Employment protection and labour market policies: Trade-offs or complementarities? The case of Denmark

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Preface

This paper is part of a series of four papers that have been prepared for the research programme “Adjustment of labour markets to economic and structural change: labour market flexibility, security and labour market policies” by the labour market policy team (LMPT) of the ILO’s Employment Strategy department. The three other papers deal with changes in France, Japan and the USA.

It is common today to ask for changes in the policies and institutions of the labour market. Numerous authors have proposed an overhaul of these and of social protection systems in general, because the labour markets are said to face a secular change towards more and more short-term and flexible jobs. These jobs would not allow workers – as did longer-term employment relationships from earlier decades – to qualify for many of the benefits of the social protection system, such as unemployment, health, and retirement. The increase in non-standard work arrangements would therefore require a new look at social protection and labour market policies.

However, many of these prescriptions were not based on a thorough analysis of the changes in the labour market but on some emerging trends, which seemed to indicate such a secular shift (especially in the “end-of-work” literature). A certain scepticism remained as to the actual extent of the changes. Was salaried work really vanishing? Was long-term commitment between workers and employers a thing of the past? Had job stability gone or was it about to fade away?

Our project took a closer look at such assertions and found an astonishing degree of job stability, accompanied by flexibility for some groups – but not for the whole labour market. This was especially true for Europe, but even in the United States, as research has noted, the link between workers and their companies was weakened, but not broken.

The present paper deals with the developments in Denmark. Of the four countries selected, Denmark, together with the United States, is the one with the most mobile labour markets. Employment protection legislation is weak, job tenure much shorter than in other European countries (though somewhat longer than in the USA) and labour turnover high. However, in comparison with the United States, where big flows of workers transit between firms without many intermediate institutions, such as the unemployment insurance or public training, labour mobility in Denmark is mediated. A considerable number of workers transit between jobs but experience a (short-time) unemployment or training spell in between. Therefore, Denmark’s labour market is characterized by a special kind of trade-off: weak employment protection is “traded” against strong income and employability protection by labour market policies. In modern times, where firms are under strong pressure to reorganize, such a labour market framework, which provides adjustment possibilities to firms and security to workers, might be an (albeit expensive for tax payers) model for other countries.

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Summary

The success of the Danish employment system
Since the mid-1990s, Denmark has shown an impressive macroeconomic performance. Unemployment has declined from 12 to 6 per cent. Total employment has increased by almost 6 per cent. Inflation has been stable. Not surprisingly, the positive developments in employment and economic growth since 1994 has caused a feeling of success, of being "on the right track", when Danish labour market policy is discussed either internally or in international fora.

Flexibility and social protection: a positive interaction
The focus of the present study is on a special aspect of the Danish employment system: the interaction between the flexibility of the employment relation on the one hand and labour market and social protection on the other. Behind the interest in this specific relation lies the idea that part of the success of the Danish model can be attributed to a unique combination of flexibility in the employment relation and the economic and social security of employees. In Denmark, employees are protected through a mainly state-financed system of unemployment and social security benefits.

The "flexicurity" model - with active labour market policy
The Danish model is thus in contrast to other institutional frameworks, where the employee experiences a high level of protection from dismissals by law or collective agreements. In the Danish case, the costs of protecting the employee are to a greater extent carried by the State - and therefore by the collective of tax payers - not by the individual firms. The term "flexicurity" is often used to summarize this characteristic feature of the Danish employment system.

A change in labour market policy from 1994 onwards can be added to this brief description of the Danish model. This change involved more emphasis on active programmes and a shift away from passive benefits. Thus the individual's right to economic support during periods of unemployment was increasingly supplemented by claims on the unemployed to participate in job training, educational programmes and other active labour market measures.

A popular picture of the present Danish system is therefore as a "golden triangle" combining flexibility in the employment relation with a generous system of unemployment benefits and - in the third corner - the new active labour market policy.

A low level of employment protection and many job openings
As shown in chapter 2, the low level of employment protection gives the Danish system a flexibility comparable to Canada, Ireland, the United Kingdom and the United States.

The low level of protection is reflected in other characteristics of the labour market. The average tenure of the employees in 1998 was 8.5 years. Among a number of European countries and the US a lower level was only found for the US and the UK. Similarly, the share of job openings is very high - between 25 and 30 per cent of all job positions are filled with a new person every year.

