FLEXICURITY – LABOUR MARKET PERFORMANCE IN DENMARK

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Abstract

Unemployment is at a low and stable level in Denmark. This achievement is often attributed to the so-called *flexicurity* model combining flexible hiring and firing rules for employers with income security for employees. Whatever virtues this model may have, a low and stable unemployment rate is not automatically among them since the basic flexicurity properties were also in place during the 1970s and 1980s where high and persistent unemployment was prevalent. Labour market performance has changed due to a series of reforms during the 1990s, the main thrust of which were a shift from a passive focus of labour market policies to a more active focus on job search and employment. The policy tightened eligibility for unemployment benefits and their duration as well as introduced workfare elements into unemployment insurance and social policies in general. Thereby policy makers attempted to strengthen the incentive structure without taking resort to general benefit reductions. We argue that the workfare policies have played an important role running primarily via motivation/threat and wage effects. However, active labour market policies are resource demanding, and although the workfare reforms have improved cost effectiveness, there is still an issue as to whether the resources going into active labour market policies are used efficiently.

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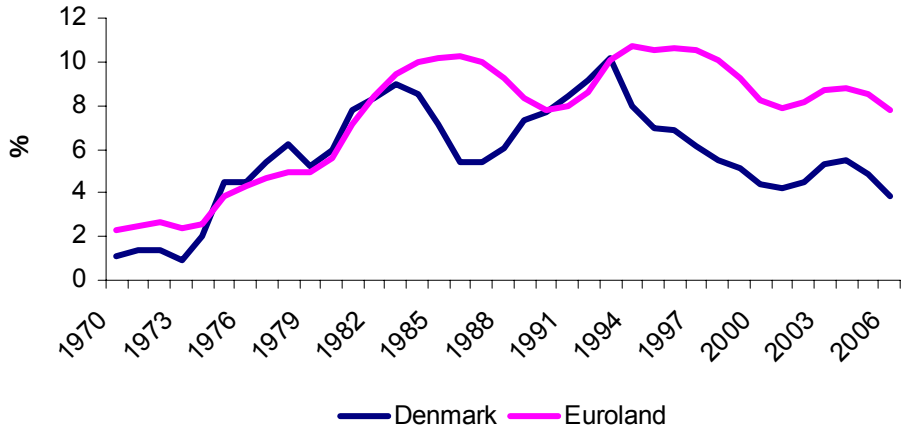
1. Introduction

The so-called flexicurity model has recently attracted much attention, and Denmark is often highlighted as the prime example of this particular mix of a *flexible* labour market with a generous social *security* system. The macro performance in Denmark in recent years, and in particular the significant reduction in unemployment, cf. Figure 1, has fuelled an interest in the flexicurity model.

Figure 1: Unemployment rates: Euroland and Denmark, 1970-2006



Source: OECD.

Discussions in Europe on labour market issues are increasingly organized under the heading of flexicurity, and the EU Commission is preparing a green book on flexicurity to set out some common principles for the EU member countries. The widespread and broad use of the term flexicurity has, however, implied that it has developed into a positively charged concept embracing all nice things about labour market outcomes, and hence the term ceases to be useful. To structure the debate, one can interpret the concept in two different ways. One is broad, seeing it as a question of finding a balance between the flexibility needed for firms in adjusting their labour input and the quest for security for workers, or in economics jargon between incentives and insurance or efficiency and equity. Another is specific, taking it to be a particular policy as e.g. found in Denmark which is considered attractive. The latter interpretation often leads to a "copy and paste" discussion on the scope for transferring this particular policy mix to other countries. On this basis, strong claims on labour market policies are often made like "Protecting jobs with employment legislation is definitely detrimental to employment, whereas protecting workers with unemployment insurance is potentially useful for employment" (Sapir (2005)).

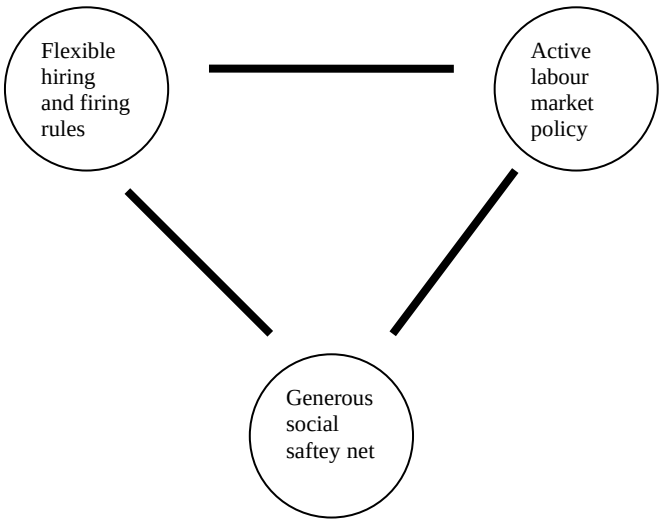
In this paper, we argue that the "copying and paste" discussion is naïve and based both on an incomplete reading of the Danish experience and a neglect of policy complementarities. However, at the more general level concerning how to strike a balance between incentives and insurance, we will argue that the Danish experience includes interesting lessons of both failure and success which are of interest for policy discussions and designs in other countries.

The short version of the Danish story is the following. Hiring and firing rules are rather flexible, and the unemployment insurance scheme is generous by international standards. However, this was also the case in the period from the mid 1970s to the early part of the 1990s, where Denmark was

routinely listed as a crises country with problems for almost any macroeconomic indicator, including high and persistent unemployment. Therefore, the *flex* and the *security* part of the Danish policy package cannot in isolation account for the drop in unemployment. This is not denying that these parts have attractive implications, but it points out that they are no guarantee for a low and stable unemployment rate. To account for the Danish experience, a series of reforms during the 1990s are important. The main thrust of these was a shift from a passive focus of labour market policies to a more active focus on job search and employment. The policy tightened eligibility for unemployment benefits and their duration as well as introduced workfare elements into unemployment insurance and social policies in general. The shift in policy and labour market performance is also to be seen in perspective of macroeconomic developments which contributed to an up-turn in economic activity, and thereby also to the political support for the changes.

The term flexicurity is therefore in some sense a misnomer for the "Danish" model. When the model was a pure flexicurity model resting only on the two legs of flexibility and security, it performed badly and public transfers tended to be an absorbing state. The unemployment rate reached 10 %, and the fraction of the age group 15-66 receiving public transfers increased from about 10 % in 1970 to 30 % in the early 1990s. The social safety net thus served to protect incomes, but not to bring unemployed back into employment, which had dramatic consequences for public finances. The model came to function better when it was balanced with the third leg – active labour market policies – having a clear focus on job search and employment, cf. Figure 2. Prior to the reforms, the welfare system was essentially a passive player between firms benefiting from flexibility and workers from income security. As is often seen in such tripartite relations, the passive player carries all the disadvantages. When a more active approach was taken in labour market policies, it was possible to strengthen employment while maintaining flexibility and income security.

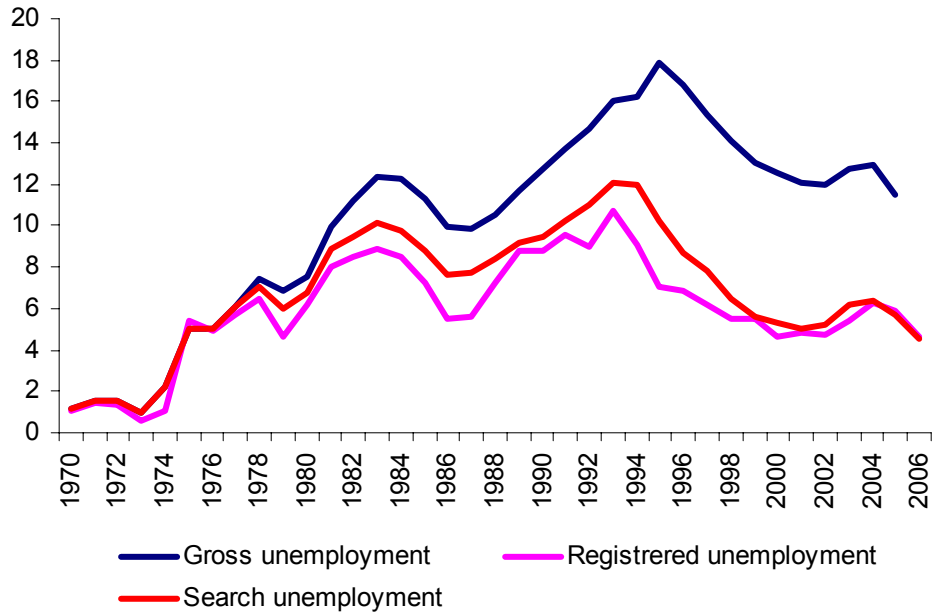
Figure 2: The "Danish" model



It is also important to note that a very different picture emerges if one turns from open unemployment to measures of gross unemployment, i.e. shifting perspective from the available pool of unemployed searching for a job to the implications of non-employment among the working age group for public finances. Figure 3 shows the registered unemployment rate, the search rate based

on those actively searching for a job, and the gross rate calculated as the sum of open unemployment and people in activation, early retirement and the like. First, it is seen that there was some spread between the official and search unemployment rates in the 1980s into the 1990s, suggesting that the system was rather lax in this period. Second, the gross unemployment rate has risen primarily due to an early retirement scheme and activation measures. Finally, although the registered unemployment rate is back to the level at the onset of the oil crisis in the 1970s, this is not so for the gross rate, and the gap between the two has only been marginally reduced. The latter shows that a major transfer burden still remains on public finances.

Figure 3: Unemployment: search, registered and gross



Note: Search unemployment is based on survey data and is measuring unemployed actively searching for a job, the gross unemployment rate equals the registered unemployment rate plus people in activation, paid leave schemes and early retirement.
Source: Calculations based on data from Statistics Denmark.

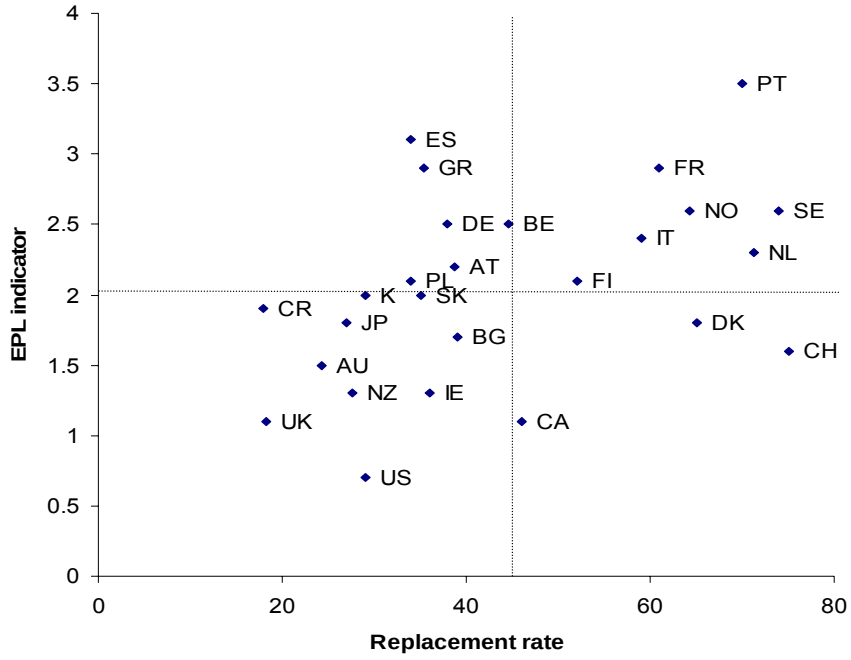
The Danish discussion and experience bring interesting insights on how to strengthen labour market incentives under tight distributional constraints. Denmark has an extended welfare state with a tightly knit social safety net and a high level of public service provisions, all of which are tax financed. Labour market policies and institutions are an integral part of the welfare state. The Danish welfare model is based on ambitious egalitarian objectives, and a strengthening of the incentive structure by general reductions in various benefits included in the social safety net is not a possible policy avenue. Working poor is not a policy option. At the same time, it is important to note that an extended tax financed welfare state presupposes that a large fraction of the population is in employment. Thus, for the model to be financially viable, the employment rate must be high. The reason is simple; when losing their job, most people have an entitlement to some income support, and at the same time, their tax payments are lowered. It is therefore no surprise that Denmark (and the other Scandinavian Countries) have a high labour force participation rate. To put it differently, the welfare model is employment focussed. The critical and challenging issue is how to strike a balance between the social/distributional objectives and the need to maintain a high employment ratio. This balance was lost in the 1970s and 1980s, but the reform process since the mid-1990s has contributed to re-establish it.

