour force by providing extensive care facilities, and simultaneously creates job opportunities for those women in the public sector. This is a policy that reduces official unemployment figures and increases GDP (since household services that initially took place in the informal sector are now made explicit by monetary payments), but in the end is welfare decreasing.

Summarizing, we can thus state that the current level of childcare subsidies in Sweden is too high from an efficiency point of view. From this perspective, it is even better to impose a small tax on childcare services. There are however at least four other motives-not shown by the partial and static Rosen-model-on which this extensive childcare policy can be justified.

In the first place, there is considerable evidence that formal, group-based childcare stimulates child development from the age of about two.[33] Simultaneously, this might incorporate substantial long-term positive externalities in the form of reduced crime and better health conditions when old (Wolfe and Haveman, 2002). Moreover, children in general also bring large positive externalities in the light of the current aging problem. Taking account of these positive, dynamic externalities, it is very likely that a positive subsidy on formal childcare is in fact optimum, although it will not fully justify the large difference between the actual Swedish subsidy rate and the optimum rate that follows from the (static) Rosen-model.

Secondly, childcare subsidies (if income dependent) may also exert a redistributing function to give both the rich and poor equal opportunities to combine work and care. In addition, childcare subsidies in general may also promote gender equality, which may be a goal in itself.

Thirdly, an effect of childcare subsidies is that women do not leave the labour market but stay attached. This has a positive effect on their human capital. When women leave the labour market to have children, they find it more difficult to find a job when they want to re-enter the labour market, or they get only low paid jobs. The other side of the coin of staying attached to the labour market is that it enhances the career chances of women. Talents can be better used and human capital developed.

Fourthly, childcare subsidies are also important for women to be economically independent. This elaborates on the third argument, that participating on the labour market while having children, strengthens the social economic position, especially of women. Childcare subsidies are necessary to be able to participate, certainly for single mothers with low incomes.

Finally, the extensive childcare subsidies can also be explained (but not necessarily justified) on positive grounds, related to political economy and the theory of interest groups: already working mothers (combining work and care through informal arrangements or part-time employment) may demand cheap public childcare facilities in return. The fact that politicians

33   This seems indeed to be a very important argument for extensive public childcare facilities in Sweden, as the government responsibility for childcare in Sweden has been with the Ministry of *Education* and Science since 1996. Moreover, "preschool" (as childcare is called in Sweden) also has its own curriculum as other types of education have. See also footnote 27.

give in to these demands can be explained by the fact that this enables them to win the votes of the caring minority (the working mothers), without losing the votes of the uninterested majority (all other voters, whose welfare is decreased by the provision of free childcare). This possibility will be discussed in the next section.

3.2.2 Causality between childcare facilities and female labour force participation

Until now it has been implicitly assumed that cheaper childcare facilities cause a higher female labour force participation rate by removing possible constraints in mothers' employment possibilities with respect to the care for their children.

Here, the validity of this implicit assumption is investigated by using the concept of causality as defined by Granger (1969).[34] More specifically, two hypotheses will be tested: firstly, whether higher childcare expenditures (Granger) caused female labour force participation in the case of Sweden (as is most often assumed), and secondly, whether there is a matter of 'reversed' causality, i.e. whether female labour force participation Granger-caused higher childcare expenditures in Sweden. If the latter is the case, then the Swedish childcare facilities would be more of a demand-driven phenomenon-most likely via a process of political pressures for cheaper childcare facilities exercised by the interest group of mothers who are already employed.

34   The Granger causality test, which finds its origin in Granger (1969), merely looks at which of the two variables concerned preceded the occurrence of the other. If the chicken was observed before the egg was empirically, we can infer that the chicken *Granger-caused* the egg.

The results of the Granger-test (with 5 lags) applied to Sweden for the period 1980 - 2001 are presented in table 3.2 below.

Table 3.2: Granger-causality between childcare expenditures and female labour force participation in Sweden over the period 1980-2001

Null hypothesis	
Higher childcare expenditures do not Granger-cause female labour force participation	Null hypothesis *not* rejected
Female labour force participation does not Granger-cause higher childcare expenditures	Null hypothesis rejected

Source: own calculations based on data on childcare expenditures (from the OECD database on Social Expenditures) and female labour force participation (from the OECD database on Labour Force Statistics)

These results indicate that we can conclude that there is empirical evidence at the 5% significance level[35] that the relatively high female labour force participation over the sample period has Granger-caused the relatively high childcare expenditures. On the other hand, there is insufficient evidence for Granger-causality in the other direction (i.e. from childcare expenditures to female labour force participation) that (among many others) the Rosen-model assumes.

This is a rather strong result, since we only find Granger-causality in one direction.[36] If this is true, then the efficiency losses associated with the Swedish childcare policy calculated in the previous paragraph may be even larger as the extensive subsidy to the childcare sector is then a result of a demand for cheaper childcare directed to the politicians.

Childcare facilities thus seem to have played only a minor role in establishing the high Swedish female participation rates. What can then explain the high labour market participation of Swedish women? In the first place, the

35   For the first null hypothesis the outcome is a P-value of 0.143 and a F-statistic of 2.53. For the second null hypothesis the P-value is 0.047 and the F-statistic is 4.50.
36   Similar results are reported by the OECD (2002a: 60) with respect to Denmark as they conclude that "the increase in Danish female employment rates before 1970 was established with the use of informal care arrangements, as it largely preceded the increase in formal care capacity."

explanation may very well lie in the importance the Swedes attach to paid labour, combined with their firm belief in the goodness of formal childcare for child development: Scandinavian mothers massively believe that their children should be raised in childcare, even if they themselves are not working, as this stimulates their development (Christensen, 2000). Lindbeck (1997: 1300) mentions two other important determinants of the high Swedish female participation rate. In the first place, he argues that the individualisation of the Swedish income tax system in the early 1970s has contributed to this fact as this reduced the marginal tax rates on female income.[37] Moreover, he argues that the high average tax rate in Sweden makes it very difficult for many Swedish households to finance their expenditures on one income, as a result of which the spouse's employment simply is a necessity.

Another aspect of the high participation of women is that there are generous provisions for parental leave. In the Scandinavian countries, it is normal for parents to take a long parental leave and then to return to their job fulltime. These institutions, parental leave and childcare subsidies, form an essential part of a culture in which it is common for both partners to work full-time. Conversely, the culture has influenced the institutions that make the combination of work and care possible.

It can thus be concluded that it is premature to assume that higher childcare investments will simply cause a higher female participation rate, as for example the Rosen-model does. In some cases, the emergence of childcare facilities may very well be demand driven so that there is no guarantee that raising public childcare investment to Swedish levels in any other country will be accompanied by a similar increase in female participation rate.

37   The Netherlands is also equipped with an individual tax system, though only since 2001. Yet, the tax system still contains many elements that are based on household income. It is therefore possible for the Dutch female participation rate to rise in the coming years as a result of this reform.

3.3 Assessment of the Dutch childcare policy

3.3.1 Efficiency analysis

Childcare in the Netherlands is less subsidised compared to Sweden, although the gap has been diminished substantially over the last few years. On *average* Dutch parents pay 19% of the *total costs of childcare*, 8% more than in Sweden (CPB, 2006b: 107). The percentage depends on the income earned. At a minimum income, a family pays only 4%. A family pays 67% if the income is more than € 130,000. In addition, the nature of the subsidy differs: while the Swedish policy directly subsidises childcare, thereby reducing its price, the Dutch government has subsidised childcare since 2005 through income contingent tax credits.[38] But is this Dutch situation, with lower subsidies for childcare facilities, less desirable?

Implementing the Rosen-analysis for the Netherlands indicates a social welfare loss of 50% of the total expenditures on household goods in the current Dutch situation (figure 3.4). Dutch childcare subsidies can thus currently be considered to be much too high. The nett loss of social welfare is almost as high as in Sweden (56%) although the subsidy in the Netherlands is lower. The reason is that dutch parents are less sensible for the price of childcare then swedisch parents. Recent research by the Stichting voor Economisch Onderzoek (SEO, 2007) concludes that production even would drop if childcare was provided free: the higher participation due to cheaper childcare does not offset the lower participation due to higher taxation. From this point of view there seems to be little reason to raise the current Dutch subsidy rate of childcare.[39]

This conclusion is completely consistent with other research in this field. The Dutch Social and Cultural Planning Bureau (SCP, 2006) for example has investigated the importance of formal, subsidised childcare in increasing female labour force participation. In their findings, this relationship is

38 Parents pay the full price for the childcare, but receive one third of the costs back from their employer and between two-thirds and zero of the costs from the government through a tax credit. In 2007 the (voluntary) contribution of the employer will be converted to a mandatory social premium.

39 This doesn't mean that the current tax credit cannot be improved. It would be better to base the tax credit on a normative price instead of the real price that parents pay for the childcare. Parents would then have an incentive to choose childcare with an optimum price-quality relation (benefit principle).

absent in the Netherlands: neither the supply, nor the costs of formal child-care have a significant influence on female labour force participation. Beliefs about the desirability of non-parental childcare with respect to child development, the importance attached to paid work and the availability of informal childcare (largely the proximity of grandparents or other capable relatives or acquaintances) on the other hand do have a significant effect on female labour force participation.

Figure 3.4: evolution of the social welfare loss in the Netherlands over different values of ρ (Rho[a]) under the balanced budget constraint
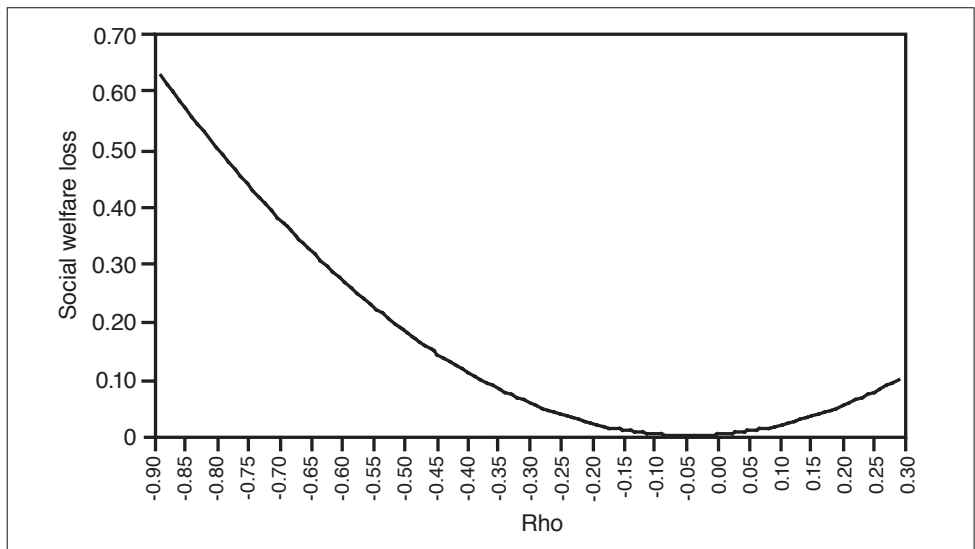
[a] Rho is the subsidy rate which is equal to one minus the percentage parents have to pay themselves.
Source: own calculations

As a result, low Dutch female labour force participation should not be explained from a lack of affordable formal childcare. It rather lies in cultural differences in work and upbringing attitudes (SCP, 2007). As table 3.2 shows, only 5% of the jobless mothers cite 'lack of affordable good childcare' as a reason for their inactiveness. This number is very low in international perspective: in 1998 over 20% of British women, aged 18-44 stated that childcare obligations restricted them from working (Family Resources Survey, 1998), while in 1992 up to 30% of mothers of pre-school age children in the US felt constraint in their employment due to childcare problems (Mason and Kuhlthau, 1992).

Table 3.2: most important reason why mothers do not work in the Netherlands in 2004

Reason for inactiveness	Percentage
It is better for the child to stay home	51
The benefits of working do not outweigh the costs of childcare	4
I would like to work, but I cannot find good quality childcare	1
The burden of combining work and care is too heavy	8
I cannot work because of my state of health	2
I do not want to work due to sickness of a relative/acquaintance	16
I am taking a course	5
I am looking for a job but cannot find one	15

Source: SCP (2006)

As can be seen from the table, over half of mothers' inactivity can be explained from the cultural belief that it is better for the child to be raised by its own mother. In Scandinavia on the other hand, mothers believe that their young children should be raised in childcare, even if they themselves are not working (Christensen, 2000).

From this point of view, there are few reasons to provide (nearly) free childcare in the current Dutch situation as this will just lead to a large substitution from informal care arrangements (currently mainly supplied by grandparents and accounting for no less than 68% of total childcare for children between 0 and 12 years old) to subsidised formal childcare. All this is without the desired increase in female labour force participation as a result. An important consequence is that valuable human capital of grandparents (which is yet increasingly becoming available due to aging) is written-off massively.

Therefore, the Netherlands should resort to other policies regarding balancing work and family life for mainly females. Reconciliation of work and family goes beyond childcare facilities, as Bovenberg (2005) argues. Increasing labour market flexibility, thereby increasing job finding opportunities and thus facilitating the transition between work and care, more activating social assistance and more opportunities for part-time employment are also key elements to promote gender equality by raising female labour force participation. The latter point will be discussed in the next section. Only if the apparent cultural aversion against non-parental childcare-and arrangements for parental leave influence that culture-diminishes, increasing direct childcare subsidies has a chance to increase female labour force participation in the Netherlands.

3.3.2 Part-time employment

Until now, the discussion of female labour force participation in Sweden and the Netherlands has been limited to childcare facilities; opportunities for part-time employment however, also constitute an important role in promoting female participation rates (although it encompasses fewer hours of work). Jaumotte (2003a) finds that the availability of part-time employment has a significant positive effect on the female participation rate. The Netherlands has been world champions in working part-time for a long time, and it is therefore no surprise that this pattern has greatly contributed to the increase in Dutch female employment since the 1970s.

The supply of part-time labour by females is partly determined by the design of the income tax system. Tax incentives to split income (and thus work hours) between first and second earners significantly influence the choice of women for inactivity or part-time employment (OECD, 1990). Table 3.3 shows tax incentives to share paid labour within the couple in 1999. A couple that chooses to split up their income will see an increase in their disposable income. It refers to the situation where one partner is entering the labour market in a part-time job, while at the same time the other partner earns less. As can be seen from the table, these tax incentives are very high in the Netherlands. Sweden on the other hand, faces lower and rapidly falling tax incentives for part-time work: whereas they still amounted up to 15% in 1981. They had dropped to 6.8% in 1999. The incentive for both partners to work is therefore high in the Netherlands. But the incentive to have a paid job could be higher if the possibility of transferring the general tax credit (about € 2000) to the partner were abolished (CPB, 2006a). The other side of the coin is that although the household income is the same, single income families have a lower disposable income than two earners.

Table 3.3: tax incentives to share market work within the couple in 1999

	Percentage increase in household disposable income when earnings are split 100/33 instead of 133/0[a]
Netherlands[b]	+10.2
Sweden	+6.8
OECD-average	+3.3

[a] 100/33 refers to a situation where the primary earner earns 100% of the average production wage (APW), while the secondary earner earns 33% of the APW; 133/0 refers to a situation in which the primary earner earns 133% of the APW, while the secondary earner has no market earnings.

[b] This number applies to the new post-2001 (individual based) tax system.