The role of unemployment benefits and social security
In spite of the high level of job mobility, the perceived job insecurity among Danish employees is among the lowest in Europe. The positive development on the Danish labour market in recent years might provide part of the explanation, but the relatively high net replacement rate in the
Danish system of unemployment benefits is another important factor. When a worker becomes unemployed, the state-financed system of unemployment benefits (and social benefits for the uninsured unemployed) acts as a safety net, preventing the individual from serious economic hardship. Furthermore, the high level of job openings engenders a high probability of re-entering employment.

The role of active labour market policy
The inherent risk related to generous social protection and high compensation rates in case of unemployment is that the individual economic incentives to return to employment are weakened. In the Danish case, this risk will be higher for the low-income groups, since they comprise the highest net compensation rates in a system with a fixed ceiling on the unemployment allowance.

Furthermore, the possibility to return to employment will be small for unemployed persons with employability problems. Lack of relevant skills (both formal and informal) or other causes of low productivity (health problems etc.) may result in a number of unemployed becoming locked into long-term unemployment instead of quickly returning directly to employment.

In this situation, the role of active labour market policy is therefore twofold. On the one hand, the prospect of becoming activated can motivate the unemployed to become more active in searching for and accepting a vacant job. On the other hand, those unemployed who participate in labour market training and other active programmes will improve their skills/ qualifications and thus their chances of getting a job.

A labour market reform in 1994 marked the first step towards a more active line in Danish labour market policy. Subsequent reforms have carried the strategy further and in 2000 implies that all unemployed are activated on a full-time basis after no more than one year of unemployment. For some groups (e.g. the young under 25 years), the passive period is less than six months.

A general evaluation
Evaluations of the enhanced model of “flexicurity” - the Danish “golden triangle” - are generally positive, both when it comes to its achievements at the micro- and the macro-level. At the micro-level, positive employment effects are found for most programmes of active labour market policy. At the same time the coincidence of a drastic fall in unemployment, high economic growth and stable wages and prices since 1994, indicates a significant reduction in structural unemployment.

The Danish experience in recent years points to the macroeconomic feasibility of a “hybrid employment system” combining on the one hand the traditional virtues of a liberal labour market with few restrictions on the employment contract with - on the other hand - a reasonable level of economic protection of the individual wage-earner. The Danish model thus fits the picture of a possible “tradeoff” between a very flexible employment relation and a social protection system, which defends the individuals from the potential costs of a low level of employment security.

Large groups expelled from the labour market
The Danish model, however, is not flawless. Firstly, the highly dynamic character of the Danish labour market involving a large number of shifts between jobs, also implies continuous testing of the productivity of the employees. One outcome of these ongoing selection processes is that some workers are gradually expelled from the labour market if they fail to fulfil the productivity criteria
of their employers. The few restrictions placed on employers when it comes to layoffs may of course add to the risk of expulsion from the labour market. Those at risk are mainly the unskilled, which are also put under pressure by the rather narrow wage dispersion found on the Danish labour market. Another risk group will be persons with health problems. As a consequence, by 1999 about 25 per cent of the adult population received some form of transfer income, many of which on a permanent basis.

Unemployment benefits and poverty traps
The high replacement rates in the Danish unemployment benefit system increases the risk of economic disincentives especially for low-income groups. While such effects are theoretically plausible, they have been hard to verify empirically - at least as having an important magnitude and the general attitude has been to rely on early and intensive activation to counter the problems with the potential disincentives from the unemployment benefit system.

The costs and effects of activation programmes
At the third corner of the “golden triangle”, some further critical points can be made. While the net effects of most activation programmes on unemployment seem positive, less is known about their cost-effectiveness. Recent estimates indicate that the net effects on the public budgets are very positive for private job training, almost neutral for public job training and negative for educational programmes, which are the dominant programmes for activating the unemployed.

Creaming effect
A number of evaluations have shown examples of the creaming effect, meaning that the strongest among the unemployed are receiving the activation offers with the best quality. This might be rational from a narrow viewpoint of economic efficiency and also understandable if one looks at the practical implementation and delivery of the services of the Labour Office. But still the bias towards the “stronger” unemployed is in conflict with some of the declared political targets of active labour market policy.