The paper is organised as follows: We start out in Section 2 by considering characteristics of the Danish labour market often associated with the flexicurity model and how these are supposed to affect labour market outcomes. Since the main policy change in Denmark is related to the third leg of the Danish model – workfare policies – the following sections take a closer look at active labour market policies and their effects in Denmark. A short introduction to Danish labour and social policies are given in Section 3 as a prelude to the discussion of the reform process in Section 4. In Section 5, we turn to the issue of how workfare policies have contributed to the shift in labour market performance in Denmark, and Section 6 offers some policy lessons from the Danish experience.

2. Danish flexicurity – a model or an outlier?

In cross-country comparisons, Denmark stands out as having rather liberal EPL and a relatively generous unemployment insurance scheme, and for this reason, Denmark is often seen as a "flexicurity"-country. The cross-country evidence presented in Figure 4 does not support the usual perception that lax EPL and a generous IU-system are substitutes in policy packages. It is more appropriate to distinguish between "low" security countries with lax EPL and non-generous UI, and "high" security countries with strict EPL and generous UI. In the latter group, Denmark stands out, being a country with one of the most generous UI-systems, but a relatively lax EPL.

Figure 4: Indicators of EPL and unemployment insurance generosity, OECD countries

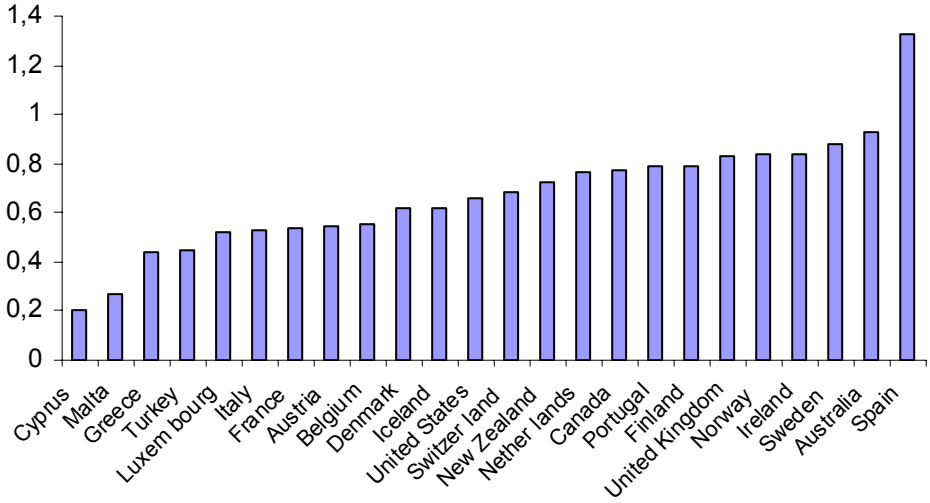


Note: Indicator for EPL is measured on a scale from 0 to 4 in 2003, and the replacement rate measures the average ratio of benefits to wages calculated as an average over 5 years. The dotted lines indicate the median values of the two indicators.
Source: OECD Database and OECD (2004)

In a number of respects, standard perceptions on flexicurity do not match experience from Denmark. It is often hypothesized that a flexicurity system like the Danish is bound to lead to large employment variability, leaving it to the UI-system to cushion the consequences of these

fluctuations. Judging job security by lengths of job tenure, one finds it to be relatively low in Denmark, but this can partly be explained by an industry structure with relatively many small firms and a relatively low average retirement age. More interestingly, employment variability seen relative to output variability is not high in Denmark, cf. Figure 5, i.e. the Danish system does not cause "excessive" employment volatility.

Figure 5: Relative employment variability, OECD countries



Note: Calculated as the standard deviation of employment growth relative to the standard deviation of real gdp growth for the period 1970-2006
Source: Own calculations based on data from Gronningen total economy data base

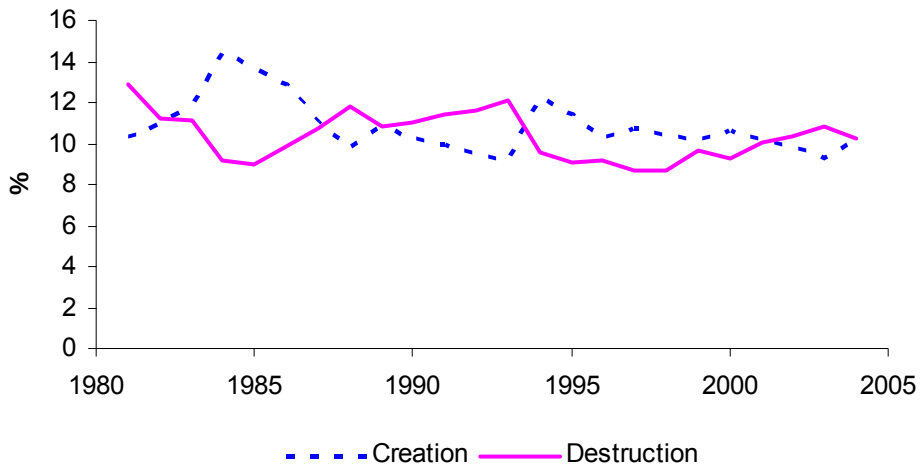
One reason for this may be that even though legal rules are lax, explicit or implicit arrangements arise between employers and employees both to protect firm-specific human capital and to diversify risk. This is supported by several facts. First, labour productivity (level or growth) is not low in Denmark[1]. Second, labour market training is among the highest in OECD (OECD, 2004). Finally, the level of temporary lay-offs is high in Denmark, i.e. the attachment to the (previous) employer is high even for the unemployed (Danish Economic Council, 2002).

These observations are related to the debate on EPL and labour market performance. It is often argued that EPL is conducive to productivity (see Belot et al. (2007)). One argument is that productivity is increasing in tenure (due to e.g. learning by doing and firm-specific training), and since tenure is also strengthened by EPL, it is inferred that EPL is good for productivity. However, the Danish experience does not confirm this, and one reason for this is that implicit contractual relations arise in the labour market. It is therefore not obvious that lax EPL is an impediment to firm-specific training. Lax EPL means that the firm has an easier option to lay off people, but it will normally only want to exercise this option in recessions perceived to be persistent. Moreover, firm-specific training may lower the outside options for the worker, which, in turn, tends to create a locking-in situation. It is therefore more plausible that lax EPL reduces general training/education, but not firm-specific training, and therefore the implications for productivity are less clear.

[1] Average hourly labour productivity is according to calculations by the Gronningen group on par with that in the US. Estimates by OECD and Eurostat have that Denmark has a lower average hourly productivity than the US by 5-10 %, but it is on par with most European countries.

A distinction can be made between job and employment security, where the former refers to protecting and maintaining a given job, while the latter relates to remaining employed but possibly in a different job (firm, function, location etc.). A system of strict EPL tends to provide job security of insiders, whereas a flexicurity system is often portrayed as ensuring employment security. If so, the latter should be more conducive to structural changes, which in itself can have beneficial effects on employment and productivity. It is difficult to compare both actual and potential structural changes between countries. Figure 6 displays job creation and destruction in Denmark as an indicator of the level of structural changes affecting the labour market. It is seen that the level of job flows is high with annual job creation and destruction at about 10 %, but this level is found in many countries. Note that the two periods with net-job creation (mid 1980s and during the 1990s) are both driven by an increase in job creation and a decrease in job destruction, but whereas the first period has large amplitude and is short-lived, the later period has smaller amplitudes but is more long-lived.

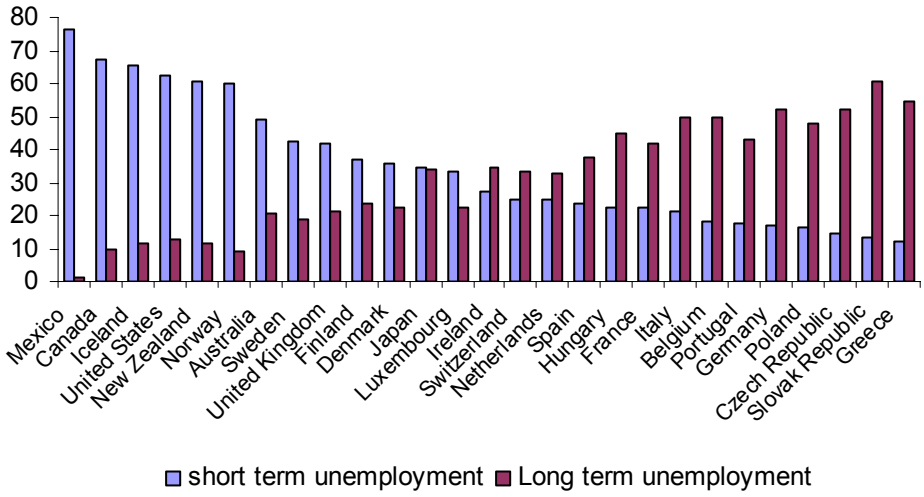
Figure 6: Job creation and destruction in private sector in percent of total employment, Denmark 1981-2004



Note: Based on firm level data covering the entire population of Danish firms. Rikke Ibsen kindly provided the data.
Source: Danish firm register data, Statistics Denmark.

Strict EPL is often taken to lead to more long-term unemployment, whereas more lax EPL leads to a larger share of short-term unemployment. According to this, Denmark should have a relatively high share of short-term unemployment and a corresponding low share of long-term unemployment. As seen from Figure 7, there is no strong support for this conjecture. However, the Danish system may cause a high level of temporary lay-offs due to the flexible dismissal rules and the generous UI-system. In an assessment for 1998, it was found that almost 30 % of all unemployment spells are followed by rehiring by the initial employer within 4 weeks (40 % within 26 weeks), implying that temporary lay-offs accounted for about 10 % of total unemployment (Danish Economic Council, 2002).

Figure 7: Relative importance of short and long-term unemployment



Note: Data applies to 2004. Short-term unemployment is defined as less than three months, and long-term unemployment as more than a year
Source: Data from OECD database, employment.