Source: Jaumotte (2003a)

The relatively favourable characteristics of the Dutch tax system regarding part-time employment seem to fit Dutch preferences very well. As table 3.4 shows, more Dutch women would like to work part-time, which indicates that stimulating part-time employment is still is potentially effective measure to increase Dutch female labour supply. Moreover, as the table shows, very few Dutch families want to change their working pattern to a situation in which both parents work full-time. The share of *involuntary* part-time workers is also very low in the Netherlands. These percentages are much higher on average in other OECD-countries and in Sweden, despite the fact that relatively many Swedish women already work full-time. This indicates-completely in line with the earlier cited study of the SCP (2006)-that most Dutch mothers (in contrast to their Swedish counterparts) simply do not want to work full-time. Promoting part-time employment is therefore a fruitful strategy to increase female labour force participation. By introducing the life course support system[40] in 2006, the Dutch government wanted to make it possible for people to spread time and money over their lifetimes. People can save money (fiscally attractive) on a saving account and use it when they temporarily want to work less because of schooling, taking care of children or parents, for a sabbatical or early retirement. The government stimulates the use of this facility by giving tax credits for special use (only for parental leave until now). The idea behind the life course support system is that labour participation measured over a lifetime will be higher, because people are financially able to work one or two days less, but stay attached to the labour market thereby maintaining their human capital.

40   The German translation for life course support system is 'Vorsorgekonto' and in Dutch it is 'levensloopregeling'.

Table 3.4: actual and preferred employment patterns (percentages) for couples with a child under six, and the share of involuntary part-time workers as percentages of total part-time employment in 1998

	Man full-time/ woman full-time	Man full-time/ woman part-time	Man full-time/ woman not employed	Rest	Share of involuntary part-time workers
Netherlands					3.1
Actual	4,8	54.8	33.7	6.7	
Preferred	5.6	69.9	10.7	13.8	
Sweden					34,6
Actual	51.1	13.3	24.9	10.7	
Preferred	66.8	22.2	6.6	4.4	
OECD-average					10.2
Actual	34.4	19.1	38.0	8.5	
Preferred	47.7	29.0	10.2	13.2	

Source: Jaumotte (2003a) and OECD database on Labour Force Statistics

The strong Dutch preference for part-time employment does however impose a restrictive upper barrier on female labour supply. To remove this constraint, a cultural shift would be necessary. Only after such a shift will increasing childcare subsidies have its desired effect. It is possible that the high costs of childcare itself are a fundamental part of that culture, and that lowering the costs would be helpful to reach a cultural change. However, it seems that this relation is especially true for parents who are users of childcare. In Sweden, political pressure by women led to higher childcare subsidies. In the Netherlands, most political parties are in favour of lowering the childcare cost partly because they want to improve the available income of working families and partly because they want more early education of children. Income policy considerations have thus played an important role in decision about the size of childcare subsidies.

3.4 Conclusion

Childcare subsidies can be justified on the basis of the theory of the second best, since high labour taxes discourage women to offer themselves on the labour market, as their labour supply is relatively elastic by the 'natural' division of home and market production within couples. Childcare subsidies may reduce this production distortion by making paid work more attractive

for females. On the other hand, childcare subsidies promote excessive consumption of the subsidised good (childcare in this case)-thereby creating a consumption distortion. In a static sense, childcare subsidies are only efficient, if the reduction in the existing production distortion is larger than the created consumption distortion. This is not the case for Sweden or the Netherlands. In both countries, the consumption distortion created is larger than the production distortion solved. The medicine is in this case worse than the malady. Moreover, if childcare subsidies create any additional jobs at all, it is mainly in the nationalised child- and elderly care sector-not in the private sector (where actual employment may even fall, due to the higher resulting tax burden). Subsequently, the massively working Swedish woman are largely employed in the care sector.

In addition, the actual efficiency losses due to the extensive Swedish childcare policy may even be larger than predicted by the Rosen-model, as in this report evidence is found that childcare subsidies did not cause the high Swedish female labour force participation rate (as Rosen implicitly assumes), but causality went the other way-via a process of political pressures exercised by Swedish mothers that were *already* working.

Therefore, there seems to be little reason to change the current Dutch childcare policy radically to Scandinavian-like policies, with almost free childcare and a strong emphasis on education, as several political parties in the Netherlands have proposed. On the contrary: further increasing childcare subsidies seems unwise in the current Dutch situation, as it will only lead to more substitution of informal for (subsidised) formal care. The current preference of mothers in the Netherlands for part-time employment is largely due to cultural reasons and not because of a lack of affordable childcare. Only if the Dutch cultural aversion to non-parental formal childcare diminishes, may an extensive childcare sector contribute to higher female participation rates. Until this cultural shift is established, there are more gains in facilitating the transition between work and care.

4 Education policy

The group of Scandinavian countries is also clearly distinctive in the education policy they pursue. The government stresses the importance of education heavily, through extensive education subsidies. As figure 4.2 shows, the Scandinavian countries heavily subsidise education as most of the education expenses are paid for by the government.[41]

Figure 4.1: public expenditures on education as a percentage of total (public and private) expenditures on education (2002)
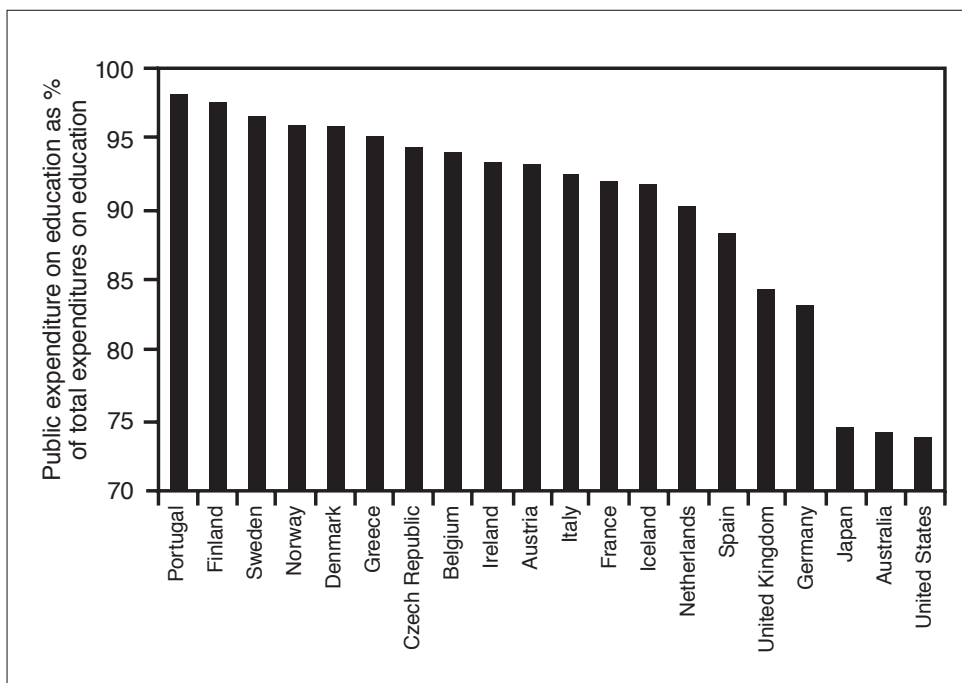
Source: OECD (2005a)

These financial efforts of the Scandinavian countries seem to have had their effect. As figure 4.2 shows, the share of the population that has attained tertiary education is relatively high in these countries.

41   Tuition fees do not even exist in Denmark and Sweden.

Figure 4.2: percentage of the population (aged 25-64) that has attained tertiary education (2003)
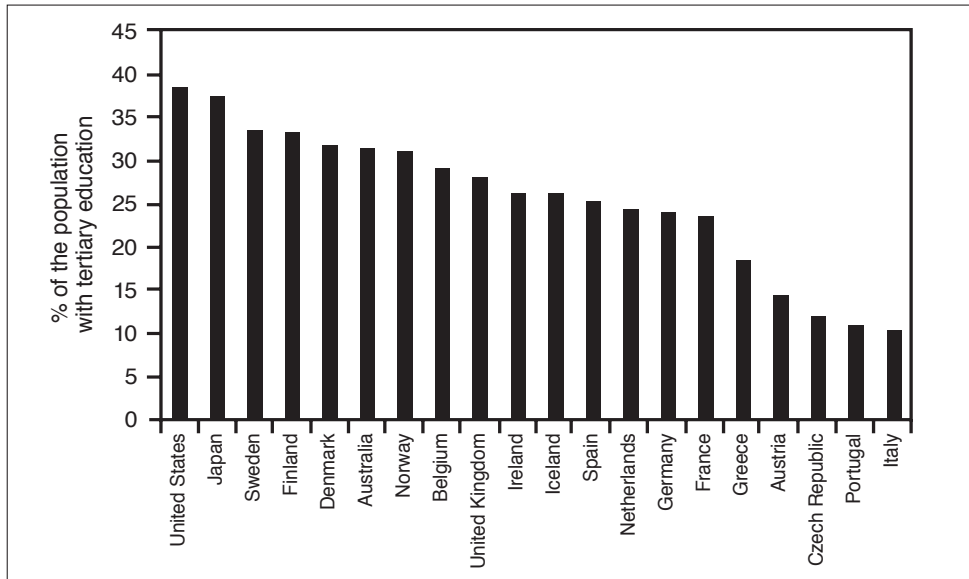
Source: OECD (2005a)

Is this heavy subsidising in the Scandinavian countries really necessary, or does it again incorporate large nett losses in social welfare? Australia, Japan and the United States are also able to attain high levels of education, but subsidise it far less. Or can education subsidies be justified on other grounds? To answer these questions and more, this chapter starts with a theoretical review of education subsidies, after which the current Scandinavian and Dutch policies will be assessed.

4.1 The economics of education subsidies

 Provision of education subsidies can be justified on merely two grounds: on cases of efficiency, and on cases of equity. In this section, economic theory is discussed regarding these two relationships.

4.1.1 Efficiency

A well-known argument for subsidising an investment in general is correcting for positive externalities. This is also the main rationale for the existing education subsidies, as it is widely believed that a better-educated labour force increases productivity (*static* externality, c.f. Lucas (1988)) and leads to faster technological change and higher economic growth in future (*dynamic*

externality, c.f. Nelson and Phelps (1966) and Romer (1990)). However, these social returns do not fully accrue to the investors as a result of which under-investment (relative to the social optimum) arises, which has to be corrected for by education subsidies.

How much is the optimum subsidy level from this point of view? To answer this question, it is necessary to compare the private and social returns on schooling. Krueger and Lindahl (2001) and Acemoglu and Angrist (1999) have-among many others[42]-compared private and social returns on school-ing and found no significant difference between them: both private and social returns lie between 5 and 15%. This finding suggests that the current subsidy-levels are nearly optimum (both static and dynamic externalities are internalized, as a result of which enough financial incentives are provided to undertake education) and that there are no reasons for rigorous subsidy-increases from this point of view, as these would only constitute large social welfare losses.

However, this analysis neglects the observation that increases in knowledge and skills through education also have important indirect effects on social behaviour. These *non-pecuniary* externalities may consist of increases in health, public and political participation, and child quality and a reduction in crime (Wolfe and Haveman, 2002). Evidence for the existence of positive non-pecuniary externalities seems most conclusive in the domain of crime reduction among low-income groups and improvements in health (Van der Steeg, 2005). Lochner and Moretti (2004) estimate that the social savings from crime reduction through increased schooling amount to about 20% of the private return. These non-pecuniary externalities-not included in most estimates of the social returns on education-provide a rationale for increas-ing education subsidies for especially the less-talented and younger students participating in pre-school and lower secondary education (c.f. Carneiro and Heckman, 2003). Moreover, the quality of early forms of education also greatly determine students' capacities to attend to higher education.[43]

Education subsidies can however also be justified from an efficiency point of view starting from the theory of the second best. Van Ewijk and Tang (2000) and Bovenberg and Jacobs (2001) show that subsidies for mainly high-er education are a powerful instrument to eliminate distortions in the accu-

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42 See Venniker (2000) for a literature survey.

43 This may explain a substantial part of the variation in educational attainments between countries, displayed in figure 4.2.

mulation of human capital that originate from the distorting progressive taxation, that favour the unskilled.[44] They show that redistribution and education subsidies are in fact Siamese twins: the more redistribution, the larger the tax distortions and the larger the optimum compensating education subsidy needs to be. In their view, a large part of the existing education subsidies can be justified on these grounds.

Finally, note that education subsidies may also be self-destructive if the level of educational investment is endogenous: as subsidising (higher) education is expected to lead to more high-skilled workers, which will cause wages of high skilled workers to decrease, and the expected return on schooling will fall. As a result of this, educational investments of rational individuals in fact decrease! As the return on investments in education will be lower, Heckman *et al.* (1998) show that this effect may be so strong that the positive incentives initially generated by education subsidies evaporate almost completely. Scarcity of highly skilled workers will mitigate this effect, as long as the scarcity still exists. Moreover, as Jacobs and Van der Ploeg (2005) argue, larger education subsidies also reduce educational effort (moral hazard), which is reflected in lower tertiary enrolment rates, more dropouts and a longer duration of enrolment. Confronting students with a larger part of the real costs of education on the other hand significantly increases their efforts.

Summarising, it can thus be concluded that from an efficiency point of view, more subsidies should flow towards lower (*i.e.* earlier and less advanced) forms of education. To increase student efforts and to reduce social welfare losses, higher private investments in higher education could be asked.

4.1.2 Equity

Education subsidies are however not only given for efficiency reasons; equity considerations may also play an important role, as an increase in the education level may lead to more income equality. Investments in education will raise someone's productivity, and therefore the income. Supply and demand on the labour market will also be influenced. As for example Tinbergen

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44   Lindbeck (1997) mentions falling after-tax returns on human capital in Sweden in the 1980s, followed by falling tertiary enrolment rates. Subsequently, when the after tax returns to human capital rose again in the early 90s, tertiary enrolment rates also increased.

(1975) argues, educational policies might lead to relatively more high-skilled workers as a result of which their wages will go down; low-skilled workers, on the other hand, have become scarcer and will face a wage increase, as a result of which income equality will rise. Moreover, education subsidies are also thought to be necessary to ensure accessibility to all types of education-independent of parents' wealth, though most of all education helps people to develop their talents and to unfold themselves.

When we look at the empirics, wage inequality has in fact risen for many industrialized countries, whilst they have become better educated (Davis, 1992). This is not only because technology has won the race over schooling. There are also some additional forces working in the other direction when it comes to education subsidies: they do not only lead to more income equality. Based on Jacobs (2004), three of those factors will be discussed.

The most important explanation for the increasing wage inequality is the *skill-based technological change* (see Katz and Murphy, 1992). If education subsidies stimulate the discovery of more advanced, labour-saving technologies, which are more complementary to skilled-workers, these subsidies not only increase relative supply, but relative demand for skilled workers as well. On balance, wage inequality may thus in fact decrease or rise, depending on the size of the elasticities. In this respect, Tinbergen (1975) referred to these counteracting forces as "the race between schooling and technology".

Secondly, subsidies for mainly higher education are very unequally distributed, as they are regressive. As the SCP (2003) notes, the 60% richest households receive about 86% of education subsidies, as children of wealthier families are more often highly talented and consequently will learn most. Moreover, education subsidies are also regressive from a life-cycle point of view, as those who receive education subsidies will generate higher lifetime incomes than the average taxpayer (Card, 1999).

Finally, it is likely that the intellectual potential of a population is rather exogenous and limited. Not everyone is suitable to attain a higher degree. This might play a very large role as Jacbos (2004) shows. The price elasticity of enrolment is rather low: lower or higher tuition fees will not lead to more or less students in higher education.
This indicates that those who are suitable for higher education are already participating in it-not hampered by any financial barriers as a result of capital market imperfections (see *e.g.* Shea (2000) and Cameron and Taber (2000) for empirical evidence).[45] Higher education subsidies-which lower

the own paying of students-would therefore incorporate large social welfare losses. Moreover, it is very costly and evidently inefficient to try "to train a moron to become an engineer" (Stiglitz, 1975: 288).