Future challenges for the Danish model
Taking a longer-term perspective, a number of further problems can be identified which could increase the forces that already are causing the rise in the number of persons expelled from the Danish labour market:

- The demographic changes during the coming decades which imply a growing number of older workers with a higher risk of marginalization
- The rising share of immigrants in the Danish population - with the share of persons from non-European countries rising from about 4 per cent currently to about 10 per cent in 2020.
- The increasing wage-competition from low-wage countries - also within Europe which will be strengthened in case of the inclusion of a number of Eastern European countries in the EU.

When the needs for future reforms are discussed, these challenges will be at the forefront.

The current Danish discourse on labour market policy
The widespread conception of the Danish employment system as a “golden triangle” model
embracing “flexicurity” indicates the generally positive tone found in the Danish discourse on labour market policy. On the other hand - as indicated in the previous section - there are also critical points made by a number of actors. In particular focus is the long-term increase in the number of persons receiving permanent transfer income.

To counter the tendency to exclusion from the labour market, two concepts have been central in policy development.

One is the concept of the social responsibility of the employers, which has emphasized the need to make firms more aware of the role they play in marginalizing persons from the labour market and of the potential in employing persons with some form of reduced employability.

In recent years, however, the idea of the encompassing labour market has taken over as the core concept when discussing the possibilities of including more people into active employment. The broad targets set for the encompassing labour market are:

- every individual should have social responsibility
- preventive measures should be taken at the workplace in order to preserve the full capacity to work during a lifetime
- persons with reduced capacity to work should keep or be retained in jobs
- more persons should become employed

The main actors involved in creating the encompassing labour market are identified as the social partners and the municipalities.

An important specific initiative to support the encompassing labour market is a planned reform of the system of invalidity pensions, which should imply that more persons with reduced capacity to work can become economically active. Other initiatives already implemented are the so-called “flexi-jobs” which are created by permanent wage-subsidies for persons with reduced capacity to work. Also the increased focus on adult vocational education, the integration of ethnic minorities and improvements in the work environment are related to the idea of the encompassing labour market.

When it comes to more specific reforms affecting the linkage between employment protection and labour market policy, the general impression is that the period of large-scale changes in active policies and in the unemployment benefit system from 1994 to 1998, has been followed by a pause. The overall evaluations of the functioning of the employment system are generally positive and there is increased awareness of the delicate balance between the different elements of the system as they are symbolized in the “golden triangle”.

Thus, the political agenda contains no plans for further major reforms of either employment protection or labour market policy in general. The lack of reform plans on the Danish agenda of labour market policy does at least indicate that the main political actors seem to share the view that the present balance in the tradeoff between flexibility and social protection is not too far from the optimum.
1. Introduction

1.1 The Danish model and its success

In recent years, Denmark has aroused international attention due to a rapid reduction in unemployment and its inflation-free economic upswing since 1994. In a previous study this development was explained by a number of background factors (Madsen, 1999):

- a high level of job mobility resulting from the interplay between an industrial structure dominated by small and medium firms, weak employment protection and generous unemployment benefits
- a well-developed system of public labour market education and training which functions in close relation with the social partners and the skills needs of firms
- a long-standing tradition for close cooperation between the social partners and government
- a number of public institutions which promote collective agreements and involvement of social partners in the policy process
- a significant shift in the priorities of trade unions during the 1980s, away from short-sighted wage claims and towards acceptance of broader and longer term goals regarding working conditions and income.

However, these are not the only reasons for the rapid change in Denmark’s economic situation since 1994. The following must also be taken into account:

- the positive macroeconomic effects of a traditional demand-driven upswing made possible by a solid surplus on the external balance
- the effects of the new design of labour market policy implemented from 1994 onwards, including a more active and flexible approach to activation and the idea of combining the fight against unemployment with the fulfilment of other goals through leave schemes and job rotation.