3. A short primer on unemployment insurance and social assistance in Denmark

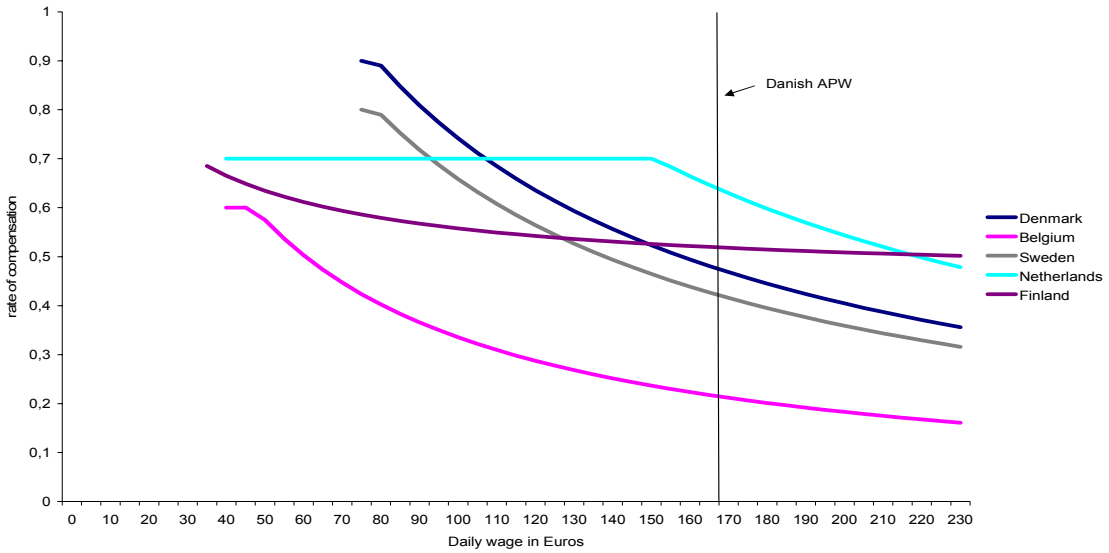
The unemployment insurance system in Denmark is a variant of the Gent model with UI-funds and voluntary individual membership. Contribution rates are determined politically and are the same across all UI-funds. The UI-funds are subsidized by the public sector (in a clearly countercyclical way). Accordingly, the marginal costs of increasing unemployment are fully tax financed. Membership is open to persons with relevant qualifications for the specific UI-fund, or via regular work within its area. The unemployment benefit cannot exceed 90 % of the previous wage (calculated over the last year) or a given cap (currently about 22.300 euros annually, taxable income), and it is indexed to general wage developments[2]. The maximum duration of benefits is 4 years, and the entitlement to benefits can be regained by regular work for at least 6 months within the last 36 months. Moreover, certain activation requirements are associated with claiming of benefits (see below). When UI-benefits expire, the individual would normally be eligible for social assistance – which is also the case for unemployed who are not members of an UI-fund. The social assistance scheme is rather complicated since the benefit level among other things depends on age and marital status, and in addition, there are various means-tested supplements. It is therefore difficult to generalize on the fall in transfer income upon transition from UI-benefits to social assistance. A person receiving the maximum unemployment benefit would experience an income reduction of 20 – 40 %.

It is an implication of this scheme that the replacement rate is strongly dependent on previous income since the cap implies that the 90 % compensation only applies for low income groups. In Figure 8, the replacement rate is depicted as a function of income for DK and other selected

[2] The current indexing formula is from a law enacted in 1990 (revised 2003) according to which all transfers are indexed on the basis of the annual wage increases two years earlier. If the increase is above 2 %, a part of 0,3 % is transferred to a fund (satsreguleringspuljen) which is spent on initiatives aiming at improving the conditions for people on transfers.

countries. It is seen that Denmark stands out by having a high replacement rate for low income groups, but not for higher income. Hence, when the Danish UI system is characterized as very generous, it has to be made with a proviso, and the flexicurity characterization of Denmark is most fitting for low income groups.

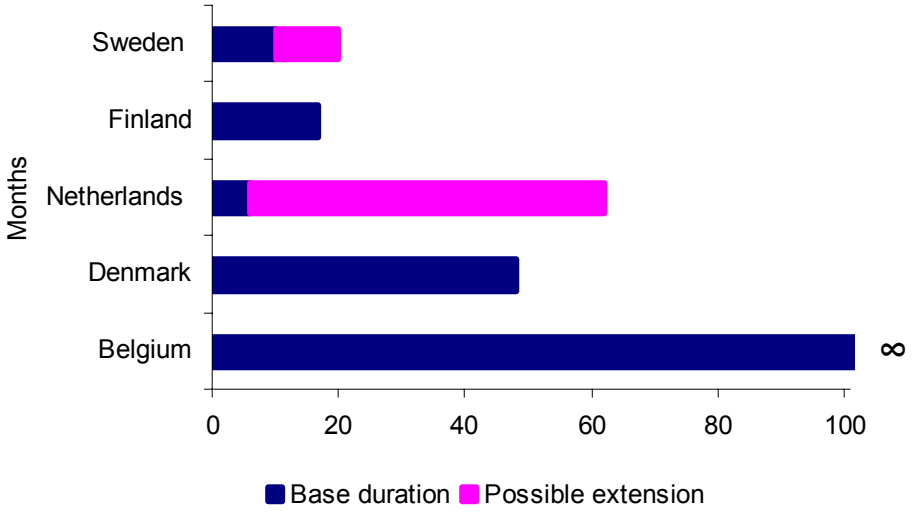
Figure 8 Income dependent replacement rates, Selected countries



Note: Replacement rate in unemployment insurance schemes calculated on the basis of daily income, and for single persons in countries where benefits are dependent on socio-economic variables. Daily wages are truncated at relevant minimum wage levels (for countries with no legal minimum wage the negotiated minimum wages are used).
Source: Own calculations based on European Commission, MISSOC 2006 and ILO.

The duration of unemployment benefit periods has been significantly reduced in recent years (see below), but is still with a 4-year period relatively long by international standards, cf. Figure 9.

Figure 9: Duration of unemployment benefits in selected countries



Note: In the Netherlands, the extension depends on seniority.
Source: European Commission, MISSOC 2006.

The transition from UIB to social assistance implies that the scheme has a time profile; that is, compensation is falling with the duration of unemployment. However, since the duration of UI-benefits is long, the time dependence is weak in international comparisons

Although subsidized, there is still a decision for workers to take concerning unemployment insurance. Currently, slightly more than 70 % of the employed are members of an UI-fund, and analyses have shown that there is a positive relationship between membership and unemployment risk as theory would predict (Parson, Lilleør and Tranæs (2003)) [3]. The relatively low membership rate despite the substantial subsidy can be taken as an indication that the perceived job risk is low for a large part of the employed. The flex part of the system is not generating a strong perception of risk in the labour market. This is also confirmed by survey analyses showing that the perception of labour market risk is particularly low in Denmark compared to other European countries (see Parent-Thirion et al. (2007)).

4. The reforms

What may seem as a grand policy reform strategy in retrospect is the outcome of a sequence of reforms made in a "trial and error" process. The very same government which undertook rather radical supply-oriented labour market reforms actually started out introducing a paid leave scheme[4] based on the lump of labour fallacy. To see the importance of these reforms, it is useful to turn to the economic scene in the early 1990s.

Background

For many years, the unemployment problem was sought to be solved by demand management policies including several devaluations. In 1982, there was a policy shift to a conservative liberal government which in different constellations remained in power until 1992. It made a firm commitment to a fixed exchange rate policy and initiated a disinflationary policy which was accompanied by a boom lowering unemployment, cf. Figure 1. However, this boom ended rather abruptly in 1986/1987 due to high wage increases (9 %) among other things. This happened at a time when the level of unemployment was above 8 %, indicating that unemployment was not only caused by a lack of demand, it also reflected structural problems in the labour market. This incidence came to influence policy making for many subsequent years because this level of wage increases would be jeopardizing the credibility of the fixed exchange rate policy, and thus the overall macroeconomic policy strategy. This experience induced the social partners to agree on the so-called "common declaration" in 1987 committing to ensure wage developments consistent with maintaining competitiveness for the Danish economy[5]. This declaration can be taken as a signal of the social dialogue characterizing labour market developments in Denmark.

[3] An indication that the UI-system may be providing under-insurance for some groups is seen from the fact that the market for private supplementary insurance has been growing in recent years although it is still not quantitatively significant (less than 3 % of the workforce has a supplementary income insurance).
[4] A so-called transition scheme (overgangsydelse) was offered unemployed in the age group 50-59 as a step towards early retirement by waving the condition to be available for and actively searching jobs. This scheme was abolished in 1996.
[5] This declaration also included the strive for a build-up of a mandatory occupational pension scheme.

It is important to note that the experience in the mid-1980s with a booming economy and falling unemployment ending in a wage surge was a lesson on the importance of maintaining medium-term objectives and the need to ensure that labour developments do not jeopardize the overall macroeconomic strategy, including the fixed exchange rate policy. The subsequent period of consolidation came to be known as the "seven bad years" with low growth and persistent high unemployment. As concerns the labour market, the mood was pessimistic because unemployment remained high, and statements like "we have to learn to live with high unemployment" and "too many are chasing too few jobs" were frequently made in the policy debate.

In 1992, there was a shift in government from a minority liberal conservative to a minority social democratic government. As noted, the government started by launching additional passive measures like a paid leave scheme (soon to be phased out when unemployment started to decline). In retrospect, one may interpret the policy shift as a two-handed approach including both demand management policies and supply-oriented labour market policies. However, this was not by grand design, but rather the result of a "trial and error" process in economic policy.

Macroeconomic policies

In 1993/94, fiscal policy was rather expansionary (according to later estimates, the fiscal impact was an increase in GDP growth in the order of 0.5 percentage points in both 1993 and 1994). This was in part due to the phasing in of a tax reform which lowered taxation of labour income and reduced the tax value of interest rate deductibility and other measures to broaden the tax base. To allow for a smooth transition of this change for the housing market, the tax reductions were phased in more quickly than the tax increases, i.e. temporarily underfinanced and thus expansionary. At the same time, domestic demand started increasing, which in part may be attributed to a shift in expectations induced by the expansionary policy. As a consequence, the Danish economy experienced a demand driven boom in the mid-1990s which contributed to reduce unemployment.