There are however many advocates of means-tested education subsidies, as they argue that especially the poor suffer from credit market imperfections. Means-testing these subsidies, however, has the significant disadvantage that they discourage parental savings (Feldstein, 1995). Poor students who are able to enjoy income-contingent loans[46] do not need to rely on their parents, nor need to be afraid that they will suffer huge repayment burdens. Moreover, earnings-prospects for graduates from poor backgrounds are equally high.

The overall conclusion is that education subsidies are rather unsuitable to decrease wage inequality, as there are many counteracting forces with none of them dominating the others. Income-contingent student loans should be used to ensure accessibility of the education system.

4.1.3 Policy recommendations

From this theoretical review, it is possible to stylize three important policy advises for an effective education policy:
1. Focus at subsidising lower and earlier education as positive externalities seem to be absent for higher education, while they are found for lower and early types of education in the form of less crime and better health conditions. Moreover, high-quality early education also lays a solid basis for any further schooling. By compensation, more private funds should flow towards higher education.
2. Do not use education subsidies for equity-considerations.

45   Moreover, Jacobs and Van Wijnbergen (2002) have shown that in case of credit constraints, education loans rather than subsidies are more effective instruments to solve this problem. To prevent elitism at universities repayment of these loans should be made income-contingent, which means that students only have to pay back their loans if their post-graduate incomes are high enough to enable this. As private banks and insurers are unable to write contracts based on future incomes, the government should supply these loans as it is able to enforce these contracts, in order to guarantee accessibility of higher education.
46   See preceding footnote.

3. Make use of income-contingent student loans to ensure accessibility of higher education for potent students of all socio-economic backgrounds.

In the next two paragraphs, both Scandinavian and Dutch education policy will be evaluated on their effectiveness and efficiency.

4.2 Education policy in Scandinavia

As stated above, the group of Scandinavian countries can be characterised by making very large public investments in education (c.f. figure 4.1). But to which types of education are these funds allocated? Figure 4.3 shows the distribution of public funds over different education levels[47] in Scandinavia in 2002, while figure 4.4 shows the mean distribution over all OECD-countries in that year.[48]

Figure 4.4: distribution of public funds over different education levels in Scandinavia (2002)
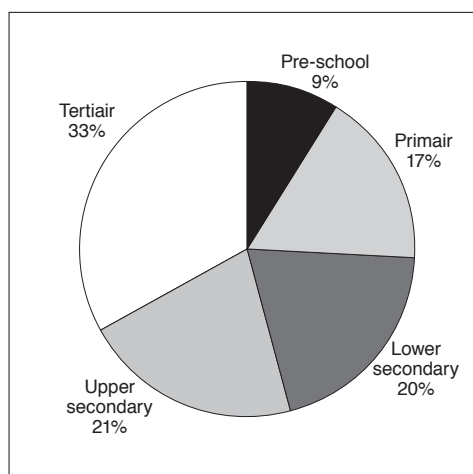
Figure 4.4: distribution of public funds over different education levels, OECD mean (2002)
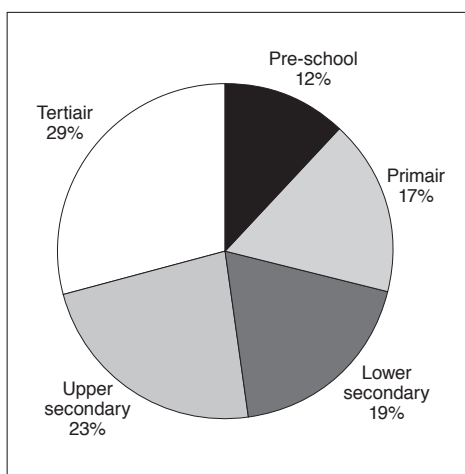
Source: own calculations based upon OECD (2005a)

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47 See appendix A for a detailed description of these different education levels.
48 Since there are only minor differences in the allocation of public education investments among the Scandinavian countries themselves, only the aggregate numbers are shown for the sake of simplicity.

If we compare these figures, we can infer that Scandinavian governments spend a little less on pre-school education relative to the OECD-mean[49], while they spend significantly more on tertiary education.

According to the policy recommendations in section 4.1.3, this policy thus leaves room for improvement: the Scandinavian countries could do better if they should re-allocate the *relative* distribution of funds more towards pre-school and lower secondary education, as these investments incorporate positive externalities such as reduced crime and better health. This relative increase could be established by diminishing public financial support for tertiary education as this type of education mainly yields private returns only and subsidies for it act regressive (especially over the life cycle) and reduce the educational efforts of students.

As argued in section 4.1.1. subsidies for higher education can also be justified by referring to the favouring of the unskilled by progressive tax systems (c.f. Bovenberg and Jacobs, 2001). Table 4.1 shows that-acknowledging with this the correcting effect of education subsidies-education subsidies are still far too high in Finland and Sweden, while they can be justified on these grounds in Denmark.[50]

Table 4.1: actual and optimum education subsidies as percentage of forgone earnings

	Actual subsidy	Lower bound optimum	Upper bound optimum
Denmark	25	25	32
Finland	37	10	16
Sweden	75	7	24

Source: Bovenberg and Jacobs (2001

49 This observation seems to be at odds with the information presented in chapter 3 (where it was argued that Scandinavian countries invest much in childcare facilities, which is partly included in the pre-school education category), but it should be kept in mind here that the *size* of the pie in panel a is about 30% larger than that displayed in panel b as the Scandinavian countries invest more in *all* types of education. In absolute numbers, these countries thus also spend much on childcare/pre-school education −which actually is in line with the recommendations.

50 Unfortunately, figures for Norway are unavailable.

The conclusion is therefore that education subsidies in Finland and Sweden for especially higher tertiary education are too high. They do not correct market failures, nor do they generate more equality. In addition, they bring large social welfare losses as countries with considerably lower public investments in education are able to reach equally high tertiary enrolment rates (see for example the U.S. and Japan in figures 4.1 and 4.2). The Scandinavian countries would be better off if they allocated more funds from tertiary education, to pre-school and lower secondary education, thereby internalizing the existing positive external effects.

It should be added here that the Scandinavian countries also spend considerable amounts on lifelong learning, which is often claimed to have contributed to a more dynamic and flexible economy in which people who become unemployed (as a result of Schumpeter's process of creative destruction for example) become re-employed more quickly (often in another sector) by means of retraining (c.f. Ericson, 2005).

4.3 Education policy in the Netherlands

Education in the Netherlands is just a little less subsidised than it is in the Scandinavian countries: here, 90% of the educational investments are covered by the government, compared to about 96% in the Scandinavian countries. Moreover, the allocation of funds over different types of education also differs slightly (see figure 4.5): relatively, the Dutch government spends much more on pre-school education, while they spend a little less on tertiary education, which is in line with the policy recommendations derived above. Moreover, the Netherlands is currently also equipped with income-contingent loans as discussed in the first paragraph-thereby guaranteeing access to higher education for students of all socio-economic backgrounds. The share of public education expenditures invested in tertiary education is however still above the OECD mean, so the Dutch could still improve their policy by shifting away from the Scandinavian countries, more towards countries like the U.S. where only 24% of the public education budget is spent on tertiary education.

Figure 4.5: distribution of public funds over different education levels in the Netherlands (2002)[51]
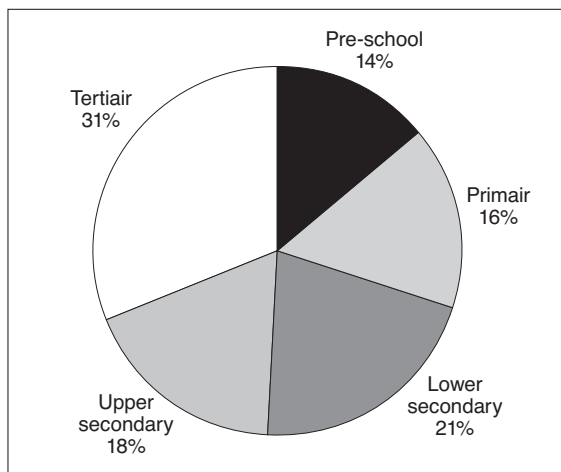
Source: own calculations based upon OECD (2005a)

More criticism is given to the level of education expenses in the Netherlands: the U.S. (+55%), Denmark (+28%) and Sweden (+18%) all spend considerably more on education relative to the number of students. Although the Netherlands has increased its spending on education in recent years and currently spend $ 7,241 in PPPs annually on educational institutions per student, it finds itself just at the OECD average-too little as critics argue for a rich and ambitious country like the Netherlands.
If we focus however on the (far more important) *output* of Dutch education policy rather than the input, a different picture emerges: a study by Antenbrink *et al.* (2005) shows that Dutch labour productivity per hour worked is still very high according to international standards, while Dutch students perform well in international capability tests (see table 4.2).
A more plausible conclusion is therefore that the Dutch education system is simply highly efficient.

51   In the Netherlands the first two groups of the elementary school (lit. "basic school") are counted as pre-school and not as primary education.

Table 4.2: labour productivity and student capabilities

Country	BBP per hour worked in 2004 (NL = 100)	Average test score[a]
Denmark	92.4	506
Finland	89.7	547
Netherlands	100	538
Sweden	86.3	526
United States	97.6	501

[a] This average test score is a composite measure containing scores on mathematic, reading and literacy skills for the period 1995-2003.

Source: Antenbrink *et al.* (2005)

In spite of this efficiency, there is room from improvement. A severe problem in the Netherlands is however formed by the high dropout rates among young people aged 17 to 18, in mainly (lower) secondary education: in the Netherlands, only 57% of the 18-year olds undergo secondary education, compared to 88% in Scandinavia (see figure 4.6). This large difference is however partially compensated by a relatively high tertiary enrolment rate, but is nevertheless worrying as these early dropouts bring large social problems to society, especially as a large part of these dropouts consists of immigrants. According to the Dutch statistics bureau 'CBS', non-westerm students accounted in 2004 for about 75% of the premature outflow in secondary education. A problem that can and should be tackled by investing larger amounts of public funds in lower secondary education, as the Scandinavian countries already do.

Figure 4.6: net enrolment rates in secondary education by age in Scandinavia and the Netherlands in 2003[a]
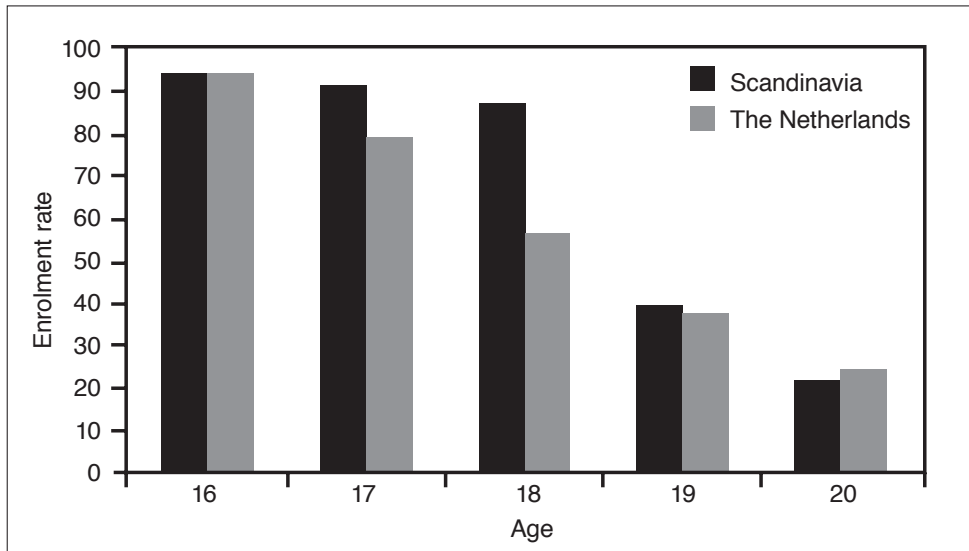
a The large drop in the secondary enrolment rate in Scandinavia at age 19, can be explained by the fact that lower secondary education is completed at age 18.
Source: OECD (2005a)

Room for improvement also exists in secondary education. According to the Bovenberg-Jacobs model, the current level of subsidies for higher education in the Netherlands is even a bit too high: Bovenberg and Jacobs (2001) report that the actual subsidy level amounts to 40% of forgone earnings, while the optimum according to this model lies somewhere in the 27~35% range. Raising the level of funding in secondary education is however desirable because it can improve the quality of higher education. Here two birds can be killed with one stone if the private part of the funding is raised: higher tuition fees will also benefit the quality of education and stimulate the motivation and educational efforts of students, because they are financially more involved in the funding of their own schooling.

A third improvement in the public funding of education in the Netherlands is possible in the light of life long learning. Learning never ends in a globalising and aging society. Life-long learning is therefore an essential part of a strategy aimed at a vital and qualified work force. Governments can stimulate schooling during the working life by granting learning rights to their citizens. This are vouchers that can be spent at accredited institutions. Very important is that these learning rights can be saved for a later moment, if they are not used. This stimulates an efficient use of the vouchers, and gives

an incentive to workers to invest in schooling. The government can also fiscally facilitate learning accounts, on which employers and employees can save money for all forms of schooling. The introduction of a lifetime support system by 2006 in the Netherlands is a first step towards a more flexible way of dealing with different situations in different phases in the lifetime. Supported by a saving account people can save money - fiscally supported - for periods of leave in order to take care of children, parents or other relatives, or for periods of schooling or even for part-time retirement. The funding of this so-called 'levensloopregeling' or life course support system (Cuyvers, Klink en Van Asselt, 2002) is private (by employees and possibly employers), but fiscally supported by the government. The arrangement has had a good start, but should be developed further in the coming years.

4.4 Conclusion

There is little reason to increase public educational investments in the Netherlands to Scandinavian levels, neither from an efficiency nor from an equity point of view. It is rather a change in the composition of public investments that is needed: more public funds should flow towards earlier and lower levels of education as these forms of education do encompass substantial positive externalities. Currently, lower secondary education in particular seems to malfunction in the Netherlands as this type of education is characterised by high dropout rates, particularly among non-western students. In this respect, we can learn from the Scandinavians, as they invest much public funds (in absolute figures) in lower forms of education.

Extra investments in higher education should not be financed by extra government subsidies, but by private investments, as these forms of education mainly generate private returns and subsidies for higher education act regressively and create a moral hazard problem. To prevent academic elitism and to facilitate private educational investments, the Netherlands should preserve the existing income-contingent loans that enable potent students from all socio-economic backgrounds to attend higher education.

Moreover, the Netherlands could also increase its spending on lifelong learning as this seems to have contributed to more dynamic and flexible economies in Scandinavia. In a dutch context this can be done through the introduction of learning rights which can be saved for later if not used, schooling accounts (possibly within sector funds). Both can be supported by the life course support system (dutch: 'levensloopregeling').

5 Empirical analyses of the performance of the Scandinavian model

In the previous chapters, a theoretical evaluation was given of the effectiveness of three typical 'Scandinavian' policies (a distinct labour market combined with a heavy reliance on public childcare and education).[52] This chapter will start with a formal empirical, economic analysis of these policies, followed by a treatise on the effectiveness of ALMP in the different countries. Thereafter, the influence of several other factors-ignored until now-will be discussed, which may also explain the apparent success of the Scandinavian economies. It will end with a conclusion.