This study takes a closer look at a specific subset of explanatory factors related to the interplay between the flexibility of the employment relation on the one hand and labour market and social policy on the other. Behind the interest in this specific relation lies the idea that part of the success of the Danish model can be attributed to a unique combination of flexibility in the employment relation and the economic and social security of employees. Employees not covered by the unemployment benefit system are covered by a mainly state-financed system of unemployment/social security benefits. Thus, the Danish model is in contrast to other institutional frameworks, where legislation or collective agreements provide the employee with a high level of protection from dismissal. In Denmark, the direct costs of protecting the employee are borne to a larger extent by the State – and therefore by the collective of tax payers and not by individual firms. The term “flexicurity” is often used to summarize this characteristic feature of the Danish employment system.

A second feature is the new design of labour market policy noted above. From 1994 onwards, there was more emphasis on active programmes and a shift away from passive benefits. Increasingly, the individual’s right to economic support during periods of unemployment was supplemented by claims on the unemployed to participate in job-training, educational programmes and other active labour market measures.
A popular picture of the current Danish system is a “golden triangle” combining flexibility in the employment relation with a generous system of unemployment benefits and - in the third corner - the new active labour market policy.

1.2 Main elements of the present study

The present study focuses on these three elements of the “golden triangle”: flexibility, security and active policies, and the interplay between them in the current Danish system. Chapter 2 discusses empirical data on employment stability and flexibility, based on:

- evidence of labour turnover and job turnover and on the mobility between work and unemployment
- employment security as determined by legislation and collective agreements and supplemented by a description of employment security as perceived by employees
- the role of active and passive labour market policies for flexibility, including a survey of current policies and evidence of the micro effects of active measures.

Chapter 3 looks outside the “golden triangle”, at new evidence of inclusion and marginalization in Denmark and at the macroeconomic effects of “flexicurity” on the Danish economy.

Finally, is the Danish model a unique and sustainable combination of a flexible employment relation, the economic and social security of employees, low unemployment and stable economic growth? Chapter 4 sums up the main results concerning the “golden triangle” of the Danish employment system, enumerating its positive aspects along with some of its more critical features.
2. The flexibility of the employment relation

This chapter presents a range of available evidence concerning the flexibility of the employment relation on the Danish labour market. This is done by looking at labour turnover and job turnover, the mobility between work and unemployment, employment security and the role of active and passive labour market policies for flexibility.

As an introduction, figure 2.1 presents some general information on the Danish labour market. Of special note are the high levels of both the participation rate and the activity rate - and the correspondingly small rate of unemployment.

![Diagram](image)

*Figure 2.1: Some general information on the Danish labour market, 1999.*

2.1 Analysis of actual mobility

This section looks at available evidence concerning labour turnover and job turnover on the Danish labour market. Also, evidence on the mobility between work and unemployment and on job tenure is presented.

2.1.1 Labour turnover and job turnover

2.1.1.1 Introduction

For some years a high level of mobility of workers between jobs has been a "stylized fact" of the Danish labour market. This observation has been attributed to the lack of strict regulation on dismissals and to the high share of small and medium size firms in the Danish economy. Furthermore, the high level of numerical flexibility has been supported by a system of unempl-
oyment benefits, which has made the resulting frictional and seasonal unemployment acceptable by workers and trade unions. Thus, the high level of mobility has been one of the characteristics of the so-called “golden triangle” of the Danish model of the employment system.

The empirical evidence supporting this stylized fact has, however, been based on estimates of mobility only in the manufacturing sector (Albæk and Sørensen, 1998) or on indirect evidence based on information on the average tenure of employees (see section 2.1.3). This situation has now changed, since a recent study published by the Centre for Labour Market and Social Research contains calculations of job and worker flows for the Danish labour market as a whole and for a long time period (1980-1995). The present section briefly summarizes and discusses the results from this important new study. For a more elaborate presentation of the rapidly growing international literature on job and labour turnover (by J. Haltiwanger, D.S. Hamermesh and others), the methods used and a detailed description of the data and the results, the reader is referred to the original study (Bingley et al., 1999).

2.1.1.2 Method and data

The new study used data from administrative registers containing all establishments and residents in Denmark to establish the connections between individuals and firms. The “pairing” took place annually (on November 1).

Based on this data set labour turnover (hires and separations) is measured in the following manner: An employee who is observed at one establishment in November of a given year and in another establishment in November of the previous year will be counted as a hire in the first establishment and as a separation from the second establishment. No distinction can be made between layoffs and quits. The estimate does not include workers shifting jobs several times within a given year (from November to November).