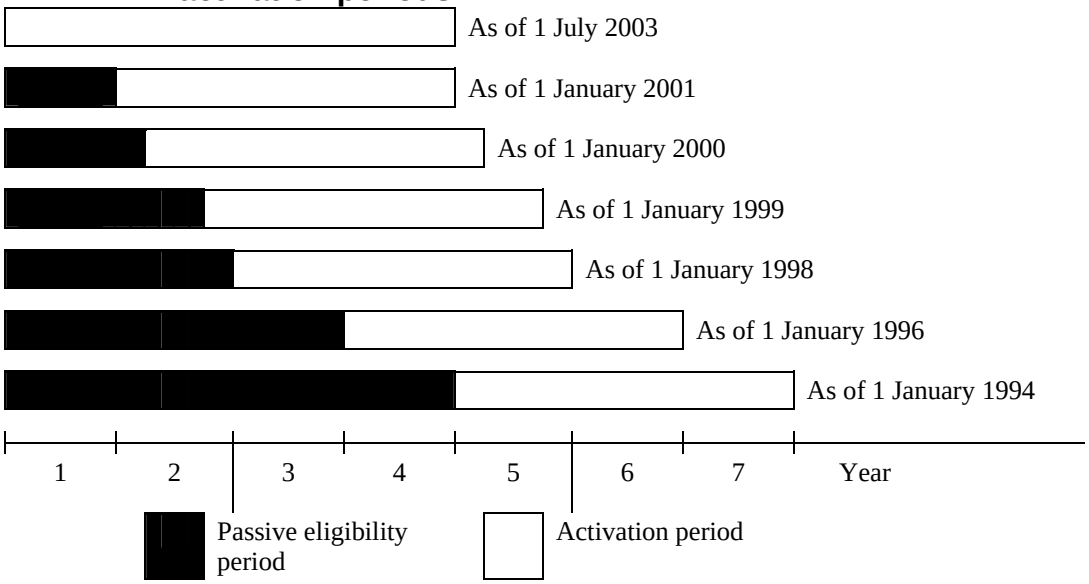
Later, fiscal policies maintained a more neutral role although discussions on the need to tighten fiscal policy to avoid "overheating" of the labour market and a repetition of the 1986/87 experience were often made. A fiscal contraction was made in 1998 as it was feared that unemployment had been reduced to a level where wage increases would take off. This led to a policy package aiming at reducing aggregate demand by both reducing public consumption growth and private consumption (via mandatory savings and an increase in the excise duty on private loans). It is noteworthy that the intervention was anticipatory in the sense of being based on a fear that the development was on a track inconsistent with the fixed exchange rate policy, and therefore an initiative had to be taken before problems grew out of hand

Labour market policies

A sequence of reforms initiated in the mid-1990s and refined in later years has radically changed the system from having a passive focus on income maintenance to a more active focus on bringing unemployed into employment. The main ingredients of the policy changes are: i) a shortening of the benefit period , ii) eligibility for benefits can no longer be re-gained by participation in activation measures, and iii) implementation of activation requirements (workfare) both in the unemployment insurance scheme and in the social assistance scheme.

The sequence of reforms can be gathered from Figure 10 showing the change in the formal length of the benefit period, and its split in a passive and active (workfare) part. Note that the benefit level is the same in both the "passive" and "active" period.

Figure 10 Changes to the social security system – eligibility and activation periods

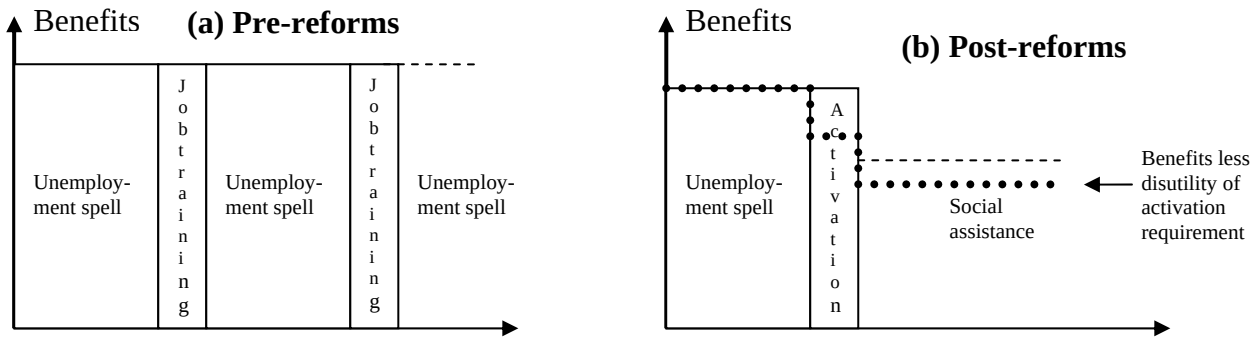


Note: The "right and duty" principle in the activation period was introduced in 1995. As of 2003, there is no distinction between the two periods.

Sources: The Danish Ministry of Finance (1999), The Danish Ministry of Labour (2000) and The Danish Ministry of Employment (2002).

The single most important change is that participation in activation measures (job training) no longer qualifies for remaining eligible for benefits. Before this change, the passive period was effectively open-ended since benefits combined with occasional job training would ensure continued eligibility for benefits. As illustrated in Figure 10, the system before the reforms effectively implied an infinite benefit period since despite a formal duration of 7 years, a new benefit period could be gained by participating in a job-offer scheme. As a consequence, the shift from UI-benefits to social assistance seldom occurred for people in the UI-system. After the reform, the system is as illustrated in Figure 11.b; the benefit period is shorter, activation is compulsory to remain eligible for benefits, and participation does not qualify for fulfilling the employment criteria to remain eligible for UI benefits, i.e. the transition from UI-benefits to social assistance (also associated with activation requirements) is a real option. The time profile of compensation offered (including efforts exerted in activation) therefore has a more clear time dependency after the reforms.

Figure 11: Shift in labour market policy: from infinite benefit duration to fixed time duration with workfare



The shift in labour market policy from a passive to an active focus was launched by appealing to a so-called "*right and duty*" principle. The argument being that the individual, on the one hand, has a *right* to income support, but, on the other hand, also a *duty* to actively search for jobs and being willing to work. At the same time, society has a *right* to demand something from recipients of income transfers, but also a *duty* to help improving job prospects. This can be interpreted as reflecting that the welfare state builds on reciprocity and work norms, cf. below. The "right and duty" principle was initially only applying to the UI-system, but in 1998, it was extended to also apply to social assistance.

The political constraint that labour market incentives are not to be improved via general reductions in benefits has one important exception, namely, the youth unemployment programme enacted in 1996 and later extended. The basic idea of the programme was twofold, namely, to shorten transfer duration and to strengthen economic incentives to educate. The background was a high youth unemployment rate and the fact that young people to an increasing degree were in long-term positions depending on transfers (mainly social assistance) at the same time as the economic incentive to undertake education was low (social assistance exceeded study grants). The youth unemployment programme addressed both of these problems. The programme introduced mandatory activation of all young unemployed below the age of 25 with labour market relevant education after 6 months of unemployment. The activation could be an education programme with a duration of at least 18 months, possibly in the ordinary education system. At the same time, social assistance was lowered to the level of the study grant. The programme was in a sequence of steps extended to include all young and to have mandatory activation after no more than 13 weeks. In 2003, the age group 25-29 was also included in the scheme although this group does not face a lower compensation.

EPL and flexibility

Denmark has a long tradition of flexible dismissal rules. Since the end of the 1980s, the only change to the Danish employment protection rules has been in relation to temporary employment contracts. Thus, more employment categories have been allowed to use temporary employment contracts. There are no longer limitations on how often the temporary contracts can be renewed, and there are no upper limits as to how long one can be employed on temporary contracts. Since the use of

temporary employment in Denmark is relatively limited (only about 8 % of total employment), it is difficult to attribute a major role to this shift in accounting for the decline in the aggregated unemployment.

In other dimensions, there have been important changes. One is that employers have obtained more flexibility in varying working time; that is, an average condition applies in the sense that daily and weekly working hours are allowed to vary within certain bounds as long as the average working hours over a certain period is in accordance with negotiated working hours.

Wage formation has traditionally been centralized but shifted during the 1980s towards an intermediate level of centralization. Calmfors et al. (2001) report an index[6] for centralization/coordination of the bargaining system taking both horizontal and vertical elements into account and find that for Denmark, it has dropped from 0.64 for the period 1973-77 to 0.47 for 1983-87 and 0.34 for 1993-97. With the increased decentralization of wage formation, it is natural that there have been changes in wage systems in the labour market in the sense that more workers are now employed under a wage system allowing local and individual variations in wages, and fewer workers are under the traditional wage system implying a centrally stipulated wage.

5. Workfare – does it work?

The popularity that workfare policies seem to have among policy makers is not quite matched by the more hesitant support found in both the theoretical and empirical literature on the effects of workfare policies on unemployment. In the following, we first present some theoretical considerations in order to explain the traditional ambiguous views on the effects of workfare, and to point to an often neglected effect which may be crucial for the overall effects of workfare policies on labour market performance. The theoretical analysis is also useful in identifying key dimensions of workfare policies to be considered empirically. We then briefly describe workfare policies in Denmark before turning to empirical evidence from Denmark which is related to both the theoretical considerations and the international empirical literature.

5.1. Workfare in theory

In the following, we present the thrust of a theoretical model bringing together the main channels through which workfare may affect labour market outcomes. This section draws on the theoretical model analysed in Andersen and Svarer (2007).

Workfare is here understood as some activation programme in which participation is a precondition for remaining eligible for unemployment benefits or social assistance. It is useful to consider this type of policy in two dimensions, namely, the work requirement associated with the programme, and the fraction of unemployed in activation programmes. The latter may also, from an individual perspective, be seen as the probability of being requested to participate in the workfare programme or its (expected) duration. The two dimensions turn out to have different implications.

[6] Defined to belong to the unit interval. A value of 1 corresponds to fully centralized and 0 to fully decentralized bargaining.

Individuals in the labour market can be divided into three groups, namely, employed, unemployed and unemployed in activation. Workfare policies in both its dimensions affect all three groups, and we take them in turn.

It is obvious that workfare policies directly affect unemployed in activation, and therefore this theme has traditionally been most in focus. A key effect is that the work requirement may crowd out ordinary job search; that is, the larger the work requirement is in terms of e.g. hours per week, the less time or effort would be left for job search. This is the so-called locking-in effect which is detrimental to job creation. This may be countered by a potential post-programme effect to the extent that participation in the programme improves human capital and therefore job prospects after completion of the programme.

The unemployed who are not in activation are also affected by workfare policies since they may be requested to participate in activation programmes to remain eligible for benefits. The possible future transition from unemployment to activation may induce them to search more intensively for a job, and to lower their reservation demands for the type of jobs (job tasks, location, employer etc.) they are willing to accept. This can be phrased in the way that the threat of being required to participate in an activation programme motivates the unemployed to search more actively for a job, and hence this threat/motivation effect is conducive to job creation. The threat effect depends both on the work requirement in the activation programme and on the probability of being required to participate in activation. Workfare can thus be thought of as a time-dependence in the benefit scheme or a stochastic change in the conditions (penalty) for claiming benefits, and to the extent that unemployed find this less attractive than unconditional access to benefits, it follows that search intensity increases.