5.1 Regression analyses

The preceding chapters all assumed that the discussed policy instruments all contribute in some way to the level of unemployment, GDP per capita and equality. This paragraph will empirically investigate this claim. To do so, a database of 16 OECD countries[53] is constructed for the period 1995 up to 2004. This contains data on ALMP (from the OECD Employment Outlook (2000. 2004, 2005)), educational attainment (from Eurostat, measured as the percentage of the labour force that has completed upper secondary education or higher), the Gini coefficient[54] (from Eurostat and the U.S. Census Bureau), the level of EPL (from the OECD database on Labour Force Statistics), the gross replacement rate (from the OECD database on Social and Welfare Statistics), the standardised unemployment rate (from the OECD Economic Outlook, 2006) and real GDP per capita (from the OECD database on National Accounts).

52   Some policies included in this chapter, are more 'Scandinavian' than others, especially with respect to the labour market: in chapter 2. Denmark with its low level of EPL is highlighted, whereas the other Scandinavian labour markets are characterised by relatively high levels of EPL (see figure 2.5). Despite the fact that the level of EPL is not a common characteristic of all Scandinavian countries, the level of EPL is included in my regression, as it is currently a point of discussion in the Netherlands.

53   The database contains data on Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the UK and the US.

54   The Gini co-efficient (which has a value between 0 and 100 here) is a concept for inequality introduced by the Italian statistician Corrado Gini (1921), and is defined as the ratio between the Lorenz curve and the uniform distribution, to the complete area under the uniform distribution. A higher Gini c-oefficient therefore indicates more inequality.

With respect to the regression, several things must be noted.

1. Note that there might be a problem with endogeneity of the ALMP-variable. As the measure used here, expresses the ALMP-expenditures as a fraction of *GDP* normalised on current unemployment, this variable might be endogenous as one of the latter variables is precisely the dependent variable we wish to explain. Own calculations show that endogeneity plays only a minor role (if any) and the results derived below with respect to ALMP-expenditures are thus robust.

2. Note that in the first regression both the level of EPL and the square of this level are recorded in the regression. This parabolic relationship was already suggested in chapter 2 and fits the data remarkably well (see below).

3. The measure used here for the gross replacement rate is constructed by the OECD and takes both the level and the duration of the benefit into account.

4. A measure for childcare is not included in the regressions, as it is highly unsure whether extensive childcare facilities are the cause or the result of high female labour force participation and thereby economic growth (see chapter 3). Moreover, large public investments in childcare facilities also increase GDP through a direct accounting-technical channel, without actually increasing welfare: as childcare is taken out of the family-sphere and is being paid for, part of the production 'hidden' in families is made visible in GDP without any extra economic activities have taken place.

5. It should be noted that the Gini coefficient can also be explained by the ALMP investments and the level of EPL (see table 5.3). This introduces the risk of multicolinearity in the first two regressions as those contain the Gini coefficient as explanatory variable and the ALMP investments and the level of EPL. Own calculations shows that multicolinearity is of minor concern in this case, so that we can ignore this potential problem henceforth.

6. Note that all of the underlying regressions use three, four or five-year averages both to reduce auto-correlation (as in this study panel data are used to correct for country-specific institutional factors) and to cancel cyclical fluctuations.

This results of the regression are presented in table 5.1. Looking at column 1, it appears that the model seems to capture reality quite well: almost 70% of the total variation can be explained by this model.

Table 5.1: the effect of different policy measures on real GDP per capita for 16 OECD countries

	Dependent variable: ln real GDP per capita	
Variable	(1)	(2)
ALMP/unemployed	0	0
Educational attainment	+	+
Gini coefficient	+	+
EPL	0	+
EPL squared	–	–
Gross replacement rate	0	
Explained variation	**66.7%**	**67.5%**

Notes: estimates are by OLS using two time periods (1995-1999, and 2000-2004). A '+' ('-') denotes a significantly positive (negative) relationship between the variable concerned and the dependent variable. A '0' indicates that no significant relationship is present. If a cell is blank, this means that the particular variable is excluded from the analysis in that specification.

If we look at the individual coefficients, it appears that both the ALMP-measures and the gross replacement rate have no *significant* influence on GDP per capita. Moreover, the first order term concerning EPL is also not significant, while the second order term is. This can possibly be explained by multicolinearity as efforts on ALMP are positively correlated with the replacement rate (the correlation coefficient equals 0.682 and is significant at the 1% level; see also figure 2.3). If therefore the latter are excluded from the analysis (column 2), the problems are largely solved: the first order term of the level of EPL now becomes significant. However, ALMP efforts still have no significant influence on GDP per capita, which might indicate that ALMP efforts in general are cost-neutral.

Since both the first and second order term are significant in the reduced model, the level of EPL also seems to influence GDP per capita. It does so in a parabolic way, as predicted by Belot, Boone and Van Ours (2004)(see also chapter 2): as the second order term is negative, the parabola is concave, indicating that GDP per capita is maximised for average levels of EPL-where the trade-off between flexibility and firm-specific investments seems to be optimally balanced. Balancing the interests of workers (security) and employers (flexibility) is economically wise.

Moreover, we can infer from the table that more inequality (a higher Gini coefficient), in our sample of 16 developed OECD-countries, generally leads to a higher GDP per capita-probably due to stronger economic incentives. In more comprehensive studies that also include developing countries, this relationship is however a bit more complicated as these countries are precisely characterised by very high Gini coefficients, often as a result of corruption (c.f. Barro, 1999).

Finally, there is a strong and highly significant relationship between the level of GDP per capita and educational attainments, as expected since the returns to education are very high-both on the micro- and macro-level.[55] It is in this case not evident if the causality runs from education to growth or vice versa, as education can be seen as a normal good and its demand thus rises with income; or as Harbison and Myers (1965: xi) have put it, "education is both the seed and the flower of economic development". For this reason, Mankiw (1997) describes the presumed exogeneity of (e.g.) human capital accumulation as "the weak link" in the empirical growth literature. In any event, it is not clear to what extent investing in education stimulates economic growth. In particular, post-initial schooling can enhance economic flexibility as it makes changes in the sector structure of the economy easier. Post-initial schooling can also be a complement of EPL, whereas it increases employability. Life-long learning therefore seems relevant.

The latter endogeneity-problem can be overcome by recording the natural logarithm of the unemployment rate as a dependent variable in the regression, as a lower level of unemployment probably does not influence educational efforts directly in the way a higher GDP per capita does. The results of this regression are given in table 5.2.[56]

From this table, we can infer that the model is also very suitable to explain unemployment as the adjusted R^2 lies around 60%.

Looking at table 5.2. one immediately notices the insignificance of the coefficient accompanying the gross replacement rate, (which in this case is a

55   Again, this is no reason for extensive education subsidies as the gains from higher education levels fully accrue to the investing students themselves; there are no positive external effects on economic growth (see chapter 4).
56   Note that the natural logarithm of the unemployment rate is estimated instead of the unemployment rate itself. This follows from the fact that many studies on wage determination find that the use of the logarithm of the unemployment rate is superior to simply the use of the unemployment rate (c.f. Blanchflower and Oswald, 1994).

combined measure of the benefit level and maximum duration). This is in line with other empirical studies: Nickell (1997), for example concludes that "generous levels of unemployment benefit (…) do not appear to have serious implications for average levels of unemployment (…) as long as they are accompanied by pressure on the unemployed to take jobs." This pressure can be exercised by limiting benefit durations and executing ALMP.

Table 5.2: the effect of different policy measures on unemployment for 16 OECD countries

	Dependent variable: ln of the standardized unemployment rate	
Variable	(1)	(2)
ALMP/unemployed	–	–
Educational attainment	–	–
Gini coefficient	–	–
EPL	0	0
Gross replacement rate	0	
Explained variation	**56.9%**	**58.0%**

Notes: estimates are by OLS using three time periods (1995-1997, 1998-2000 and 2001-2004). A '+' ('-') denotes a significantly positive (negative) relationship between the variable concerned and the dependent variable. A '0' indicates that no significant relationship is present. If a cell is blank, this means that the particular variable is excluded from the analysis in that specification.

The latter do have a highly significant reducing effect on the unemployment rate in both specifications of the model. Moreover, unemployment is reduced further by a higher Gini coefficient, while the level of EPL has no significant influence on the unemployment rate (in line with findings of most other empirical studies (c.f. for example Nickel, 1997).

A similar regression can be performed to explain a measure for equality in an economy, in this case the Gini coefficient. In table 5.3. the Gini coefficient is regressed on the ALMP-rank, educational attainment, the level of EPL and its square, and the gross replacement rate.

In the first specification of the model (the complete model), only the coefficients accompanying the level of EPL and its square are significant. As the second order term is positive, the parabola is convex indicating that only extreme levels of EPL decrease inequality. Interestingly, the level of educational attainment has no significant influence on the Gini coefficient, indi-

cating that (on average) "the race between schooling and technology" Tinbergen (1975) described is a thrilling one, with currently no competitor in the lead. In any further regressions explaining the degree of inequality, this variable is therefore excluded.

Table 5.3: the effect of different policy measures on the Gini coefficient for 16 OECD countries

	Dependent variable: Gini coefficient		
Variable	(1)	(2)	(3)
AALMP/unemployed	0	–	
Educational attainment	0		
EPL	–	–	
EPL squared	+	+	
Gross replacement rate	0		–
Explained variation	78.7%	79.0%	26.5%

Notes: estimates are by OLS using two time periods (1995-1999 and 2000-2004). A '+' ('-') denotes a significantly positive (negative) relationship between the variable concerned and the dependent variable. A '0' indicates that no significant relationship is present. If a cell is blank, this means that the particular variable is excluded from the analysis in that specification.

The remarkable fact that the gross replacement rate has no significant impact on the Gini coefficient in the complete model may be explained by multicollinearity: a higher gross replacement rate is often accompanied by more stringent ALMPs and a lower level of EPL (De Mooij, 2006: 111). If these variables therefore are alternately excluded, a different picture emerges. In column 2 of table 5.3, the gross replacement rate is dropped from the regression. As a result, ALMP-efforts now also appear to have a highly significant reducing effect on inequality. In this way, the results suggest that ALMPs are able to overcome the trade-off between equity and efficiency, as it also reduces unemployment-a finding in line with research done by De Groot, Nahuis and Tang (2004). There is a free lunch after all![57]

57   Please note that this result does not imply direct cost effectiveness. Reducing unemployment is an important goal of socio-economic policy as it includes positive externalities on a countries' inhabitants well-being.

Column 3 shows the results of a regression that explains the Gini coefficient from the gross replacement rate solely and shows a significant reducing effect of a higher replacement rate on inequality, as expected.

Summarising, it can be concluded that, in line with the theoretical predictions in this study, the typical elements of the Scandinavian welfare states have different and sometimes counteracting effects on a countries' economy and thus differ in their import-desirability. A relatively equal income distribution, as the Scandinavian countries currently have, hampers economic development but may be a political goal in itself. Large public 'Scandinavian' investments in education on the other hand, cannot be justified on the grounds of efficiency or equity. A high gross replacement rate need not to be a problem for economic efficiency if a country is equipped with the right institutional setting; moreover it significantly reduces inequality. Regarding the level of EPL, extremely low (Denmark) or high (Sweden) levels cannot be justified on grounds of efficiency, while they are seemingly able to reduce inequality. ALMPs on the other hand deserve considerable attention, as they are able to increase both equity and efficiency.

5.2 What other factors might explain the success of Scandinavian countries?

As the preceding analysis has shown, not all of the 'Scandinavian' policies have been successful in stimulating employment and economic growth. Especially the extensive public investments in childcare facilities and the large education subsidies and some forms of ALMPs seem to incorporate large social welfare losses. Yet, the Scandinavian economies have performed relatively well in the past three decades (see tables 1.1 and 1.2). This suggests that several other factors, not included in the analysis so far, also explain part of the apparent economic success in these countries. These factors are to be discussed below.

In the first place, it should be noted that all the Scandinavian countries pursue a (probably unintentional) sort of window dressing in their economic figures. They take productive activities out of the unpaid, informal family sector and make them visible in GDP by subsidising payments for these activities[58] as they heavily subsidise the 'outsourcing' of household activities (childcare in particular). Moreover, there is evidence that these forms of

58   It is estimated that even in modern developed economies, household production probably accounts for more than half the total economic production (Quah, 1993; Thomas, 1992). 'Monetarising' household activities thus has great potential to window-dress a country's GDP; unfortunately welfare is not directly influenced.

public employment in the care sector encompass much hidden unemployment (Rosen, 1996).

There are also several country-specific factors that have contributed to economic growth in the Scandinavian countries. One very important factor in explaining both the very high economic growth rates and the very high level of GDP per capita in Norway is its oil stock. Various authors argue that the discovery of offshore North Sea oil in 1969 has boosted Norwegian economic growth (see, e.g. Roed Larsen, 2006). Simultaneously, so far, the Norwegian government has seemingly been able to avoid the development of a *Dutch disease* in Norway[59] by strong fiscal discipline, investing abroad and by a highly centralized wage formation system that limits wage increases-thereby slowing down domestic demand (Roed Larsen, 2006).

To a lesser extend, the same holds true for Denmark and the Netherlands, as they both possess considerable amounts of North Sea oil and gas fields. However, regarding Denmark, there is more. As described in chapter 2, the Danes were able to bring down their unemployment level dramatically in the 1990s, without a significant rise in inflation. Although Danish ALMPs have played an important role here (as is argued above in chapter 2), the fixed exchange rate regime with other EMS-countries also greatly contributed to this job miracle. This regime controlled Danish inflation in two ways. In the first place, with a fixed exchange rate, the national inflation rate follows global inflation rates more closely, as a result of which internal country-specific policies lose their impact on domestic inflation. Secondly, fixed exchange rates also exert a disciplining effect on wage demands, as the exchange rate mechanism is no longer able to correct for high domestic wages (and thus price) level increases by depreciation. Labour unions clearly reckoned with this fact in Denmark as a result of which wages were moderated to prevent a drop in exports.

Finland and Sweden also occupy a special position. These economies experienced an intense boom in the period 1986 - 1989, followed by a sudden and severe bust in the period 1990 - 1993 from which these countries labour markets have not yet recovered (see the development of unemployment in figure 5.1): a classical example of hysteresis. Simultaneously, national income per capita in these countries dropped by over 10% during the crisis.

59 In short, the *Dutch disease* refers to a situation in which a natural recourse boom leads to a real appreciation (as a result of higher wages), thereby making production in traditional manufacturing industry less competitive. As a result the energy boom will, *ceteris paribus*, lead to a smaller manufacturing sector. See Corden and Neary (1982) for the formal model.