The data set also allows for calculations of job turnover (job creation and destruction). Here, job creation measures the total number of new jobs in newly started firms or firms expanding their employment. Similarly, job destruction is calculated as the number of jobs disappearing from firms closing down or reducing total employment from one November to the next. Since the number of jobs is based on counting the number of employed, unfilled jobs (vacancies) are not included in the estimate. The aggregate data for labour and job turnover are presented as rates by dividing by total employment.

2.1.1.3 Employment by sectors

As background information on the sectoral distribution of employment in Denmark, figure 2.2 presents the average distribution of the total number of employees by sector for the whole period 1980 to 1995. The figure illustrates the importance of the public sector as an employer (more than one-third of total employment) and the limited role of agriculture on the Danish labour market. Private services amount to another one-third of employment, while manufacturing and construction count for slightly less than one-third of the total number of employees.

During the period from 1980 to 1995 the average level of wage-earner employment was 2.2 million persons. From 1980 to 1995 total wage-earner employment increased by 9 per cent. The highest yearly growth in employment was found in 1985 (85,000 persons or 4 per cent). In most years the net change in employment was less than 2 per cent.
The highest growth rates over the whole period were in private services (15 per cent) and in the public sector (11 per cent). Employment in manufacturing increased by a modest 2 per cent, while wage-earner employment in agriculture fell by 5 per cent from 1980 to 1995.

2.1.1.4 Overall job and worker mobility

Compared to the modest net changes in employment, the underlying circulation of workers among jobs (labour turnover) and the level of both job creation and job destruction (job turnover) is found to be surprisingly high. In figure 2.3 the main results concerning hires, separations, job creation and job destruction are shown on a yearly basis for the period 1980 to 1995.

Some significant observations can be made from figure 2.3. First, overall level of both hires and separations for the period as a whole is high. Not surprisingly, some fluctuations are related to the business cycle, but on the average the level of both hires and separations is about 30 per cent and in no year less than 25 per cent. During periods of economic expansion (e.g. between 1983-1986), the level of hires is above the level of separations.

Also, the level of job creation and job destruction is much higher that the level of yearly net changes in employment. The overall average is around 12 per cent, with the same cyclical pattern as for labour turnover.
2.1.1.5 The mobility pattern across sectors

For a number of reasons one would expect the levels of labour and job turnover to differ across sectors of the economy, but the actual differences depicted in figures 2.4 and 2.5 are rather small. The highest mobility levels are found in agriculture and construction - the two sectors with the highest level of seasonal fluctuation in their production. At the other end of the spectrum, a very low level of mobility for public utilities is observed. For public services, it is worthy of note that the differences between public services and manufacturing and other parts of the private sector are minor, especially when it comes to labour turnover. In this respect, the public sector is almost as dynamic as the rest of the economy.

Figure 2.4: Job turnover (creation and destruction) across sectors, average 1980-1995. Source: Bingley et al., 1999, table 2.
2.1.1.6 Mobility and firm size

One could expect a relation between both job mobility and worker mobility on the one hand and firm size on the other hand. Small firms (establishments) often have a short lifespan and thus contribute more to job creation and destruction. Also, larger firms will develop internal labour markets and perhaps a higher level of functional flexibility and thus contribute less to the size of worker mobility.

As an introduction, figure 2.6 shows the distribution of Danish firms (establishments) and employment by size of establishment. Figure 2.6 gives a clear impression of the dominance of small (micro) establishments in the Danish economy. Almost 80 per cent have less than 10 employees. On the other hand, more than 80 per cent of the employees are found in establishments with less than 500 employees.

As shown in figures 2.7 and 2.8, the expectation concerning the higher level of worker and job flows in small establishments is confirmed by the data. Furthermore, the larger firms with more than 500 employees have a rather low level for both worker and job flows. However, note that distribution is actually somewhat hump-shaped, in the sense that medium size establishments with 101-500 employees (and to some degree firms with between 41 and 100 employees) also seem to show a high level of mobility. For labour turnover, the level is similar to that of the smallest firms. Also, for job creation and destruction the level is considerable. Medium size firms thus seem to represent a very dynamic segment on the Danish labour market.
Figure 2.6: Establishments and employment by size of establishment, average 1980-1995. Source: Bingley et al., 1999, table 3b.