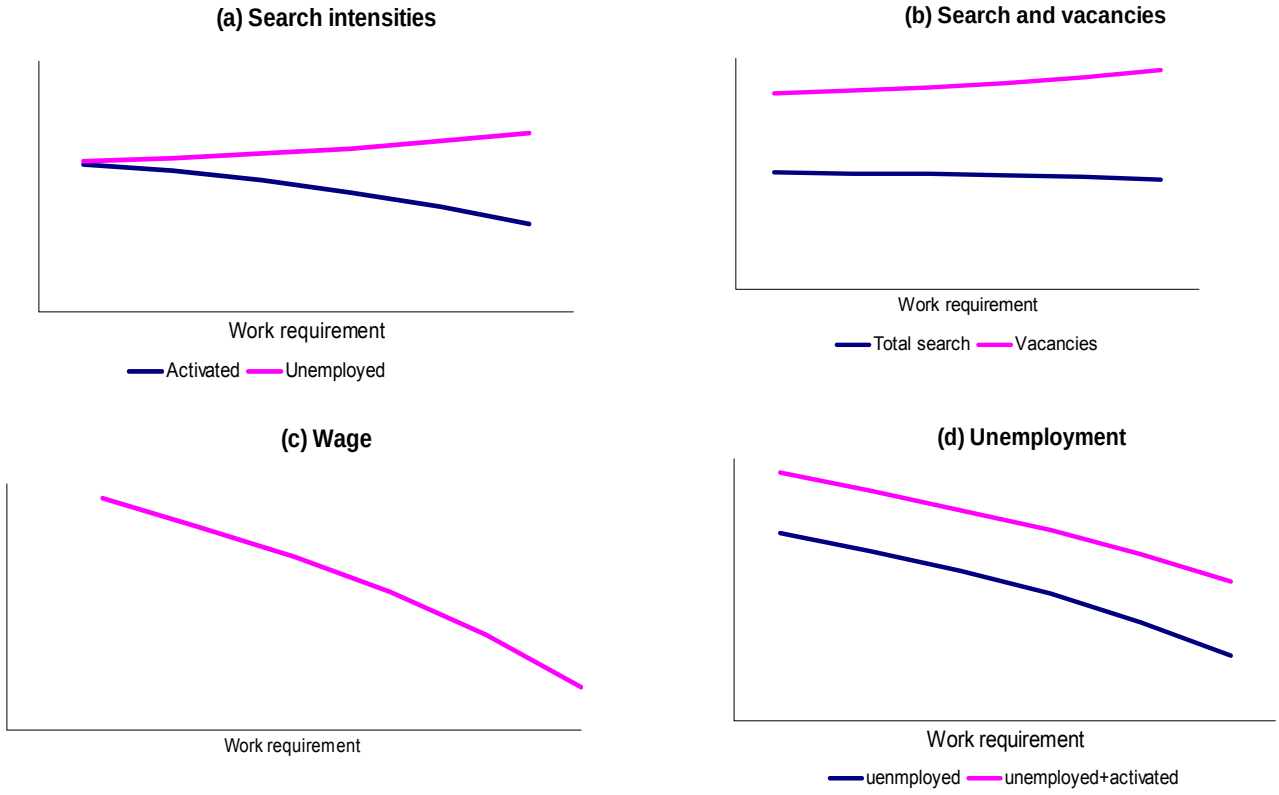
Summing up on the search effects of workfare, it consists of both a possible negative locking-in effect of the activated and a positive threat/motivation effect for the unemployed. The net effect on search intensity among those without a job is thus theoretically ambiguous, and it is an empirical issue which effect dominates. Most empirical assessments of workfare policies have focus on the search effects (and post-programme effects), and the theoretical analysis suggests that these effects may be ambiguous, which, in turn, explains why many observers are sceptical as to whether workfare would significantly affect labour market outcomes.

The employed are also affected by workfare policies. The effect is indirect and arises from the fact that employed may lose their job, and if unemployed, they are affected by workfare policies. The outside option or alternative for the employed if out of job becomes less attractive, and this will under very general assumptions imply that wage demands are moderated. Wage moderation is conducive to job creation and therefore in equilibrium increases the job-finding rate.

The presence of the wage effect is important for the effects of workfare policies, not least for empirical evaluations of workfare policies. Figure 12 illustrates the interaction between the different mechanisms outlined above by means of the model analysed in Andersen and Svarer (2007). The figure illustrates how key variables depend on the work requirement of workfare programmes. Figure 12a shows search effort for the activated and the unemployed, and it is seen that there is a locking-in effect for the former group and a threat effect for the latter, in accordance with the reasoning above. Total search effort is displayed in Figure 12b and is almost constant due to the counteracting locking-in and threat effects. The figure also displays job creation (vacancies) which are increasing due to wage moderation, cf. Figure 12c. The implication is that unemployment falls

both when considering registered unemployment (unemployed not in activation) and total unemployment including those in activation, cf. Figure 12d. Observe that the figure does not – but the model does – take into account the resources used in workfare policies, and hence even though unemployment falls, there may be a reduction in overall consumption possibilities due to implied tax increases.

Figure 12: Search, job creation, wages and unemployment



Note: Based on simulations of of theoretical model.
Source: Andersen and Svarer (2007).

It is an implication of Figure 12 that judging the effects of workfare policies solely from empirical analysis of search behaviour or the number of agents in activation may be misleading indicators of the effects workfare policies have on overall labour market performance.

The stylized theoretical considerations also point to the fact that the composition of workfare policies in terms of work requirement and incidence may play an important role. Having few in a workfare programme with a high work requirement may not contribute as much to bringing down unemployment as a policy with a smaller work requirement but a higher incidence. The reason is that the former mainly has a locking-in effect, while the latter releases a stronger threat effect.

There is a further effect of workfare policies not captured above, namely, a screening effect. In a passive system with lax conditions for maintaining eligibility for benefits, some may claim benefits without being interested in finding a job, e.g. because they work in the shadow economy or because they enjoy non-market activities/leisure. The work requirement implied by workfare implies that it becomes less attractive for non-job seekers to claim benefits, and as a consequence, they may either

leave the labour force or become genuine job seekers. The screening effect thus implies that transfers are better targeted to non-employed job seekers (Besley and Coate (1992)).

A number of important points for policy design can be derived from the preceding considerations. Workfare has here been considered as a condition to remain eligible for benefits rather than an option to prolong the benefit period, cf. Figure 11 above. In the latter case, the effects – especially the wage effect – may easily be reversed. Crowding out may also arise if workfare is considered as a "job option" on par with regular jobs. Evaluations of active labour market policies in Sweden point to the crowding out mechanisms which can arise in these cases (see e.g. Calmfors, Forslund and Hemström (2004)). Similar issues arise if the scheme includes employment subsidies, and thus the question of whether regular jobs are crowded out (see e.g. Kangasharju (2007)). In this respect, it is important to note that labour market policies in Denmark have shifted from a passive focus on income maintenance to a more active focus on employment and job search.

The reasoning above has the important implication that labour market incentives can be strengthened via workfare policies. Under a binding distributional constraint in a welfare state, this may be a more attractive route by which to reduce unemployment than a reduction in benefits. A "utilitarist" would argue that this is a deception since to any workfare requirement there is a benefit reduction which leaves the unemployed with the same utility level. Hence, in utility terms, no extra degree of freedom is gained in economic policy by use of workfare policies as an alternative to benefit reductions. This is not quite that simple since workfare affects the utility of employed, unemployed and the activated in different ways, and therefore there is not a one-to-one relation between benefits and workfare requirements for the three groups. This is, however, a subtle argument. More important politically, is the fact that income or consumption possibilities are pivotal in discussions on distribution, whereas utility is not. This partly reflects that income is measurable and inter-personally comparable, while utility is not. Moreover, as noted above, in a society with a strong work ethic and employment focus, it is not problematic politically to ask people to do something in return for support, whereas it may be so to reduce the support to those without a job.

Finally, note that the effects of workfare policies on unemployment should be seen relative to the resources going into administration and programme activities. These resources have to be financed via taxes with distortionary effects. Hence, a reduction in unemployment – open and total – may be achieved at a too high cost. We return to this question in Section 6.

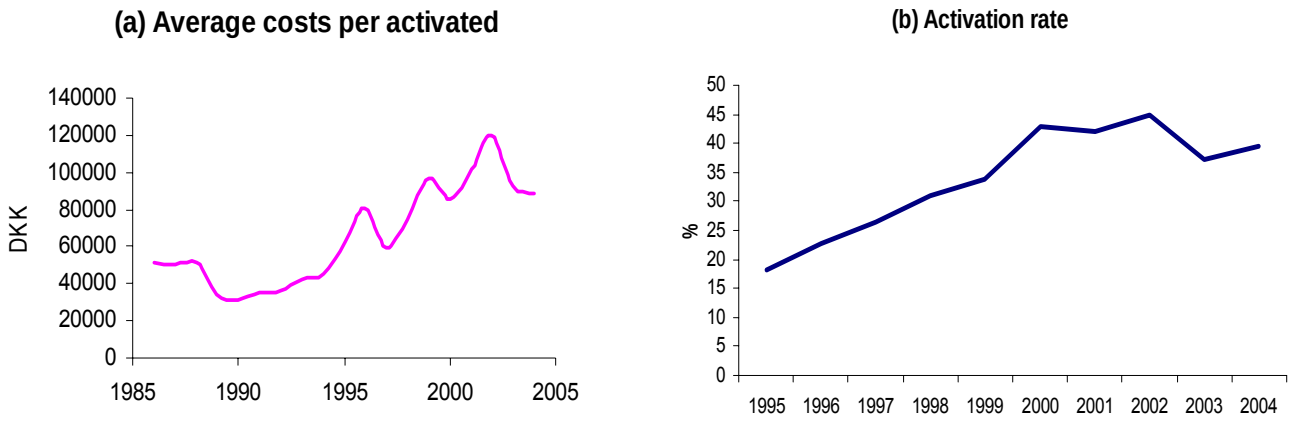
5.2. Workfare in practice

The emphasis on workfare elements in unemployment insurance and social policies have implied that active labour market policies are used much more intensively. Various forms of active labour market programmes were also used prior to the reform, but with the main purpose of allowing participants to re-qualify for a new benefit period. The more active use of active labour market policies both as an indirect job search test and to improve job prospects implied a large increase in active labour market policies.

For the period 1986-93, average costs of active labour market policies constituted 0.9 % of GDP, and for the period 1994-2004, it has been 1.3 % of GDP. The increase reflects both that the costs per activated have risen, cf. Figure 13a, since more expensive forms of activation like education

have been used more extensively, and also that a larger number of unemployed have been participating in activation programmes, cf. Figure 13b.

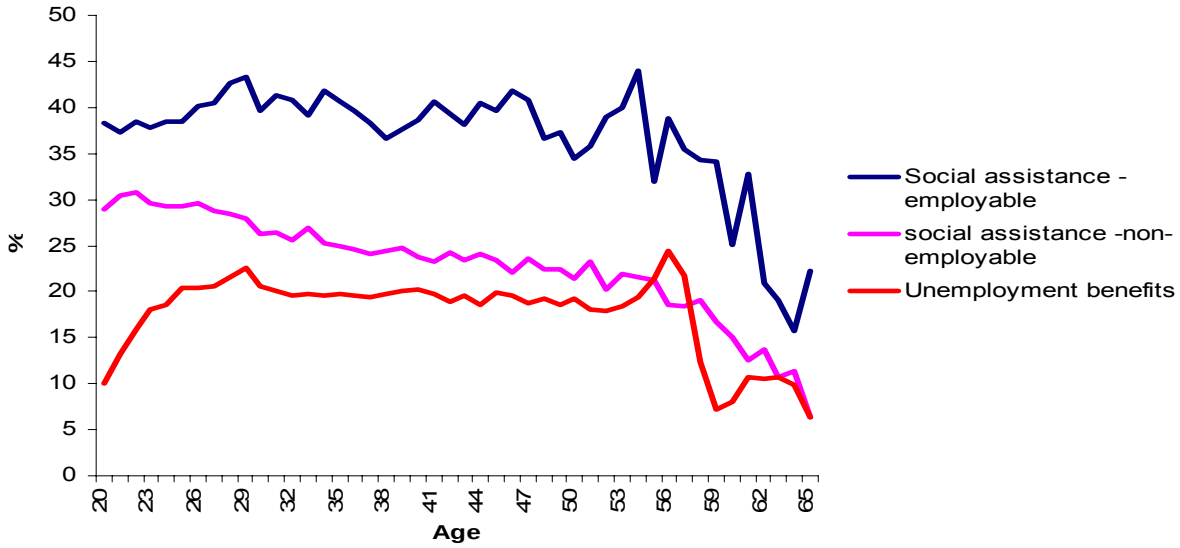
Figure 13: Activation – Costs and extent



Note: Costs are average cost on active labour market programmes per activated. Activation rate is calculated as number of activated relative to number of unemployed. A consistent series for the activation rate does not exist prior to 1995.
Source: Calculated on the basis of data from various editions of OECD Employment Outlook and from data from Statistics Denmark.