Figure 5.1: unemployment in Sweden and Finland before, during and after the crisis
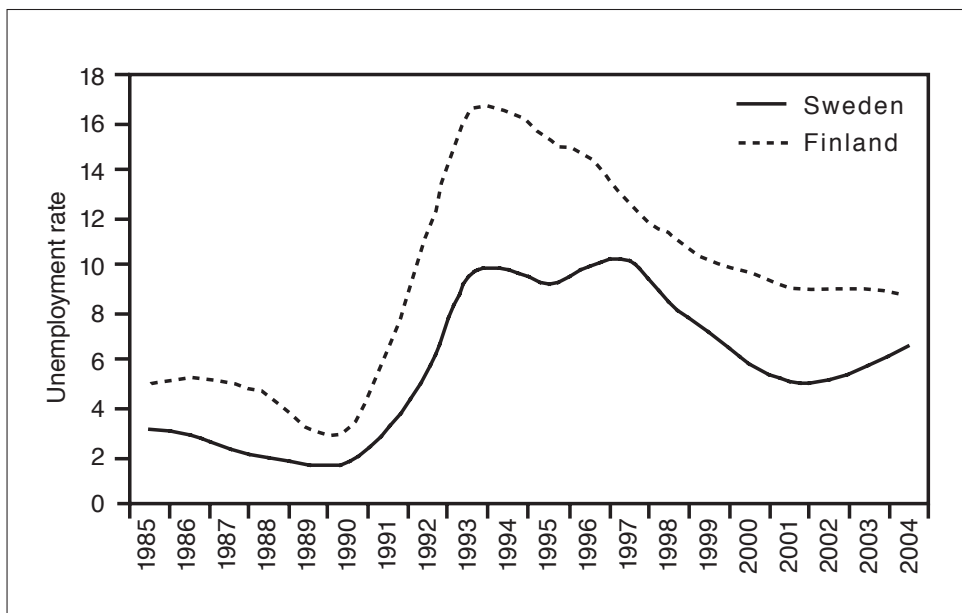
Source: OECD database on Labour Statistics

The initial boom was caused by financial deregulation in both Finland and Sweden around 1985.[60] Before this year, both countries' credit markets were strongly regulated, restricting the level of interest rates and the supply of credit in both countries. As credit markets were rapidly deregulated in the mid-1980s, and hardly any restrictive fiscal or monetary policy measures were taken, lending from banks, and thereby aggregate demand, increased rapidly. During this time, asset prices grew more rapidly than consumer prices-facilitating the basis for rising collateral values and strong credit expansion. Inflation also rose rapidly with aggregate demand. As both countries persisted with their fixed exchange rate regimes, the Finnish *markka* and the Swedish *krona* became highly overvalued. This, in combination with the rising German interest rate due to the reunification, led to a sharp increase in the Finnish and Swedish nominal interest rates. As consumer prices simultaneously fell, real interest rates rose sharply-causing a collapse in asset prices, with all the known negative consequences as a result. As the *markka* and the *krona* were also exposed to speculative attacks in 1992, both countries introduced floating exchange rates-immediately leading to a sharp

60 See Jonung, Schuknecht and Tujula (2005) for a more elaborate discussion of the boom-bust cycle.

depreciation of both currencies.[61] This process eventually started the recovery process, as it caused a strong increase in exports. Although economic growth did catch up with this recovery in both Finland and Sweden, unemployment rates have still not fallen back to their pre-1990 levels.

In reaction to this severe bust, an intensive process of further liberalisation and deregulation emerged in Finland and Sweden (see table 6 in Bergh (2006) for a full overview for Sweden), which led to more economic freedom as figure 5.2 shows. Bergh (2006) argues that this process, in combination with the process of recovering from the bust, was the real trigger for the high growth rates in Finland and Sweden during the second half of the 90s.

Figure 5.2: development of the Heritage Foundation Index of economic freedom in Sweden, Finland and the US over the period 1995-2006. A lower index points at more economic freedom.
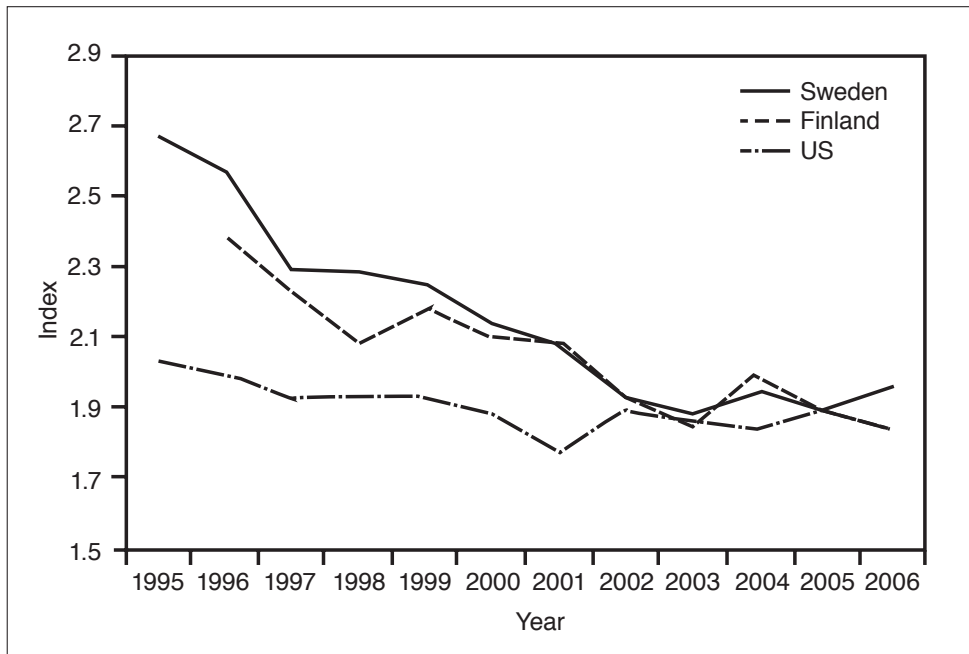
Source: The Heritage Foundation

61   The Swedish *krona* fell by about 20% (effective exchange rate) as Lindbeck (1997) notes.

Most of these claims can again be investigated empirically. To do so, the Heritage Foundation Index of economic freedom, data on oil and gas production (from The Energy Information Administration) and a dummy[62] for Sweden and Finland (to capture the collapse-recovery process) are added to the previous regressions in section 5.1.

The results are presented in table 5.4 (where the natural logarithm of real GDP per capita is the dependent variable) and table 5.5 (with the natural logarithm of the unemployment rate as dependent variable).

Table 5.4: the effect of different policy measures, controlling for additional factors, on real GDP per capita for 16 OECD countries

	Dependent variable: ln of real GDP per capita	
Variable	**(1)**	**(2)**
ALMP/unemployed	0	
Educational attainment	+	+
Gini coefficient	+	+
EPL	+	+
EPL squared	−	−
Gross replacement rate	0	
Heritage Foundation Index	0	−
Dummy Sweden/Finland	0	
Gas production per capita	0	
Oil production per capita	0	0
Explained variation	**81.0%**	**82.2%**

Notes: estimates are by OLS using two time periods (1995-1999, and 2000-2004). A '+' ('-') denotes a significantly positive (negative) relationship between the variable concerned and the dependent variable. A '0' indicates that no significant relationship is present. If a cell is blank, this means that the particular variable is excluded from the analysis in that specification.

62 The dummy captures any unspecified outperformance of Sweden and Finland caused by variables not present in this model.

Table 5.5: the effect of different policy measures, controlling for other factors, on unemployment for 16 OECD countries

	Dependent variable: ln of the standardized unemployment rate[a]	
Variable	**(1)**	**(2)**
ALMP/unemployed	–	–
Educational attainment	0	
Gini coefficient	–	–
EPL	0	
Gross replacement rate	0	
Heritage Foundation Index	+	+
Dummy Sweden/Finland	0	
Gas production per capita	0	
Oil production per capita	0	0
Explained variation	**69.5%**	**71.1%**

Notes: estimates are by OLS using three time periods (1995-1997, 1998-2000 and 2001-2004). A '+' ('-') denotes a significantly positive (negative) relationship between the variable concerned and the dependent variable. A '0' indicates that no significant relationship is present. If a cell is blank, this means that the particular variable is excluded from the analysis in that specification.

It can immediately be noted that the inclusion of the additional variables increases the explanatory power of the model significantly: in explaining GDP per capita, the explained variation of the model increases from about 65% to over 80%, while the explained variation of the model explaining unemployment increases from just below 60% to over 70%. This suggests that there is more regarding the strong economic performance of the Scandinavian countries in recent years than their welfare state model.

The additional variables do not alter the earlier conclusions in this study dramatically. The coefficients preceding gas and oil production are insignificant and nearly equal to zero respectively, which implies that these variables cannot explain GDP or unemployment in general. *On a OECD-scale*, the natural recourse revenues on the one hand and the negative effects of the resource curse and Dutch disease on the other hand, tend to offset each other. This does not imply that gas and oil revenues did not contribute the economic performance of an *individual* country like Norway. Indeed, the earlier cited study of Roed Larsen (2006) suggests it did, as Norway has seeming-

ly been able to avoid both the negative effects associated with the resource curse and the Dutch disease. [63]

The Heritage Foundation Index of economic freedom however does exert a significant impact on both GDP per capita and the unemployment rate: a lower Heritage Foundation Index (indicating more economic freedom), has both increased the level of real GDP per capita and decreased the unemployment rate over the sample period in the countries recorded in the regression. This thus implies that the process of economic liberalisation in mainly Sweden and Finland (in reaction to the early 90s bust) does explain a significant part of the steadily rising GDP levels and falling unemployment rates in these countries.

According to the regressions above, the recovery-process ('catching up') from the severe economic collapse in Sweden and Finland itself, had no significant direct influence on both the level of GDP and the level of unemployment in the 1990s (only via the subsequent process of liberalisation). This result is however dissatisfactory as these two countries have shown extremely high growth rates in the post-1995 period. Table 5.6 therefore investigates whether this recovery-process in Sweden and Finland did increase real economic growth in a direct way, and indeed the coefficient of the dummy for Sweden and Finland turns significantly positive.

63 Since 1990 Norway has a 'state oil fund' under auspician of the Central Bank, which is filled since 1996 with about 200 bilion euros, in order to secure Norwegian pension obligations (the official name is Norwegian Government Pension Fund). The money in the fund is invested.

Table 5.6: the effect of different policy measures, controlling for other factors, on real economic growth for 16 OECD countries

	Dependent variable: ln of real economic growth
Variable	**(1)**
ALMP/unemployed	0
Gini coefficient	0
EPL	−
EPL squared	+
Gross replacement rate	0
Heritage Foundation Index	0
Dummy Sweden/Finland	+
Gas production per capita	0
Oil production per capita	0
Explained variation	**9.9%**

Notes: estimates are by OLS using yearly data. A '+' ('-') denotes a significantly positive (negative) relationship between the variable concerned and the dependent variable. A '0' indicates that no significant relationship is present. If a cell is blank, this means that the particular variable is excluded from the analysis in that specification. The variable 'educational attainment' is excluded from the regression as its sign would be negative in this regression, which is more a problem of the variable itself rather than that it indicates real explanatory power (c.f. the critiques on the well-known study of Mankiw, Romer and Weil (1992)).

5.3 Conclusion

In line with the theoretical predictions in this study, the typical 'Scandinavian' policies seem to have exerted different forces on the economic development of these countries. Based on a sample of OECD-countries, the main findings of this chapter can be summarised as follows:

• Although ALMPs in general cannot be concluded to be cost effective, they have contributed significantly to lower levels of unemployment and higher levels of equality in the OECD countries concerned. It is thus likely that the relatively low levels of unemployment in the Scandinavian countries can be explained from their ALMPs. As was argued in chapter 2, temporary employment subsidies in the private sector and job search assistance for workers with a poor labour market position are likely to be the most effective forms of ALMPs.

• There is a positive relationship between high levels of education and GDP per capita. It is not clear whether high education levels are either the

cause or the result of high levels of GDP. They do however seem to reduce unemployment. Equality is not significantly influenced by educational attainments.

- Higher levels of inequality (providing more economic incentives) both stimulate the development of GDP per capita and reduce unemployment. It thus seems that the relatively even income distributions in the Scandinavian countries are more a result of their relative prosperity (enabling all inhabitants to profit from the increased wealth) than a cause.
- It appears that GDP per capita is maximised for countries with average levels of EPL. Apparently, the economy is best served with an average level of EPL, as a result of which its negative effects (increased flexibility and ability to adapt through reallocation) and positive effects (the hold-up problem for the worker who under-invests in company-specific schooling) are optimally balanced. Moreover, the level of EPL does not significantly influence unemployment and thus cannot explain the Danish job miracle. EPL has to be assessed in consistency with ALMP and social benefits.
- A well-designed labour market does not have to suffer from generous replacement rates. The institutional setting of the Scandinavian countries (with the ALMPs acting as a stick) thus seems to have contributed significantly to their successful combining of efficient labour markets with relatively high benefit levels.

The typical Scandinavian policies thus did not seem to have contributed univocally to the strong economic performance of the Scandinavian countries. This is no surprise as it is a well-known fact that the Scandinavian countries were already very prosperous in the 1950s, when the "Scandinavian model" was really installed (Erikson *et al.*, 1987: 18). As noted before, the high level of equality and the model in general thus seems to be more of a response to high levels of efficiency (that can be attributed to other factors)-enabling all inhabitants to participate in the relatively high levels of welfare.

What factors then do explain the recent apparent success of the Scandinavian countries? For Norway, the oil and gas revenues and the accompanying prudent fiscal policy play an import role in explaining their prosperity. With respect to the Danish job miracle, it should be noted that-besides their successful ALMP-their fixed exchange rate policy (which enforced wage moderation) seems to have played an important role. The bust Sweden and Finland experienced during the early 90s, was the start a process of economic liberalisation. This contributed significantly to their economic success, as did the bust-recovery process itself. In Sweden the productivity rose especially in the private sector, due to deregulation en more

competition. A solid budgettairy policy and the entry to the European Union in 1995, were also important (Bengtsson *et al.*, 2006). Finland developed a coherent innovation strategy with a stong emphasis on education, scientific research and new technology (Castells and Himanen, 2002).

6 Future threats to the Scandinavian model

The previously discussed distinctive features of the Scandinavian welfare states make this model theoretically vulnerable to several serious threats: the generous social benefit levels may induce opportunistic migration, while their large public sectors make these countries vulnerable to both strategic policy competition and Baumol's cost disease, (which refers to cost increases in the public sector as a result of a lagging productivity growth relative to the private sector). Moreover, Scandinavian countries rely heavily on labour market participation to finance their high public expenditures, which might become problematic in the light of aging. In this chapter, these threats will be discussed and possible solutions to cope with them are presented.

6.1 Immigration

For many years now, the Scandinavian countries have been jointly characterised by a policy of 'immigration stop' with respect to economic migrants. In principle, only political refugees are admitted with their close family members and long-term, temporary residents, but immigrants are largely accepted in virtue of humanitarian reasons. As a result, the relative population size of immigrants from less developed countries has grown much bigger than the relative population size of immigrants from developed countries during the past 20 years.

There is however considerable debate about the sustainability of the welfare state in relation to this migration of former inhabitants of less developed countries.[64] On one hand, there are proponents of migration who argue that migration is able to overcome the negative effects of aging on the welfare state as immigrants are typically young and have higher fertility rates (especially those from less developed countries).[65] On the other hand, there are those who argue that migrants are only a fiscal burden as less developed countries immigrants rely more heavily upon welfare state services, adding to the current aging problem.

The latter point is particularly interesting for the Scandinavian countries and will be the focus of this paragraph, as the Scandinavian countries are

64   The following discussion abstracts from the (more important) moral aspects of this type of migration.

65   This argument neglects the fact that migrants themselves will draw pensions at some stage in their life and that fertility is largely endogenous to the institutional landscape. Indeed, it turns out that second-generation migrants generally have the same fertility rates as natives (Boeri, 2006).

mainly characterised by relatively generous welfare states-largely with a universal and tax-financed character. Access to most welfare state services depends solely on legal residency in the country and is independent of (past) labour market position, contributions made or citizenship. Consequently, the Scandinavian countries are quite appealing to less-skilled immigrants from less developed countries, who have a higher probability of becoming dependent upon welfare services as a result of which theory predicts that more of them will immigrate to one of these countries (an adverse selection problem).[66] Simultaneously, from the host country's perspective, immigrants become an immediate financial burden unless they are quickly integrated into the labour market. This fast labour market integration is currently lacking in Scandinavian countries for at least three reasons. In the first place, high Scandinavian replacement rates weaken the incentives for labour market participation for especially the low-skilled, to which immigrants of less developed countries often belong. Secondly, relatively high minimum wage levels create substantial entry barriers for low-skilled immigrants: after all, a substantial part of them will be priced out of the market as their productivity level is not high enough to meet the minimum wage. Finally and in contrast to for example Spanish- and English-speaking countries, there is also a substantial language barrier, which weakens the labour market position of the lion share of the immigrants who do not master any Scandinavian language.