Figure 2.7: Job turnover (creation and destruction) by establishment size, average 1980-1995. Source: Bingley et al., 1999, table 5b.
Finding reported in Bingley et al (1999) indicate that there is a considerable homogeneity of job turnover between establishments in a given size class, regardless of their industry. Labour turnover, however, is more homogenous within a given industry, regardless of size class. Thus it seems that the specific traits of technology, market conditions and industrial relations which characterize a given industry have an important influence on labour turnover. On the other hand, job turnover is more governed by dynamics processes related to the size of business establishments.

2.1.1.7 Mobility and individual characteristics of workers

Unfortunately the recent study by Bingley et al (1999) does not include data on the mobility of different groups of workers. Here the latest data are from a study covering the period from 1980 to 1989 (Vejrup-Hansen, 1995). Nonetheless, the basic data used for these two studies are similar and, given the substantial overlap in time periods, adding the later years to the analysis probably would not imply significant changes in the results.

However, the study by Vejrup-Hansen (1995) looks only at job creation and job destruction and not at the total number of hires and separations. Thus we have information only on the number of jobs created in new or expanding firms and the number of jobs destroyed in firms closing down or reducing employment within each category of workers. Bearing in mind these limitations, the main conclusions from the study are the following:

- There are significant differences in the level of job creation and destruction between groups. The lowest level of job creation and job destruction is found for white-collar workers (around 9 per cent of total employment of the group). For blue-collar workers in general the level is 13 per cent. Young unskilled workers have a level of job-creation/job-destruction of almost 18 per cent.
• These differences between the groups are stable over time.
• In a separate analysis of the employment sensitivity of different groups to changes in the business cycle, it was found to be below average for white-collar workers and above average for unskilled workers.

Thus, the involuntary mobility caused by job creation and destruction varies across different groups of employees. The largest burden is on the unskilled groups; white-collar workers are exposed to smaller demands on their flexibility.

This situation may be interpreted within standard labour market theory both by noting that the costs of job-specific training normally are higher for white-collar workers and that white-collar workers perform tasks that are less sensitive to short-term changes in the level of production.

A further explanation of a more institutional kind could be that the employment relation of white-collar workers - even within the liberal regime of Danish employment protection legislation - is somewhat more protected than for blue-collar workers (see section 2.2.1).

2.1.1.8 The stylized facts of Danish labour and job turnover

The research reported in this section has given some interesting results concerning the stylized facts of job and worker flows in the Danish economy:

• Across the business cycle, there is a level of labour turnover ( hires and separations) of about 30 per cent of total employment every year.
• The level of job turnover (creation and destruction) is also high, at 10-15 per cent of total employment every year.
• The level of worker and job flows varies somewhat across sectors, but there are only minor differences between the public and the private sector.
• Across establishments of different sizes there is some variation in worker and job flows, with the highest level in the smallest and medium size establishments.
• Significant differences exist in the level of job turnover between groups. The lowest level is for white-collar workers (around 9 per cent of total employment of this group). For blue-collar workers in general the level is 13 per cent. Young unskilled workers have a level of job-creation/job-destruction of almost 18 per cent.

2.1.2 Mobility and unemployment

While the previous section looked at mobility between jobs, this section presents available data on the movements in and out of unemployment.

2.1.2.1 Persons affected by unemployment

The unemployment register enables Statistics Denmark to calculate not only the average number of registered unemployed during a given period (e.g. one year) but also to calculate the total number of persons affected by unemployment during a period and the duration of their individual unemployment. *The relation between the average number of unemployed and the total number of persons affected by unemployment is of course a measure of the average share of the period, in which a person is unemployed.* As shown below, the share of the year in unemployment can be calculated not only as an average figure. The distribution of the unemployed according to the share of the year spent in unemployment can also be studied.
Figure 2.9 shows the development of the number of persons affected by unemployment, the average number of unemployed and the share of the year in unemployment from 1982 to 1999. The latter figure is measured on the right axis. The average number of unemployed can be calculated as the product of the number of persons affected by unemployment and the average share of the year that each person is unemployed.

All three curves tend to move in parallel indicating that, for instance, a rise in the average number of unemployed can be attributed both to an increasing number of persons being affected by unemployment and an increase in the average share of the year in which each affected person is unemployed. In general, the relative change is larger in the average share of the year spent as unemployed. One exception is from 1996 to 1997, where the fall in average unemployment is caused solely by a decreasing number of persons having been affected by unemployment.