Activation requirements apply to unemployed if they are entitled to unemployment insurance, or if they receive social benefits. However, the activation requirements are different (and have changed over the years). The main principle is that an activation offer should be given no later than after 12 months unemployment (after 13 weeks if age is below 30), and a new offer should then be given after each 6-month period. The extent of activation differs both by age and across insured and non-insured. The non-insured receiving social assistance who are considered employable are activated more often than the insured.

Figure 14: Age-dependent activation rate – unemployment insurance and social assistance



Note: Activation rates are calculated on the basis of full-time equivalents relative to the group of unemployed with unemployment insurance, and the group receiving social assistance, respectively.
Source: Arbejdsmarkedsstyrelsen

The most common type of activation is education, cf. Table 1, although its importance has been reduced somewhat in recent years where job training and other forms of activation have increased in importance. The average duration of an activation activity is close to 6 months for job training, and a little less for other forms of activation.

Table 1: Activation types and duration

	1995	1998	2001	2003
Activated	54.460	56.040	59.490	62.760
	----------%----------			
Activation type				
Private job training	13	10	7	9
Public job training	33	17	13	16
Education	33	56	69	52
Other	20	18	11	23
	----------weeks----------			
Duration				
Private job training	26	23	25	27
Public job training	34	36	30	26
Education	23	21	18	17
Other	56	32	19	18

Note: Duration is the average duration of both completed and non-completed activation programmes. "Other" includes intensified job search, specific designed projects etc. For 2003, the data applies to the period July 1st 2003 to June 30th 2004.
Source: Danish Economic Council (2007)

5.3. Empirical evidence

Following the increased use of active labour market programmes in the past decades, there has been an increased interest in evaluating the effectiveness of these programmes in terms of bringing unemployed closer to the labour market and also to enhance their level of productivity, which should result in higher wages and more stable employment trajectories. The empirical literature has primarily been focused on the immediate effects of active labour market programmes, but recently, there has also been a raise in the number of analyses of long-term effects of active labour market programmes.

The main effects of workfare policies have been discussed in Section 5.1. When discussing the empirical evidence, it is useful to distinguish between the effects directly affecting the unemployed and the general equilibrium effects. The former relates to the threat, locking-in and post-programme effects, while the latter mainly relates to the wage effect. We consider the empirical evidence on these in turn.

Does participation in workfare programmes enhance job finding rates?
As mentioned above, there are several potential effects of activation on unemployment. As illustrated below, these effects set in at different points in time over the course of an unemployment spell.

Figure 15: The effects of workfare on the job finding rate

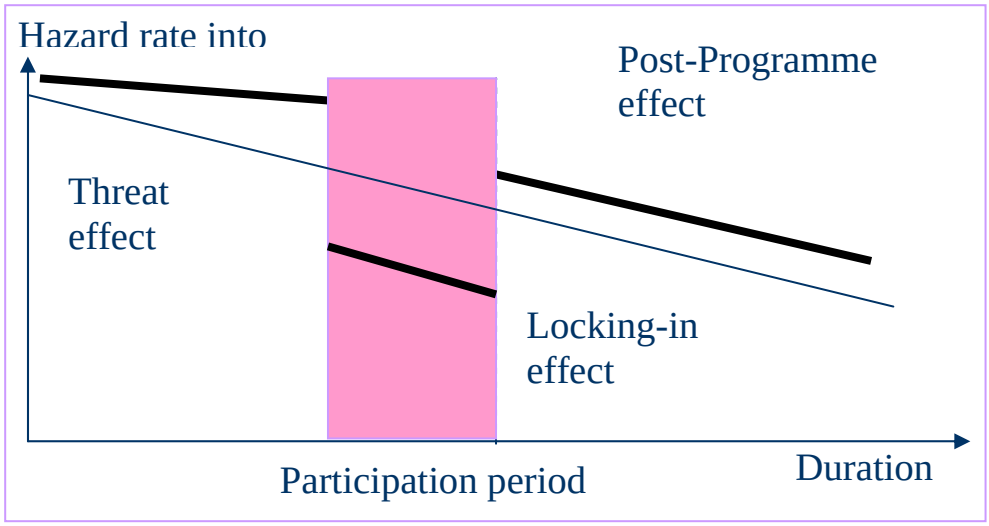


Figure 15 illustrates the three effects in terms of a hazard rate analysis where the hazard rate gives the instantaneous probability of leaving unemployment at a given point of elapsed unemployment duration. As shown, the potential for workfare to lower the duration of unemployment requires that potential positive threat- and post-programme effects dominate a potential negative locking-in effect.

Locking-in and post-programme effects

There have been numerous investigations of especially the locking-in and the post-programme effects of the active labour market policy in Denmark as well as internationally. The conclusion of the international literature is that the job creation effects of the system are questionable (see e.g. Heckman et al. (1999) and Kluve (2006)). Similar findings are found in Denmark. In relation to most activation programmes, the locking-in effect is quite significant, whereas the post-programme effects in most cases are minor, if not absent (see e.g. Skipper and Munch (2007)). The most positive effects have been registered for private job training.

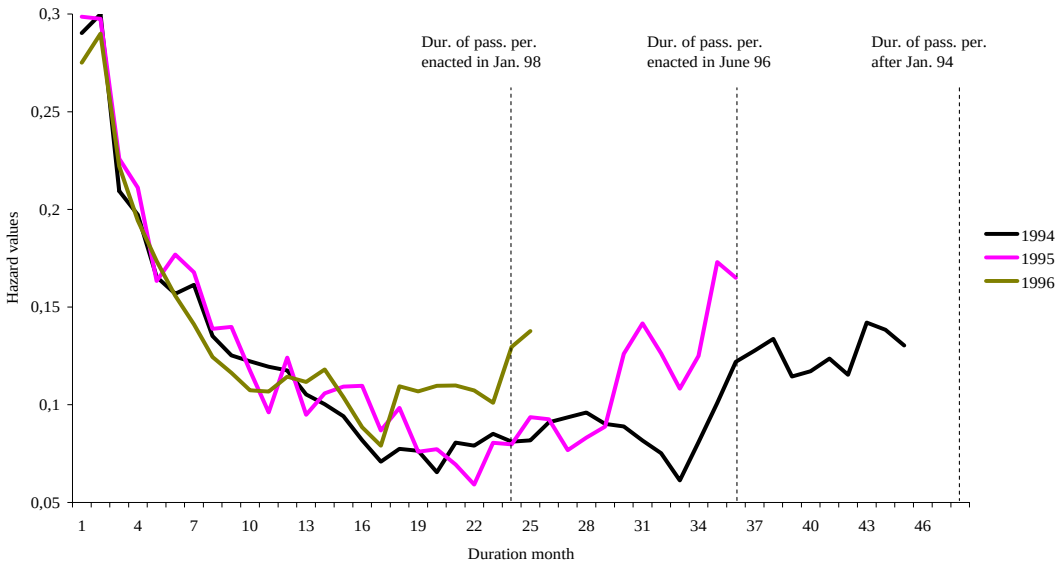
Threat/motivation effects

While it is natural in the first place to focus on the direct effects of workfare policies on those in the programmes, subsequent work has pointed to the importance of considering the effects ex ante to possible entry into the programme, i.e. the threat/motivation effect discussed above.

In an influential study, Black et al. (2003) find, based on an experimental design, that active labour market programmes in the US reduce mean weeks of UI benefit receipt by about 2.2 weeks, that they reduce mean UI benefits received by about $143, and that they increase subsequent earnings by over $1,050. Most, but not all, of the effects result from a sharp increase in early UI exits in the treatment group relative to the control group. These exits coincide with claimants finding out about the mandatory programme obligations rather than with actual receipt of employment and training services.

This article inspired several studies based on Danish data. Geerdsen (2006) exploits legislative changes in the duration of benefit periods to identify threat effects. In Figure 10 we showed how the so-called passive period has been shortened through the 1990s. Geerdsen (2006) finds that moving the active period forward affects the transition rate from unemployment to employment in a positive direction. This effect is large and is even comparable in size to the effect of benefits exhaustion found in studies of American UI systems. In Figure 16, it is shown how the exit rate from unemployment to employment is affected by the change in legislation.

Figure 16: Empirical hazard rates for exit rates out of unemployment

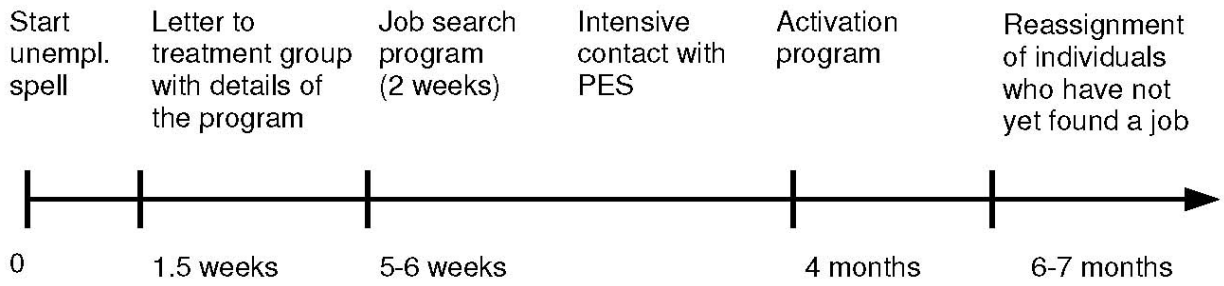


Source: Geerdsen (2006)

In a related study, Rosholm and Svarer (2004) consider the threat effects and the locking-in/post-programme effect simultaneously. Specifically, they allow the individual risk of being activated to have a direct effect on the exit rate from unemployment, and they find, especially for men, that the risk of being activated significantly increases the job finding rate. On average, the unemployment period for men is reduced by around 3 weeks, or by approximately 10 %.

One disadvantage of studies of the type referred above is that they rely on non-experimental data, and as a consequence, these studies need rather strict identifying assumptions to generate appropriate control and treatment groups. Interestingly, the Danish Labour Market Authority has recently implemented a controlled experiment in two Danish counties. In the period from November 2005 to March 2006, all newly registered unemployed were split into two groups depending on their birthday. All who were born from the 1st to the 16th in a given month constituted the treatment group, the rest the control group. The control group followed the going rules in the labour market, whereas the treatment group were exposed to an intensified sequence of monitoring, counselling, job search assistance and mandatory programme participation. The sequence of activities for the treatment group can be seen in Figure 17.

Figure 17: Sequence of activities for treatment group



Source: Danish Economic Council (2007)

Both Graversen & van Ours (2006) and Rosholm (2007) have evaluated the experiment. They find significantly higher job finding rates for the treatment group, which can be attributed to the fact that they have to attend more meetings and face the risk of activation earlier during the unemployment spell than the control group. Rosholm (2007) does not find any evidence that participating in job search assistance or other active labour market programmes help unemployed back to work.