While the latter reason cannot be altered directly by policy measures (apart from providing extensive language training publicly), the two former reasons can. However, this would require a substantial deviation from the essence of the Scandinavian model, namely the universal access to relatively high benefits.

As a result of these problems, immigrants are over-represented in social security systems, even relative to immigrants of developed countries. To a large extend this can be attributed to the weak labour market attachment of non-western immigrants: while the average participation rate for native Danes amounted up to 76% in 2001. The corresponding rate for non-western

66   Borjas (1999) presents empirical evidence for this hypothesis. By looking at the distribution of immigrants over different states with different welfare regimes in the U.S., he shows that generous welfare states can indeed work as a "welfare magnet" to particularly low-skilled immigrants. This conclusion is not only limited to different states within the U.S., but can also be extrapolated to the case of different countries. Boeri, Hanson and McCormick (2002: 89) actually present evidence that Denmark (and the Netherlands) also act as welfare magnets.

immigrants (corrected for gender and age) was only 46% (Schulz-Nielsen, 2002).[67] This problem seems, in the case of the Scandinavian countries, persistent through time as the integration process progresses only very slowly, both in time (after 25 years of residence the predicted welfare dependency rate of immigrants of less developed countries is still over double that of natives, see Blume and Verner (2003)) and across generations: second-generation immigrants still have a strong tendency to find partners in the parents' country of origin (Nannestad, 2004) and additionally, there also seem to be large negative inter-generational transmission effects. Nielsen *et al.* (2001) show for example that the parents' attachment to the labour market has a strong effect on the child's prospect of obtaining a qualifying education level and a stable labour market position.

It should be noted however that the Scandinavian countries implicitly also refuse to capture any possible benefits of immigration themselves, with their policy of an immigration stop as a result of which only refugees enter the country. By adopting a point-system (in which only migrants with certain demanded characteristics may enter the country), as for example Australia and Canada have, the Scandinavian countries could profit from the admittance of young, preferably highly skilled non-refugee individuals. Storesletten (2003) has for example calculated that for Sweden immigration of 20 to 30 year old migrants has a positive effect on the government budget.

Summarising, we can state that immigration is currently a problem inherent to the Scandinavian model, as these welfare states act as a magnet to mainly low-skilled individuals. Together with the language barrier and the relatively high minimum wages, this results in the fact that migrants are over-represented in social security schemes-threatening the sustainability of the relatively generous Scandinavian welfare states. As this problem is inherent to the Scandinavian model (relatively high and universal benefits), it cannot be tackled directly without a serious welfare reform.
The Scandinavian countries could however also capture some fruit from immigration, by admitting relatively young non-refugee migrants on a point-system basis.

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67   By comparison: employment rates of immigrants in the U.S. are comparable to those of natives (Storesletten, 2003).

6.2 Strategic policy competition

Another potential future threat to generous welfare states, as a result of globalisation, is formed by 'strategic policy competition'. As a generous welfare state exerts both an income tax and an administrative burden on a nation's employers and reduces their relative competitiveness through higher labour costs, countries might engage in strategic policy competition implying that they form their institutions in such a manner that they favour mobile factors of production (*in casu* capital). Such a 'race to the bottom' is already taking place in Europe with respect to corporate taxation (see Devereux, Griffith and Klemm, 2002) and might spill-over towards welfare state institutions as the mobility of production factors keeps growing in the light of globalisation and increased factor mobility.

However, empirical evidence points in the other direction: De Grauwe and Polan (2003) have investigated the empirical relationship between the impact of social expenditures in OECD countries on indicators for competitiveness and found no significant effect. They suggest that social expenditures do not only involve a cost for mobile factors of production, but also a benefit (e.g. a better quality of human capital), which implies that the welfare state is not undermined as a result of increased foreign competition. This claim is supported by table 6.1, which shows that the Scandinavian countries are very competitive in the eyes of international business leaders-with all of the Scandinavian countries lying in the top 15.

Table 6.1: WEF ranking of competitiveness in 2006

Rank	Country
1	Switzerland
2	Finland
3	Sweden
4	Denmark
5	Singapore
6	United States
7	Japan
8	Germany
9	The Netherlands
10	United Kingdom
12	Norway

Source: World Economic Forum (2006)

Furthermore, there is little evidence for social dumping in Europe as social security spending has actually risen as a share of GDP since the 1980s (De Mooij, Gorter and Nahuis, 2003). Moreover, Cameron (1978), Schmidt (1983) and Saunders and Klau (1985) all report a significant positive correlation between economic openness and the size of the public sector.[68] Rodrik (1998) has investigated this positive correlation in greater detail and found that it is mainly caused by the fact that social security and welfare spending tends to increase with economic openness and the associated external risks (resulting from turbulence in world markets) in particular. He argues therefore that governments try to compensate their inhabitants for these additional external risks by establishing a more generous system of social security-leading to higher social and welfare spending.

This implies that the risk of a 'race to the bottom' with respect to the generosity of current welfare states as a result of strategic policy competition is rather low. The countervailing power, consisting of government insurance in response to increased external risks, seems more dominant in this case, which actually predicts that welfare states will yet increase as a result of globalisation.

6.3 Baumol's cost disease

The nature of Baumol's cost disease, which finds its theoretical origin in Baumol and Bowen (1966) and Baumol (1969), can be explained by a very simple two-sector model of the economy. In this model, it is assumed that economic activities can be grouped into two types: technologically progressive activities, in which capital accumulation leads to productivity increases via innovation, and human service activities, which permit only slow or sporadic technological progress by their human nature. With respect to the latter activities, the care sector, the education sector or the culinary sector are good examples, as labour is an end in itself in these services and quality in theses sectors is often judged in terms of the amount of labour that is attributed to the activities. Moreover, it is assumed that wages in these two sectors will follow each other, which is rather realistic as large structural wage discrepancies will cause an unwillingness to work in the less-paying sector.

68 Compare for example the relatively closed economies in the U.S. and Japan accompanied by their minimal welfare provisions, (which are at the one end of the relationship), with the relatively open economies of the Netherlands and Belgium with their relatively generous welfare provisions (which are at the other end of the relationship).

As a result the price of public sector goods will rise relatively to private sector goods.

If the government wants to keep public output relatively equal to private output, the tax rate must be raised in the course of time to keep the budget balanced. A rising share of services is no problem as such, as overall productivity growth enables more consumption of everything. The real problem lies in the fact that an increasing share of the total output of the economy will be distributed via the public sector, with all the accompanying distortions present (Baumol, 1992). The distortions will lead to a lower economic output, and to less choice for citizens.

This problem could be mitigated in two ways. One possible solution would be to try to stimulate productivity in the public, service-oriented sector. This is however very hard as productivity increases are not enforceable 'top down' in general, and the more so since the labour-intensive nature of this sector makes it relatively insensitive to technological progressions.[69] Another solution would be to alter the ratio between public and private output: if the provision of Baumol-susceptible services would be privatised, thereby reducing public output to the benefit of private output, the tax rate could be held constant.

Currently, Scandinavian countries are particularly vulnerable to Baumol's disease as they provide education and health care largely on a public scale. It is therefore no surprise that these countries are leading in public-sector innovations: Finland, for example, makes large use of 'e-learning', thereby increasing productivity in the education sector as one teacher now can serve more students via the Internet. Apart from the important question of whether this is desirable or not, this is no working panacea against Baumol's cost disease as there are still clear boundaries to the number of 'customers' one servant can serve in these labour-intensive sectors (especially in the care sector, where the amount of devoted labour itself is an indicator for quality). Therefore, in the long-run, privatisation of these services or larger private investments in for example the educational system (and thus reform of the current Scandinavian policies) seem inevitable to prevent a total tax absorption of GDP.

69   There are scholars who believe that the IT revolution is (or has been) able to 'cure' Baumol's disease (see e.g. Triplett and Bosworth (2002)). But, if the IT revolution only provides the service sector with a one-time gain as a result of which the same problem will probably occur again several years after the disease has been 'cured'. Continous improvement is necessary to cure Baumol's disease.

6.4 Aging

As is the case in every developed western country, aging also forms a major threat to the sustainability of the Scandinavian welfare states-particularly so as these welfare states rely heavily on high labour market participation, (which is about to decline), to finance the broad public sector. In this light, the Scandinavian countries have laid a good foundation to cope with aging, as they are already characterised by relatively high labour force participation rates of the elderly (see figure 6.2).

The high participation can be explained by several aspects. In the first place, it is widely established that there is a positive and significant relationship between education level and the effective retirement age. Since the education level in Scandinavian countries is rather high (see for example figure 4.2), this has certainly contributed to the relatively high labour market attachment of older workers. Secondly, the fact that the entitlement age to public pensions in Denmark and Norway is rather high (67 years) also significantly contributes to this observation (Blondal and Scarpetta, 1999). For Sweden and Finland, the presence of actuarial adjustment of pension benefits in the case of early retirement seems to play an import role in this respect (Ibid.).

Figure 6.2: labour force participation by 55 to 64 year olds in 2005
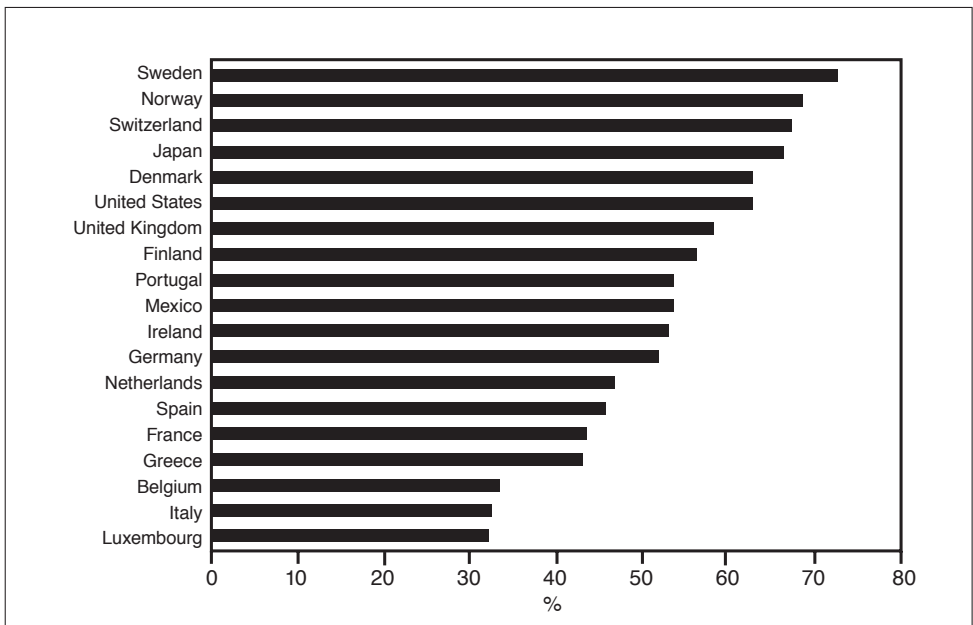
Source: OECD database on Labour Force Statistics

As can be seen in figure 6.3, the projected increase in age-related public spending is almost as severe in Denmark and Finland as it is in the Netherlands, and worse compared to the EU15-area on average. Sweden, however, has a less worrying prospect-mainly due to its recent pension reform as a result of which pension expenditures are projected to increase much less than in other European countries.[70],[71]

Figure 6.3: projected increase in age-related public spending between 2004 and 2050 (as percentage of GDP)
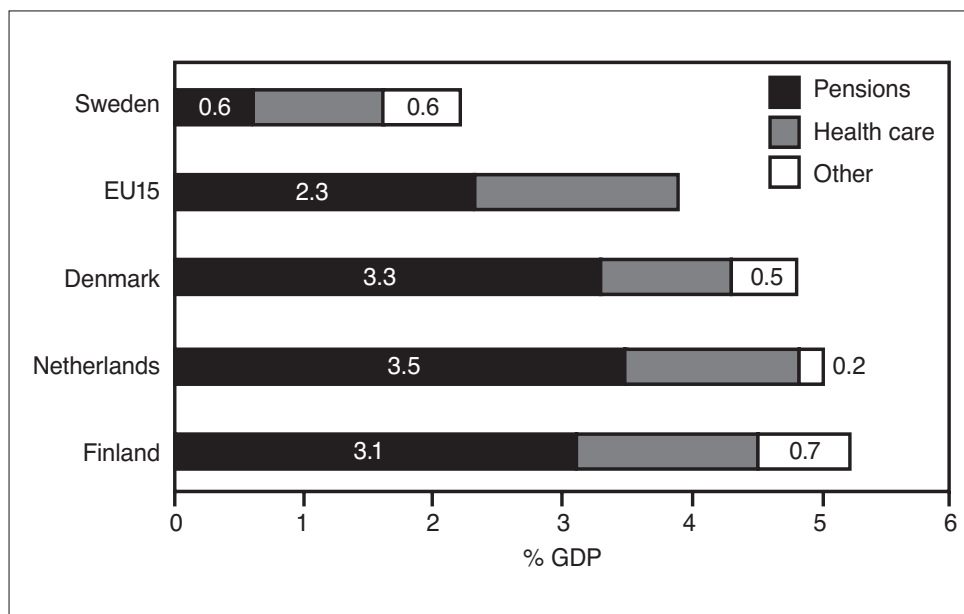
To cope with this aging problem, the Scandinavian countries have concentrated on the creation of government surpluses: Sweden is aiming at a structural budget surplus of 2% of GDP, while Finland and Denmark even aim at a government surpluses of about 3% of GDP! As a result, the EMU-debt and

70 Unfortunately, numbers for Norway are unavailable.

71 The Swedish pension reform, which started in 1994 and is currently in its transition phase, mainly implies the shift from a defined benefit 'pay-as-you-go'-scheme, to a defined contribution (or more precisely: a 'Notional Defined Contribution') 'pay-as-you-go'-scheme with partial funding possibilities due to the projected demographic changes. Moreover, the macro longevity risk (one of the causes of the aging problem) is borne by pensions. See for example Palmer (2000) for a more elaborate discussion of the reformed Swedish pension system.

accompanying interest burden are relatively low for the Scandinavian countries (see table 6.2)[72]-thereby limiting the forward shifting of burdens onto future generations.

Table 6.2: EMU-debt as percentage of GDP in 2005

Country	EMU-debt as percentage of GDP in 2005
Denmark	35.8
Finland	41.1
Netherlands	52.9
Sweden	50.3
EU-average	63.4

Source: Eurostat

It is therefore no surprise that this strict fiscal discipline has provided the Scandinavian countries with a relatively good starting position with respect to the sustainability of government finances: according to the Dutch Ministry of Finance (2005) current government finances in Sweden and Denmark are sustainable, while Finland only has a sustainability gap of 1% of GDP. By comparison: estimates indicate that the Netherlands currently faces a sustainability gap of 2.6% of GDP (CPB, 2006a).[73]

Summarizing, we can state that the Scandinavian countries have laid solid foundations in recent years relating to aging-specific problems: their institutional environment and their high education level ensure high participation rates for the elderly, while their fiscal discipline has ensured the sustainability of government finances despite the projected aging-related increase in government spending.