Empirical evidence for Denmark confirms that threat effects are present and also quantitatively important. However, the substitution and displacement effects of active labour market programmes have not been systematically investigated. Also, internationally the empirical evidence is rather modest on these issues. A recent attempt on Finish data shows that firms who hire subsidized labour experience a real increase in total employment, and firms in the same industry do not seem to suffer from their potential competitive disadvantage (Kangasharju (2007)). This suggests that substitution- and displacement effects are not a major issue, but clearly more research in this area is needed before any firm conclusions can be drawn.

Are there effects to be found in the long run?

Recently, more focus has been directed at the long-term effects of active labour market programmes. As we argue later in this article, it could very well be the case that workfare programmes help unemployed getting closer to employment and hence reduce the risk that they become long-term recipients of public support. There are by now a substantial literature that has shown that welfare dependency today increases the risk of welfare dependency tomorrow (see e.g. Prowse (2005)). This implies that the long-term benefits of workfare policies are potentially large if they succeed in minimizing the number of unemployed being trapped in welfare dependency.

Long-term evaluations obviously require micro data that follow individuals for a number of years after participation in workfare programmes. Lechner et al. (2006) exploit data from West Germany to estimate short- and long-term effects of government-sponsored training programmes. They find – in line with the literature cited above – a negative employment effect in the short-run for all programmes. However, in the longer run, they find that most programmes seem to increase employment rates by about 10 percentage points. In essence, it takes time before the post-programme effects come to dominate the locking-in effect.

The German findings are more or less corroborated in a recent Danish investigation by the Danish Economic Council (2007). Here, long-term effects of four different types of programmes are investigated in terms of subsequent employment rates and wages. Again, the short-term effects are negative, but for several of the programmes both employment rates and wages are positively affected by participation in especially private job training and other programmes than education and public job training.

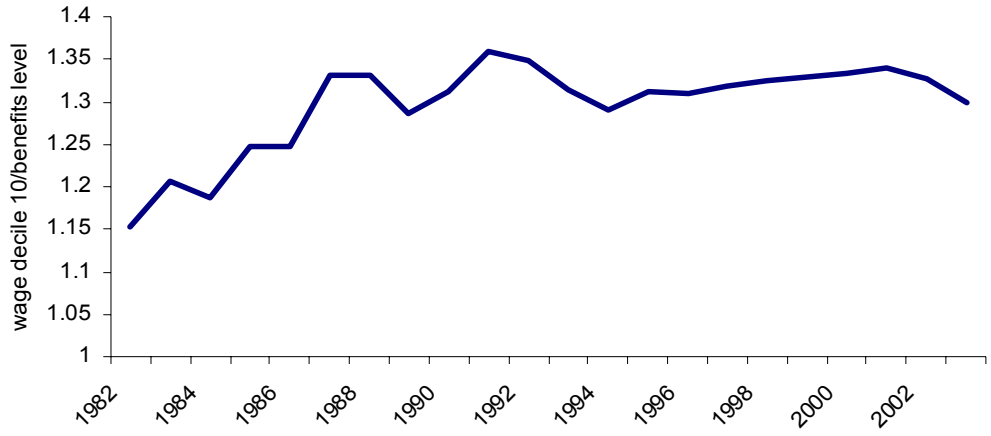
The cited studies suggest that a potential long-term effect of workfare policies is to minimize the risk of welfare dependency for individuals, and therefore, in turn, the fraction of unemployed being permanently dependent on transfers. More research is needed on this before firm conclusions can be drawn on the quantitative implications of this mechanism.

Wage effects

Including workfare requirements among the eligibility conditions for benefits imply that the outside option for employed workers becomes less attractive. A large class of wage bargaining models predict that this will tend to lower wage demands, i.e. the mark-up of wages over benefits is reduced, and this wage effect will, in turn, be conducive to employment. We expect this effect to be strongest in the lower end of the wage distribution for two reasons. First, unemployment risks are in general higher for this group, and therefore unemployment benefits and the conditions attached to them matter more for this group. Second, since the Danish unemployment benefits are determined both by an absolute maximum and as a percentage of past income, it follows that the replacement ratio is declining in income, cf. Figure 8, and therefore the largest incentive effect is expected for groups with high replacement rates.

To evaluate whether there is such a supply side effect we consider both wages and employment for low wage groups. A necessary condition for this supply side effect to be present is that there is both a downward pressure on wage setting and an upward move in employment. To assess the wage effect, we present in Figure 18 the ratio of wages in the lower end of the wage distribution (decile 10) to the absolute benefit maximum. It is seen that during the 1980s there was an upward trend in this ratio despite a high unemployment level. The upward trend was broken in the 1990s despite the significant reduction in unemployment. This is suggestive that the labour market reforms have had a direct effect on wage formation. A similar tendency is found for higher wage levels, but it is strongest in the lower end of the wage distribution as should also a priori be expected.

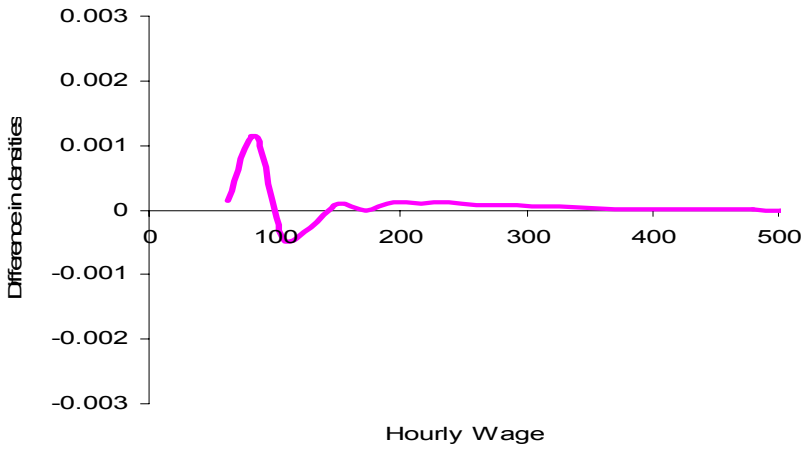
Figure 18: Low wages relative to maximum unemployment benefits



Notes: Calculated as the hourly wage for decile 10 in the wage distribution. There is a break in calculation of hourly wages, which implies a drop in the wages from 1992 to 1993. We have corrected the wages so that hourly wages after 1992 are comparable to wages prior to this year.
Source: Own calculations based on data from register data from Statistics Denmark.

The finding of Figure 18 suggests that part of the employment increase should be found in the lower end of the wage distribution, and thus that it is possibly driven by the workfare policies. To assess whether this is the case, we have considered the wage distribution year by year to see where in the distribution most employment growth takes place. We use 1990 (pre reform) as the base year and compare it to the wage distribution for all subsequent years (corrected for average wage growth between the years). If the wage distribution in a subsequent year has more mass over a given income interval, it follows that most of the employment growth has been concentrated in this income interval. Figure 19 shows one such comparison for 1996 relative to 1990, and it is seen that the wage distribution in 1996 has much more mass at the lower end than in 1990, i.e. in comparing employment in the two years, one finds relatively more employment in the lower end of the income distribution in 1996 compared to 1990. This is consistent with the finding above on the wage mark-up.

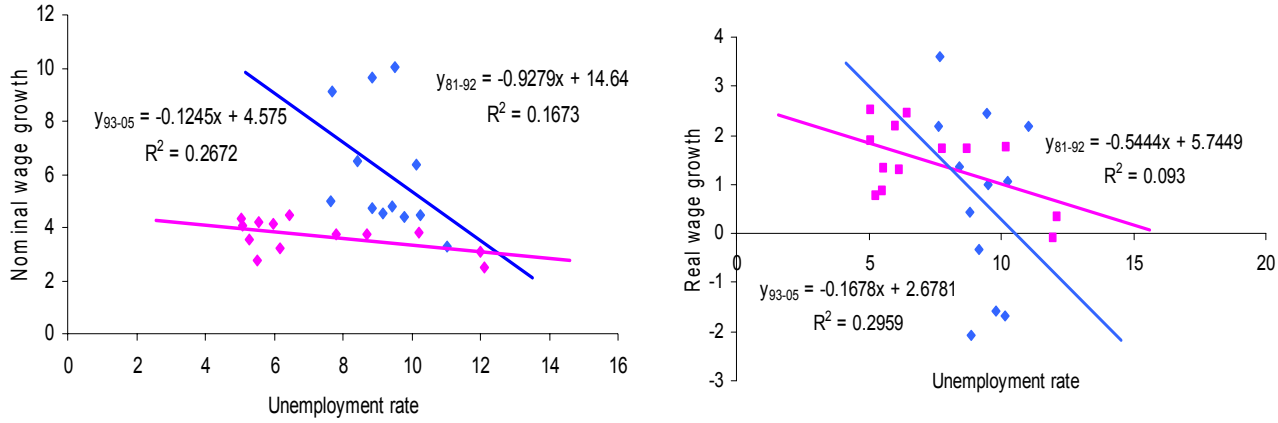
Figure 19: Employment creation and wages



Note: The wages are hourly wages for the total Danish working population.
Source: Own calculations based on register data from Statistics Denmark.

The fact that wage formation has been affected is also seen from macro wage relations. During the reform period, the most widely used wage relations for business cycle forecasting systematically overpredicted wage increases (see e.g. Andersen (2006)). An indication of the changes is seen from the Phillips curves shown in Figure 21 comparing two periods 1981-1992 and 1993-2005, where it is noted that both periods include a booming economy with strong growth in domestic demand. Since over the period there is a substantial difference in inflation due to the disinflationary policy, the Phillips curve is shown both in the standard form relating nominal wage increases to unemployment, and in a real version where real wage growth is related to unemployment. The former can be interpreted as being based on "naïve" expectations assuming price inflation to be zero, and the latter as being based on "forward looking" expectations in the sense that actual price increases are perceived. In this way, the two versions of the Phillips curve span different expectations assumptions over the disinflationary period, and in either case, it is seen that there is a significant shift in the Phillips curve in the sense that it both shifts inwards and becomes flatter. Based on the real-version of the Phillips curve, the rate of unemployment consistent with real wage growth of 2 % (equal the trend growth in productivity) has fallen from about 7 % to 4 % between the two periods. While suggestive, the macro wage relations suffer from the problem that the effects of reforms cannot be captured in some simple time series, and hence the inference has to be indirect. Finally, it should be noted that the finding of "more flat Phillips curves" is not a particular Danish phenomenon, but is experienced in many countries (see e.g. OECD (2007)). In addition to changes in labour market policies, possible explanations include more decentralized wage formation and various effects of globalization. A more elaborate empirical investigation of the main determinants of the changes in the wage distribution is beyond the scope of this article, but is indeed a promising research area for future work.

Figure 20: Phillips curves: Nominal and real, 1981-1992 vs. 1993-2005



Source: Own calculations based on data from Statistic Denmark

Finally, it should be noted that the preceding discussion has entirely focussed on assessing the effects of workfare policies since they have been central to the Danish policy shift. However, as noted above, the policy shift also included other elements including a shortening of the benefit duration and tighter eligibility rules for claiming unemployment benefits. A large empirical literature has documented the role of unemployment insurance for unemployment (see e.g. Lalive et al. (2006)), and these changes are therefore also important in accounting for the shifts in the Danish labour market performance.

7. Workfare – is it worthwhile?

Workfare policies are costly both in terms of administration and programme costs. Given the extensive use of workfare policies in Denmark, it is no surprise that the resource use on active labour market policies is among the highest in OECD, constituting about 1.3 % of GDP. This raises the question of whether the effects of workfare policies are worth the resources.

A few attempts have been made at making a cost-benefit analysis of the activation policies (see Danish Economic Council (2007)). The overall conclusion is that the costs exceed the benefit by about 50.000 DKK (6.800 EURO) per year per activated when including the locking-in, post-programme and motivation effects. However, considering the various forms of activation, it is found that job training (in particular private) has benefits exceeding its costs, while this is not the case for education and other forms of activation.

Cost-benefit analyses in their standard form suffer from some problems. First, they are very sensitive to the effects which it has *not* been possible to quantify. In e.g. the cost-benefit analysis referred to above, the wage effect is not included. Second, the use of activation policies, such as benefit reductions, rather than other means to reduce unemployment is in the first place motivated by distributional considerations, and therefore an evaluation of the policy outcome must take these considerations into account. Finally, dynamic effects and possible state dependencies are difficult to capture.

To assess the orders of magnitudes involved, we propose a very simple and yet informative approach by asking how large the employment gains from workfare policies need to be to justify the costs, i.e. how large should the employment gain be such that the policy in net terms is not a burden on public finances. A proper analysis of this question would require a calibrated general equilibrium model which it not at hand. Instead, we take an indirect (partial) approach and calculate how much extra employment workfare policies should generate for achieving a break even for public finances. In this, we take into account that increased employment improves public finances via both increased tax payments generated by the increase in income and reduced expenditures on transfers. In net terms this effect is rather strong in Denmark due to the extended welfare state (high taxes, high income transfers). With total costs of workfare policies constituting about 1.3 % of GDP, we find that the needed employment effect is about 90.000 persons, or a 3 % increase in employment[7]. Seen relative to available micro-evidence, cf. above, this seems to suggest that the policy has not achieved breakeven. However, there are two arguments why the effects of workfare policies may be more favourable than suggested above. First, the problem is a second-best problem and resources were used on workfare policies already before the reforms in the 1990s, and hence the question is whether the reforms have improved the situation. Resources on labour market policies were on average 0.9 of GDP before the reforms, and about 1.3 % after the reforms. Hence, the reforms increased expenditures by about 0.4 % of GDP which only requires an employment increase of about 20.000 or almost 1 % to reach breakeven. This suggests that the policy reforms have contributed to relieve the pressure on public finances. Second, to the extent that state dependence is important in the labour market, the procedure above – and standard cost-benefit analyses – suffer from the problem that they take a static approach overlooking the dynamic implications of workfare

[7] Calculations are based on costs of active labour market policies as reported by the OECD, and the marginal budget effect of bringing one unemployed into employment given current tax and benefit rules as calculated by the Danish Welfare Commission (2006).

policies in bringing more people closer to the labour market and thereby preventing labour market exclusion. As an illustration of the quantitative importance of this, note that taking a purely static perspective it is required that 50 % of the activated become employed to reach breakeven on public budgets, while if there is state dependence, then over a say 10-year perspective workfare should raise employment probabilities by less than 10 % each year.

The findings above suggest that the shift in labour market policies have improved the cost-effectiveness ratio relative to past policies, but also that an issue of cost-effectiveness remains. The challenge is to design programmes that increase the chances of employment the most, which, in turn, raises questions of both programme design and allocation of unemployed to appropriate programmes. An important question is whether the policy can be refined so as to achieve the same or better employment effects at lower costs. These issues have been much in focus in recent years, and we briefly discuss three elements: sanctions, targeting and matching.

Sanctions and Matching

The effectiveness of workfare policies can possibly be enhanced via monitoring and sanctions of unemployed. The eligibility criteria include that the public employment service may ask the unemployed to accept a given employment opportunity, they may require that the unemployed submits and maintains a CV on the internet based job bank, and they may require that the unemployed participates in active labour market programmes. If the unemployed does not comply with the requirements, his/her UI-fund is notified. The UI-fund can then choose to sanction the unemployed by cancelling UI benefit payment for a period of time. Sanctions can also be used to strengthen incentives for job search (see e.g. Fredriksson & Holmlund (2005)).

Policies used to be very lax and few were sanctioned. The most recent labour market reforms have contained elements that have lead to a strengthening of eligibility criteria. This is also true for the 2003 reform. Figure 22 reports sanctions before (2002) and after (2004) the reform, and it is seen that sanctions have become more prevalent. Another piece of evidence for the increased use of sanctions in Denmark is found in Gray (2003). Here, sanction rates for 14 different OECD countries in the late 1990s are compared. At that time, Denmark sanctioned 4.3 % of the total stock of unemployed. The corresponding number for 2005 is close to 12 % suggesting that the sanction intensity indeed has risen in recent years.

Figure 21: Sanction rates, 2002 and 2004

Note: The figure is based on data for all unemployed in the period from 2001-2005 and gives the sanction rate defined as the fraction of individuals who are receiving a sanction in a given week of their unemployment spell compared to all individuals with similar spell duration. No reliable time series exists on the number of sanctions in Denmark.
Source: DREAM and AMANDA

The key question is whether sanctions affect the transition rate from unemployment to employment. Svarer (2007) analyses a large Danish register data set with information on unemployment and sanctions for the complete Danish population in the period from January 2003 to November 2005. He finds that the exit rate from unemployment to employment increases with more than 50 % for both males and females as a consequence of sanctions. Similar results are found for the Netherlands (e.g. Abbring et al. (2005)) and for Switzerland (Lalive et al. (2005)).

It is likely that monitoring and sanctions have threat effects. Lalive et al. (2005) exploit differences in the intensity at which local public employment service offices monitor and sanction unemployed. They find that for public employment office units where the policy is more lax, the unemployed spend more time receiving public support. In the Danish context, it is the UI-fund of the unemployed that sanctions in response to non-compliance. There are 32 different UI-funds that cover different educational groupings and industries. There are remarkably large differences in the intensity at which the different UI-funds sanction their members, also when the characteristics of their members and the labour market conditions are taken into account. Svarer (2007) investigates whether members of more lax UI-funds stay longer in unemployment, and he finds that this is the case for males, but not for females. In comparison to the results found in Rosholm & Svarer (2004) for the threat effects of active labour market programmes, it is interesting that the threat effects of both monitoring and sanctions and active labour market programmes are present for males, but not for females.

Targeting and matching

As pointed out in e.g Kluve (2006), effects of active labour market programmes differ across the population. In the Danish case, recent findings suggest that low-skilled unemployed exhibit positive employment effects of educational training, whereas highly educated do not (Danish Economic Council, 2007)).

This suggests that targeting of programmes to unemployed should systematically take into account the possible heterogeneous effects they have for different groups. This can be accomplished by use of a statistical assistance programme selection tool that assesses which programme (if any) is expected to have the best effect in terms of reducing the length of unemployment spells for a particular individual with certain personal characteristics. The advantage of basing allocation of programmes on statistical tools is that these can exploit the accumulated experience of all previous activation spells; something it is hard to imagine a case worker with only a limited number of clients can do with equal precision. Currently, targeting programmes are being designed and tested in Switzerland (SAPS) and Germany (TrEffeR). In Denmark, Staghøj et al. (2007) are currently testing the usefulness of a targeting tool based on historic data. The development and implementation of these instruments are still in their infancy. However, a simulation study by Lechner and Smith (2007) suggests that the allocation of unemployed to different programmes can be improved if the choice is based on the statistical allocation mechanism compared to the allocation chosen by case workers. A related issue arises for the group of unemployed receiving social assistance where some only have unemployment as their problem, while others have additional social and personal problems making immediate transition into employment unlikely. Since 2004, recipients of social assistance have been classified in one of few so-called match groups according to the extent to which their abilities and characteristics make job finding likely or unlikely. Recipients in match groups making job finding likely are required to sign up in job-centres

as actively searching for jobs. Activation requirements are also larger for this group since they should have a new offer no later than 6 months after having ended the previous offer.

7. Future challenges

Flexible hiring and firing rules are conducive to adjustment and change, and generous social security systems lower individual risk via collective risk sharing reducing worker opposition to change and adjustment. The Danish experience shows that this model is not automatically leading to low unemployment. On the contrary, changes in the labour market may cause unemployment, and the transfers offered by the welfare state may become an absorbing state. Essentially, this is a variant of the well-known finding that if there is a passive player in a tripartite relation, the passive player ends up carrying all the costs. This was the case in Denmark from the mid of the 1970s to the mid of the 1990s with high and persistent unemployment and a growing "transfer" obligation on the par of the welfare state. The Danish experience also shows that when the third leg of the model came to take a more active rather than passive role in the sense of not only providing income support but also focusing on job search and employment, the model came to function better. Unemployment has been reduced dramatically, although there still is an issue with respect to reducing the transfer burden further.

The Danish labour market development since the mid-1990s with a significant reduction in unemployment is remarkable since it has achieved great results without taking resort to general benefit reductions. This shows that it is possible to improve incentives in the labour market without taking resort to benefit reductions and the like. The pivotal elements are the activation policies and the shortening of the benefit period both directly by shortening benefit duration, and indirectly via the conditions arising from activation. However, these changes have not come without costs since the active labour market policies are resource demanding. This is a second-best issue since the resource use was already large before the change towards a more active policy, and seen in this perspective, the policy has been an improvement, although there is scope for improving the cost-effectiveness ratio. Whether the policy in absolute net terms has improved the trade-off between efficiency and distribution is an open issue, but judged from revealed preferences in policy debates, it seems to be the case.

In addition to the cost implications, there are other important policy dilemmas associated with the activation policy. The first is the screening paradox related to activation requirements. To the extent that this policy works, the consequence may be that those actually ending up in activation are the groups with severe problems in terms of meeting the requirements to obtain a job at given wage levels (low ability groups), while the stronger groups have left the system. Hence, it may seem as if the policy does not work (those on activation do not get jobs) and activation accomplishes nothing but punishing weak groups. Another dilemma is that with a binding distributional constraint it inevitable follows that labour demand falls short of labour supply, and hence it may seem pointless to focus so much on job search for these groups. This view is problematic since even in the presence of unemployment, it does not follow that employment is invariant to changes on the supply side (more job search, changed wage setting). Moreover, there is a dynamic aspect to this since slack job search criteria may imply that labour supply eventually comes to constrain demand, in particular if human capital depreciates over time. Finally, the political support to the policy stance is likely to be very business cycle dependent. In a recession with increasing unemployment, there is a risk that it will be difficult to maintain support for the active line in labour market policies.

Already during the mild recession in 2001-03, it was voiced that the active approach could be relaxed since there was a decline in the need for labour.

Can the Danish flexicurity model be exported? As the preceding discussion has shown the Danish experience is the product of a historic process and policy changes involving complementarities between the three main ingredients of the Danish labour market model. Hence, the answer is basically no. There are, however, lessons from the Danish experience, both from the failures during the 1970s and 1980s, and the more successful changes in labour market policies since the early part of the 1990s. This development shows that it is possible to improve labour market performance by policies taking a direct approach in strengthening incentives for job search and creation.

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