6.5 Conclusion

The four potential threats to generous welfare states identified in this chapter are all of different importance to the Scandinavian countries. Immigration in the first place is a serious threat to the sustainability of the Scandinavian welfare states due to poor labour market integration of immi-

72   Sweden is an exception in this case with an EMU-debt roughly equal to that of the Netherlands; as noted above, the Swedes will face a much lower increase in age-related public expenditures-thereby decreasing the necessity of debt reduction.
73   Concretely the sustainability gap can be interpreted as the permanent adjustment of the budget that is required to reach sustainability.

grants. These immigrants are often adversely selected, since relatively generous welfare states often act as a magnet to low-skilled migrants. This problem is also relevant to the Netherlands, as the Dutch welfare state merely features the same characteristics in this respect.

The problematic weak labour market attachment of immigrants in Scandinavia is mainly caused by the institutional setting of the Scandinavian labour markets (the compressed wage structure) and the substantial language barrier. Apart from providing more intensive language courses to immigrants, this problem cannot be easily solved without deviating from the Scandinavian model. The Scandinavian welfare states in general could also benefit from migration by also admitting selected younger immigrants, instead of restricting themselves to the acceptance of refugees only.

Strategic policy competition, which is also often brought up as a serious threat to generous welfare states, forms on the other hand a minor threat. It turns out that possible negative effects of higher tax wedges are being dominated by a welfare state-induced increase in the quality of human capital-making these countries yet more attractive to many companies.

Baumol's cost disease may however become a serious problem for the current Scandinavian welfare states: as they provide many services that are labour intensive by their nature (like education and care), increasingly more funds will be allocated via the public sector-accompanied by a necessary and inevitable increase in distortionary taxes. The only way to prevent this is by privatising these services in the future, thereby deviating from the typical Scandinavian model.

In recent years, the Scandinavian countries prepared themselves well to the upcoming aging problem by stimulating labour force participation of the elderly and by creating government surpluses to make room for the projected increase in age-related public expenditures in the future. As a result, the Scandinavian countries have made their sustainability gaps disappear, while most other European countries (e.g. Netherlands) still face unsustainable fiscal policies in this light.

7 Should the Netherlands adopt a Scandinavian-like policy?

This report tries to answer the question whether adaptation of the Scandinavian model is advisable for the Netherlands. The question is a little bit concealing, because in comparison with other European countries, the differences between the Netherlands and Sweden, Denmark, Finland and Norway are not that great. Some even categorise the Netherlands already as a Nordic country! Moreover, the Scandinavian countries are rather different among themselves. Although the Scandinavian model as such consequently does not exists, in the public opinion it stands for the combination of high social benefits and public expenditures on one hand, and high economic growth and a solid government budget on the other. The Scandinavian model seems to work well both in terms of equity and efficiency. To make the case for the Scandinavian model as strong as possible we have focused on the distinct Danish labour market policy, the Swedish childcare policy and Scandinavian educational policies in general. These distinct policies are also put in the light of four frequently named threats to the sustainability of welfare states: immigration, strategic policy competition, aging and Baumol's cost disease.

With respect to the Danish labour market policy (the flexicurity-model), characterised by relatively generous unemployment benefits, little employment protection legislation and a heavy reliance upon active labour market policies, it should be noted in the first place that it is not very dissimilar to its Dutch counterpart. Despite the similarities, both countries can learn from each other: for example, Danish active labour market policy seems to be more effective than its Dutch equivalent. The Danes rely heavily on the provision of *temporary* employment subsidies in the private sector (as a result of which the information problem of the employer is reduced), and not at all on direct job creation in the *public* sector-a programme for which hardly any positive results can be found. Job search assistance should be focused more on the unemployed or disabled with a poor labour market prospective. Conversely, the Danes could learn from the Dutch with respect to employment protection legislation. It appears that the strictness hereof has no significant effect on unemployment, since low levels of employment protection create job uncertainty as a result of which employees become unwilling to invest in firm-specific skills. Welfare is-because of the parabolic relation - maximised for *average* levels of employment protection legislation. The low level of EPL in Denmark has, however, contributed to a reduction in insider-outsider contradictions and consequently to the fraction of long-term unemployment and also stimulated the reallocation of workers. In the Netherlands, the main causes of a high EPL are severance pay for long tenures, procedural inconveniences and the difficulty of dismissal. It would be better to link the severance pay to the investments in the employability

of the employee by the employer; this can be a fruitful way to protect older workers against the risk of losing their job, while it offers *work* security instead of *job* security.

With respect to the cheap, public provision of childcare facilities-which can be found in all Scandinavian countries-a comparison is made between the current Dutch policy, and its Swedish counterpart, since the latter country is the world leader in public childcare. It appears that the current Dutch and Swedish childcare policies are both sub-optimal. The distortion they create (through over-consumption of the subsidised service) is in both cases larger than the distortion they reduce (too low female labour force participation).

It is often argued that the Swedish childcare policy has contributed to the well-known high Swedish female labour force participation rate. This statement neglects the fact that many Swedish women are working in the (nationalised) care sector, as the formalisation of childcare must also be accompanied by a formalisation of care for the elderly, since both sons and daughters (in law) are participating in the Swedish labour market. Moreover, this report presents evidence that causality may actually have run the other way (via a process of political pressures), since the high Swedish female labour force participation rate was observed before the extensive public childcare sector.

Moreover, importing this Scandinavian policy to the Netherlands seems unwise, since the Netherlands has a well functioning private childcare sector and free childcare would not lead to a higher GDP. Most mothers state that they simply want to raise their own children or have more faith in informal arrangements, like grandmothers and -fathers. Providing free childcare in the Netherlands will lead to a substitution of current free, informal care arrangements for subsidised formal care-without any accompanying increase in production. Facilitating the transition between work and care is more fruitful in enhancing labour market attachment of Dutch females.

In addition, there is also little reason to adopt the Scandinavian education system (characterised by large public investments in education at *all* levels) in the Netherlands. In the first place, large education subsidies, especially for higher education, are not desirable from an efficiency point of view, as the market already provides enough incentives to undertake educational investments in the form of higher wages. Moreover, large subsidies for higher forms of education also cannot be justified from an equity point of view, as they act out regressive-especially over the lifecycle. If the Netherlands would like to improve the quality of higher forms of education, the govern-

ment should rely more on private than public funding. However, to ensure accessibility for potent students from all socio-economic backgrounds, the government should provide (or in the Dutch case: preserve) educational loans, which only have to be paid back if the graduate's salary enables him to do so. In this way, it can be guaranteed that no one has to suffer from high debt burdens after graduation as a result of educational investments. The government can give students an incentive to study efficiently by granting learning rights which can be saved for later if they are not used. In this way, learning rights (vouchers) can stimulate life long learning.

Extra public money should be invested in earlier and lower forms of education, as these investments have high social returns. In the Netherlands, the high dropout rates among non-western students in lower secondary education ('MBO') are particularly worrying. This could be combated by higher public investments in this type of education. From this point of view, we can learn from the Scandinavians as they invest much more public funds (in absolute figures) in lower forms of education.

With respect to the often cited threats to the sustainability of generous welfare states, it can be concluded that they are of divergent relevance to the Scandinavian countries. It appears that immigration is indeed a threat to the generosity of these welfare states, as the Scandinavian welfare states suffer from the bad labour market integration of immigrants, mainly caused by the high reservation wages in these countries. Strategic policy competition on the other hand seems less of a threat: in addition to negative effects (in the form of a higher tax burden, generous welfare states also bring advantages as human capital is of a higher quality in these countries. The extensive Scandinavian public sectors however are sensitive to Baumol's cost disease as a result of which the tax burden in these countries may increase further in the future-with all accompanying distortions. Finally, the aging-problem is almost entirely covered in the Scandinavian countries by ensuring a high labour force participation of the elderly and the implementation of a prudent fiscal policy.

In general, it can be concluded that the typical Scandinavian model did not contribute too much to the apparent recent success of these countries. Other factors, like the Norwegian oil and gas revenues, Denmark's exchange rate policy, Sweden deregulation of its private sector, Finlands innovation strategy and the boom-bust cycle in Sweden and Finland seem to be of greater importance in explaining this empirical observation. The Scandinavian policies discussed seem to be more of a reaction to the high levels of welfare these countries have known since the Second World War, enabling all inhabitants to profit from the prosperity, than the real cause of

it. It is therefore very unlikely that a complete implementation of the Scandinavian model in the Netherlands will lead to more economic efficiency. We should therefore rather treat the Scandinavian experiment with care, learn from it, and import only those elements that fit our specific society and needs.

8 Executive summary in Dutch

Het Scandinavische model

Het zogenaamde "Scandinavische model" krijgt de laatste tijd veel aandacht in nationale en internationale discussies over de welvaartsstaat. De westerse verzorgingsstaten staan onder grote druk, die (voornamelijk door de vergrijzing) alsmaar toeneemt. Hervorming lijken onvermijdelijk. Sommigen bepleiten een hervorming van de Nederlandse welvaartsstaat richting het Scandinavische model. In dat model lijken hoge overheidsuitgaven en dito belastingdruk niet nadelig uit te pakken voor het economische presteren van een land. In tegendeel, volgens voorstanders laten de ervaringen in de Scandinavische landen juist zien dat investeringen in scholing en een hoge kwaliteit van publieke dienstverlening de economie versterken, en dus een alternatief bieden voor het Angelsaksische model. Het Nederlandse model zou op de duur onhoudbaar zijn omdat het geen echte keuze maakt, noch voor een Scandinvische noch voor een Angelsaksische benadering.

Hoewel de Scandinavische landen onderling veel verschillen (en er dus geen sprake is van *hét* Scandinavische model), hebben de Scandinavische welvaartsstaten toch voldoende gemeenschappelijke (en internationaal onderscheidende) kenmerken, om van 'het' Scandinavische model te kunnen spreken, namelijk:

1. Een hoge mate van universalisme: alle burgers hebben recht op sociale voorzieningen en diensten, ongeacht gedane contributies of arbeidsmarktpositie.
2. en hoge mate van gelijkheid: de inkomensverdeling is relatief gelijk, scholing op alle niveaus is nagenoeg gratis en mannen en vrouwen worden gelijke kansen geboden op de arbeidsmarkt.
3. De overheid heeft een sterke en actieve functie in het bereiken van volledige werkgelegenheid, vaak via het verrichten van actief arbeidsmarktbeleid.

De populariteit van het Scandinavische model kan vooral worden verklaard uit het feit dat deze landen - geheel tegen de heersende economische theorieën in - er schijnbaar in slagen een hoge mate van gelijkheid met een hoge mate van economische efficiëntie te combineren (cf. Sapir, 2005). Volgens voorstanders van het Scandinavische model, zouden de nadruk op actief arbeidsmarktbeleid en het goedkope publieke aanbod van kinderopvang en scholing hierin een grote rol spelen. Dit rapport onderzoekt deze claims.

Hoge uitkeringen en actief arbeidsmarktbeleid

In eerste instantie wordt het Nederlandse arbeidsmarktbeleid vergeleken met het Deense *flexicurity* model (dat een hoge mate van flexibiliteit met een genereus sociaal zekerheidsstelsel combineert). Dit model krijgt momenteel

veel aandacht en bewondering in internationale discussies. Een globale vergelijking tussen de twee arbeidsmarkt instituties maakt echter al duidelijk dat deze niet veel verschillen: beide landen kennen een zeer laag werkloosheidspercentage in internationaal opzicht en relatief genereuze sociale uitkeringen. De hoge uitkeringen gaan in beide landen samen met een breed gedragen afkeuring van misbruik van sociale voorzieningen. Radicale hervormingen van de huidige Nederlandse arbeidsmarkt liggen op basis van de Deense ervaringen dan ook niet voor de hand.

Wel kunnen de twee landen van elkaar leren: zo blijkt uit internationaal onderzoek dat het niveau van ontslagbescherming geen invloed heeft op het werkloosheidspercentage (het reduceert enkel langdurige werkloosheid ten koste van kortdurende werkloosheid, wat een legitiem doel op zich kan zijn), terwijl het ondernemingsspecieke investeringen bij de werknemer remt door verminderde baanzekerheid. Anderzijds vergroot een versoepeling van het ontslagrecht wel weer de dynamiek en aanpassingsvermogen van een economie. Minder ontslagbescherming is echter niet per se gunstig. Uit analyses in dit rapport komt naar voren dat de relatie tussen ontslagbescherming en economische groei een parabolische is. Ook in de economische literatuur wordt beargumenteerd dat de welvaart gemaximaliseerd wordt voor gemiddelde niveaus van ontslagbescherming. Het huidige, lage Deense niveau van ontslagbescherming is vanuit welvaartsoogpunt dan waarschijnlijk ook 'te laag'. Het Nederlandse stelsel van ontslagbescherming is evenmin opitmaal. De procedurele en administratieve lasten zijn boven gemiddeld en het is moeilijk om iemand te ontslaan. Het belangrijkste verbeterpunt hangt echter samen met de sterke ontslagbescherming van oudere werknemers die lang bij een werkgever in dienst zijn. Hierdoor is de arbeidsmarkt voor oudere werknemers inflexibel en worden insiders beschermd ten koste van outsiders (vrouwen en allochtonen). De arbeidsparticipatie van ouderen is in Nederland dan ook aanzienlijk lager dan in Denemarken. Oudere werknemers lopen de kans dat hun arbeidsproductiviteit achterblijft bij hun salaris, waardoor het moeilijker wordt om een andere baan te vinden en men geneigd is te blijven zitten waar men zit. Allen tegen (hele) hoge kosten kunnen oudere werknemers met een land dienstverband worden ontslagen door hun werkgever. Investeren in scholing is een mogelijkheid om deze patstelling die zo ontstaat te doorbreken. Om die reden is het wenselijk om de kantonrechtersformule te verrijken door bij de vaststelling van de ontslagvergoeding rekening te houden met de investeringen die door de werkgever zijn gedaan in de employability van de werknemer.

Anderzijds, kan Nederland leren van Denemarken op het gebied van actief arbeidsmarktbeleid. De Denen laten goede resultaten zien met het verstrekken van *tijdelijke* subsidies aan *private* bedrijven voor het in dienst nemen van langdurige werklozen-een vorm van actief arbeidsmarktbeleid die informatieproblemen tussen werkgevers en −zoekenden verminderd, maar in Nederland slechts in beperkte mate aanwezig.. Daarnaast wordt in Nederland (via gemeenten) nog steeds een aanzienlijk deel van de reïntegratiemiddelen (hoewel steeds minder) ingezet voor gecreëerde werkgelegenheid in in de publieke sector (de voormalige Melkert- of ID-banen), terwijl zowel nationaal als internationaal onderzoek weinig positieve resultaten melden voor deze vorm van actief arbeidsmarktbeleid. Deze fondsen kunnen dan ook beter worden aangewend voor tijdelijke subsidies aan de private sector, zoals in Denemarken reeds gebeurt. Een andere strategie die Denemarken met succes hanteert in het kader van actief arbeidsmarktbeleid is het focussen van de arbeidsmarktbemiddeling op de werklozen met een slecht arbeidsmarktperspectief. In Nederland liggen de prikkels voor uitvoerders vaak zodanig dat het aantrekkelijk is om zich te richten op de meest kansrijken in een bestand.

Goedkope kinderopvang

Met betrekking tot de sterke nadruk op het aanbieden van goedkope, publieke kinderopvang, wordt een vergelijking gemaakt tussen Nederland en Zweden-het land dat internationaal voorop loopt als het gaat om het goedkoop aanbieden van publieke kinderopvang. Veelal wordt deze politiek zeer positief geëvalueerd, aangezien het bijgedragen zou hebben aan de zeer hoge participatiecijfers van Zweedse vrouwen-met alle positieve gevolgen van dien. Bij nadere beschouwing blijkt deze politiek echter een stuk minder succesvol. Als de goedkope en relatief extensieve Zweedse kinderopvang al bijgedragen zou hebben aan het verhogen van de participatie van vrouwen, dan gaat het vooral om banen in juist die genationaliseerde zorgsector: naast de extra geschapen banen in kinderopvang, zal er immers ook meer vraag komen naar formele ouderenzorg nu zowel (schoon)zonen als (schoon)dochters werken. Zorg is nu eenmaal per definitie een arbeidsintensieve bezigheid, waarin de kwaliteit in belangrijke mate samenhangt met de hoeveelheid arbeid. Deze taken kunnen op macro-schaal dus niet weggeorganiseerd worden zonder aan kwaliteit in te boeten. Wanneer we naar Zweden kijken, zien we dan ook dat veel vrouwen in de kinder- ofwel ouderenzorg werken.

Nieuw empirisch onderzoek in dit rapport suggereert trouwens eerder dat de uitgebreide kinderopvang niet de oorzaak, maar eerder een gevolg was van de hoge Zweedse arbeidsparticipatie onder vrouwen. Via politieke druk

is door werkende vrouwen goedkopere kinderopvang bewerkstelligd. De relatief hoge arbeidsparticipatie van vrouwen in Zweden is dan meer een historisch bepaald cultureel fenomeen, dan een gevolg van bewust beleid!

Deze culturele factoren lijken ook een belangrijke rol te spelen in het verklaren van de lage arbeidsparticipatie van Nederlandse vrouwen. Zo is de elasticiteit van het arbeidsaanbod van vrouwen in relatie tot de prijs van kinderopvang in Nederland nagenoeg gelijk aan nul. Daarnaast blijkt uit eerdere onderzoek van het Sociaal Cultureel Planbureau dat slechts vijf procent van de niet-werkende moeders een gebrek aan betaalbare kinderopvang opgeeft als reden voor hun werkloosheid; het leeuwendeel van deze groep geeft simpelweg aan de opvoeding van hun kind zelf te willen verzorgen, omdat zij van mening zijn dat dit beter is voor het kind. Tenzij er een cultuuromslag plaatsvindt in Nederland (waardoor de houding ten opzichte van met name formele kinderopvang verbetert), zal het verlagen van de prijs van formele kinderopvang in Nederland dan ook niet leiden tot de gewenste verhoging van het arbeidsaanbod; maar hoofdzakelijk tot substitutie van informele zorg (door bijvoorbeeld opa's en oma's) voor gesubsidieerde formele zorg. In dit licht zijn het vergroten van de flexibiliteit op de arbeidsmarkt (om de transitie tussen zorg en werk te vergemakkelijken) en het stimuleren van parttime werkgelegenheid (waarbij werk en zorg gecombineerd kunnen worden) meer kansrijke beleidsopties om de arbeidsmarktparticipatie van vrouwen in Nederland te verhogen.

Publiek gefinancierd onderwijs

Zoals opgemerkt, zijn de Scandinavische landen ook onderscheidend in het feit dat zij onderwijs op alle niveaus nagenoeg gratis aanbieden. Het gemiddelde opleidingsniveau in deze landen is dan ook relatief hoog. Het gaat echter te ver om dit relatief hoge opleidingsniveau toe te schrijven aan het nagenoeg gratis aanbieden van hoger onderwijs: inwoners van de Verenigde Staten en Japan hebben bijvoorbeeld een nog hoger gemiddeld opleidingsniveau, terwijl onderwijsinvesteringen in die landen veel en veel meer via private kanalen lopen. Capaciteiten (die grotendeels in het lager onderwijs gevormd worden) spelen een grotere rol in het verklaren van de opleidingsverschillen tussen landen.

Het evengoed hoge opleidingsniveau in landen waar hoger onderwijs meer privaat gefinancierd is, kan verklaard worden door het feit dat hogere vormen van onderwijs in het algemeen met name private opbrengsten met zich meebrengen (een substantieel hoger loon), waardoor er reeds voldoende prikkels zijn om privaat te investeren in onderwijs en een omvangrijke subsidie niet nodig is. Uit het oogpunt van economische efficiëntie zijn de

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subsidies aan hoger onderwijs (zoals ze worden verstrekt in Scandinavië) omvangrijk. Ook uit rechtvaardigheidsoogpunt kunnen subsidies aan hoger onderwijs niet worden verdedigd. Subsidies aan hoger onderwijs vallen grotendeels toe aan relatief rijke huishoudens. Bovendien verdienen die subsidies aan hoger onderwijs ontvangen, later in hun leven meer dan de gemiddelde belastingbetaler.

Zowel uit het oogpunt van economische efficiëntie alsmede rechtvaardigheid, dienen extra uitgaven aan hoger onderwijs dus vooral door een vergroting van private middelen te worden opgebracht. Om echter elitisme op hogescholen en universiteiten te voorkomen, zullen eventuele hogere private bijdragen wel gepaard moeten blijven gaan met het door de overheid beschikbaar stellen van onderwijsleningen met inkomensafhankelijke aflossingen (zoals in Nederland reeds het geval is). Dit houdt in, dat iedere student moet kunnen lenen voor zijn studie (tegen een relatief laag rentepercentage), maar dat deze lening alleen afgelost hoeft te worden als het inkomen dat deze student na afstuderen verdient hiertoe toereikend is, en zonodig na 25 jaar wordt kwijtgescholden.

Extra publieke middelen voor onderwijs, kunnen geïnvesteerd worden in vroegere vormen van onderwijs (primaire educatie en beroepsonderwijs) en inburgering, aangezien deze vormen van onderwijs veelal leiden tot sociale opbrengsten, meer participatie, een generieke verhoging van het kennispeil, maar ook minder criminaliteit en een betere gezondheid op latere leeftijd. In Nederland is in het bijzonder de hoge uitval onder allochtone scholieren in het middelbaar beroepsonderwijs zorgwekkend. Op dit punt scoren Scandinavische landen beter. Interessant voorbeeld vormt Noorwegen, dat in het voortgezet onderwijs met leerrechten werkt.

Econometrische analyse

Wanneer we het Scandinavische model in zijn totaliteit empirisch (via econometrische analyse) onder de loep nemen, worden de hierboven genoemde conclusies grotendeels bevestigd: actief arbeidsmarktbeleid verlaagt de werkloosheid, terwijl ontslagbescherming hier geen significante invloed op heeft. Anderzijds blijkt het nationaal inkomen per hoofd inderdaad gemaximaliseerd te worden voor gemiddelde niveaus van ontslagbescherming. Daarnaast is er ook een significant positief verband tussen economische efficiëntie en opleidingsniveau, al is het alles behalve duidelijk hoe de causaliteit in dit opzicht verloopt. Ook kan geconcludeerd worden op basis van empirisch onderzoek dat de hoge mate van gelijkheid niet heeft bijgedragen aan de goede economische Scandinavische prestaties: meer ongelijkheid-sterkere economische prikkels-blijken nog steeds tot een

hoger inkomen per hoofd en een lagere werkloosheid te leiden. Anderzijds kan ook opgemerkt worden dat een goed ingerichte arbeidsmarkt, niet hoeft te leiden onder relatief hoge uitkeringen; actief arbeidsmarktbeleid lijkt in deze als bruikbare stok achter de deur te kunnen functioneren, waardoor individuen toch geprikkeld blijven om actief op zoek te gaan naar een baan-ondanks de relatief hoge uitkering die ze genieten.

Het typisch Scandinavische beleid heeft dus niet eenduidig bijgedragen aan de sterke economische prestaties van deze landen in de jaren '90. Dit is geen verrassing wanneer gerealiseerd wordt dat deze landen al betrekkelijk welvarend waren in de jaren '50-ruim voordat het Scandinavische model zoals we dat nu kennen, bestond. In dit opzicht lijkt het Scandinavische model eerder een reactie te zijn op eerder verworven rijkdommen, om iedereen in deze welvaart te laten meedelen.

Oorzaken van het Scandinavische succes

Maar wat kan het schijnbare succes van de Scandinavische landen dan wel verklaren? In de eerste plaats heeft het hoge opleidingsniveau van de gemiddelde Scandinaviër zeker bijgedragen aan de goede economische prestaties; het zij echter opgemerkt dat dit het gratis aanbieden van hogere vormen van onderwijs allerminst rechtvaardigt, aangezien de markt reeds voldoende financiële prikkels biedt om tot scholing over te gaan. Daarnaast spelen ook een aantal landspecifieke factoren in dit opzicht een rol. Voor Zweden en Finland is hierbij de diepe recessie die deze landen hebben doorgemaakt begin jaren '90 van belang geweest. In reactie hierop hebben deze landen namelijk forse hervormingen en liberaliseringen doorgevoerd hetgeen significant bijgedragen heeft aan de sterke economische prestaties in deze landen. Voor Noorwegen zijn de olie- en gasinkomsten die dit land geniet (en de verantwoorde wijze waarop de Noren hiermee omgaan door een groot deel in een fonds apart te zetten, waaruit toekomstige pensioenverplichtingen worden betaald) hierbij zeker van belang. Met betrekking tot het Deense arbeidsmarkt wonder tenslotte, lijkt de Deense politiek van vaste wisselkoersen in de jaren '90 een belangrijke rol te hebben gespeeld: hierdoor zouden excessieve loonstijgingen namelijk onherroepelijk hebben geleid tot terug-lopende exporten, waardoor de vakbonden, die hiermee rekening hielden, hun looneisen matigden en de werkgelegenheid aldus gestaag kon groeien. Stuk voor stuk zaken die weinig tot niets te maken hebben met het typische Scandinavische model, maar die wel de sterke economische ontwikkeling van deze landen in de jaren '90 kunnen verklaren.

Bedreigingen voor de Scandinavische welvaartstaten

Tenslotte is er ook gekeken naar potentiële gevaren voor genereuze welvaartstaten als de Scandinavische. In dit opzicht worden vaak immigratie, strategische beleidsconcurrentie, de ziekte van Baumol en vergrijzing genoemd. Nadere beschouwing van deze factoren leert dat immigratie inderdaad een bedreiging kan vormen voor het Scandinavische model aangezien dit type welvaartsstaat vaak lager gekwalificeerde immigranten aantrekt, met een hogere kans op werkloosheid, die zich aldus verzekeren van een relatief genereuze uitkering. In dit opzicht is het probleem voornamelijk gelegen in de slechte arbeidsmarktintegratie van immigranten in Scandinavië. Die wordt veroorzaakt door het reeds eerder genoemde relatieve hoge uitkeringsniveau, waardoor veel immigranten óf uit de markt geprijsd worden óf zichzelf niet aan zullen bieden en genoegen nemen met de hoogte van de uitkering. Dit probleem is in dit opzicht dus inherent aan het Scandinavische model zelf. De Scandinavische landen zouden echter ook vruchten kunnen plukken van immigratie door geselecteerde jonge immigranten toe te laten, hetgeen ze nu, net als Nederland, verzuimen.

Strategische beleidsconcurrentie vormt een minder grote bedreiging. Het blijkt dat genereuze sociale voorzieningen niet alleen kosten voor bedrijven met zich meebrengen, in de vorm van hogere belastingafdrachten-maar ook voordelen, in de vorm van beter menselijk kapitaal. Empirisch onderzoek laat zien dat het laatste effect domineert, waardoor deze vaak genoemde bedreiging het Scandinavische model niet onder druk zet.

Daarnaast wordt de ziekte van Baumol ook als een gevaar voor het Scandinavische model beschouwd. Deze wordt veroorzaakt door de praktijk dat de arbeidsproductiviteit in de marktsector harder groeit dan die in de overheidssector terwijl lonen een grofweg gelijke ontwikkeling volgen (anders zou er immers niemand meer in de overheidssector willen werken). Diensten zoals onderwijs en zorg, die in Scandinavië op grote schaal publiek worden aangeboden, worden hierdoor relatief steeds duurder waardoor de belastingdruk almaar toe moet nemen om dit te kunnen bekostigen-met alle belastingverstoringen vandien. Veel is echter nog onduidelijk met betrekking tot de ontwikkeling van de ziekte van Baumol (zo speelt er bijvoorbeeld de vraag of de ICT-revolutie de ziekte kan genezen), maar wanneer dit werkelijk een probleem zou worden is privatisering van overheidsdiensten die zich daarvoor lenen de enige remedie.

Een ander potentieel gevaar voor de houdbaarheid van de Scandinavische welvaartstaten, vormt de vergrijzing die alle westerse landen momenteel

teistert. Het blijkt echter dat de Scandinavische landen zich hier zeer goed
op voorbereid hebben door het stimuleren van arbeidsparticipatie onder
ouderen (of door een hogere pensioengerechtigde leeftijd of door actuariële
aanpassingen in pensioeninkomen bij prepensioen) als ook het creëren van
budgettaire overschotten door de overheid. Hierdoor zijn deze welvaart-
staten 'houdbaar' in het licht van de vergrijzing, terwijl Nederland in dit
opzicht nog met een gat te kampen heeft.

Conclusie

Al met al is er echter weinig reden voor de huidige Nederlandse
welvaartsstaat om verder op te schuiven richting het Scandinavische model.
Nederland kan slim 'shoppen' (bijvoorbeeld met betrekking tot het Deense
actief arbeidsmarktbeleid en de hogere publieke investeringen in lagere
vormen van onderwijs), maar het kopiëren van met name de Scandinavische
politiek van kinderopvang en scholing lijkt in deze bijzonder onverstandig
aangezien ze efficiëntieverliezen in onze economie alleen maar zullen
vergroten. Het Scandinavische succesverhaal kan dan ook grotendeels
worden verklaard uit de besproken overige zaken die niets met het vaak
geprezen model te maken hebben. De structuurversterkende maatregelen
die Nederland de afgelopen jaren heeft genomen en het tegelijkertijd voeren
van een degelijk en solide begrotingsbeleid, vertonen zodoende veel over-
eenkomst met de zaken die het Scandinavische succes kunnen verklaren.

Appendix: OECD education levels

The OECD distinguishes between several types of education levels. Table A1 defines each level used in this publication.

Table A1: OECD definitions of various education levels

Education level	OECD definition
Pre-school	The initial stage of organised instruction, designed primarily to introduce very young children to a school-type environment, i.e. to provide a bridge between home and a school-based atmosphere. Programmes should be centre or school-based, designed to meet the educational and developmental needs of children of at least three years of age, and have staff that are adequately trained (i.e. qualified) to provide an educational programme for the children.
Primary education	Primary education usually begins at ages five, six or seven and lasts for four to six years. Programmes at the primary level generally require no previous formal education, although it is becoming increasingly common for children to have attended a pre-primary programme before entering primary education. The boundary between pre-primary and primary education is typically the beginning of systematic studies characteristic of primary education, e.g., reading, writing and mathematics. It is common, however, for children to begin learning basic literacy and numeric skills at the pre-primary level.
Lower secondary education	Lower secondary education generally continues the basic programmes of the primary level, although teaching is typically more subject-focused, often employing more specialised teachers who conduct classes in their field of specialisation. Lower secondary education may either be "terminal" (i.e. preparing students for entry directly into working life) and/or "preparatory" (i.e. preparing students for upper secondary education). This level usually consists of two to six years of schooling.
Upper secondary education	Upper secondary education corresponds to the final stage of secondary education in most OECD countries. Instruction is often more organised along subject-matter lines than at the lower level and teachers typically need to have a higher level or more subject-specific qualifications. The entrance age to this level is typically 15 or 16 years.
Tertiary education	Largely theory based programmes, designed to provide sufficient qualifications for entry to advanced research programmes and professions with high skill requirements. Tertiary education also includes programmes that focus more on practical, technical or occupational skills for direct entry into the labour market, although some theoretical foundations may be covered in the respective programmes.

Source: OECD (2002b)

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