2.1.2.2 Flows in and out of unemployment

As seen from figure 2.9, around 700,000 persons - or about a quarter of the workforce - are affected by unemployment every year. For the majority this is due to lack of full-time work, but the registration as short-term unemployed may also be caused by receiving special holiday benefits (for persons not eligible for normal employer paid holiday payments) or by being registered as recipients of supplementary benefits (for part-time unemployed).

On average each unemployed is in the unemployment register for around 30 per cent of the year - depending on the business cycle. There is however a wide dispersion around this figure. For any given year one may calculate the number of persons with different degrees of unemployment. As shown in figure 2.10, a large number of those affected by unemployment (around 300,000 persons every year) experience only short spells of unemployment - being unemployed for less than 20 per cent of the year. At the other end of the scale one finds the long-term unemployed, who are unemployed for more than 80 per cent of the year. This group numbered approx. 150,000 in 1993-94 but has diminished in recent years. During the upswing from 1994 onwards, there was actually an increase in the number of persons affected by short unemployment spells, while there is a tendency for the number of persons with longer spells to diminish.

One important observation should be made when interpreting figures 2.9 and 2.10. The degree of unemployment is defined within one given calendar year. Thus a person becoming unemployed on July 1 and leaving unemployment on June 30 of the following year will have a degree of unemployment of 0.5 in each of the two calendar years. Furthermore, the unemployment spells are affected by participation in active labour market programmes, since participants are not counted as unemployed. Therefore the statistics cited in figure 2.9 underestimate long-term unemployment interpreted as a marginal position on the labour market for a longer time period.

In a recent report from the Ministry of Finance (Finansredegørelse, 2000, chapter 5) estimates are made of the "marginal group" on the labour market. For the purpose of the study, the group was defined as persons having been openly unemployed or in activation (including paid leave for educational purposes) during more than 80 per cent of the past three years. Measured by this indicator, the marginal group diminished from 125,000 persons in 1994 to about 70,000 persons in the second quarter of 1999. The marginal group is characterized by an over-representation of older persons and a low level of education. Thus 33 per cent of the persons in employment have only a basic education compared to 50 per cent of the members of the "marginal group". Furthermore 10 per cent of those in the marginal group are immigrants from less developed countries (compared to 2 per cent of the employed persons).
There is a considerable circulation into, but also out of the marginal group. Of those entering the marginal group in 1998, about half were in employment in 1994, while 20 per cent were unemployed. The remaining persons entering the marginal group in 1998 were in activation, in education or receiving some form of transfer income in 1994. In a similar manner about 27 per cent of those in the marginal group younger than 50 years in 1996 were in employment in 1998, while 21 per cent were unemployed. The remaining half was in activation, on leave or receiving some form of transfer income.

![Graph](image)

**Figure 2.9:** Number of persons affected by unemployment (left scale), the average share of the year in unemployment (right scale) and average unemployment (left scale), 1982-1999. Source: CRAM
2.1.3 Other evidence on mobility

Another indicator of the high mobility on the Danish labour market is data on the average tenure of employees. Such data have been published by OECD (1997) and in a recent working paper from the ILO (Auer & Cazes, 2000). Figure 2.11 shows the distribution of employees by tenure in a number of OECD-countries.

Measured by average tenure, Denmark is in the low range, together with countries like the United Kingdom and the United States. By contrast, the other Nordic countries in the sample (Finland and Sweden) have much higher levels of average tenure - Sweden being in the top range together with Italy and Greece. The average levels - both for Denmark and the other countries - are rather stable over time. Thus, the level of average tenure seems to be an inherent structural characteristic of the employment system for each country. Finally, during the time span covered by the data, there are no signs of an overall decline in the stability of the employment relation, when looking across the countries in figure 2.11.
Figure 2.11: Average tenure (years) for employees in a number of OECD countries. Source: Auer and Cazes (2000).

If one looks solely at the manufacturing industry, Denmark stands out even more with an average tenure lower than both the United Kingdom and the United States (Smith, 1998). Again, this is in strong contrast to the other Nordic countries and a number of European countries.

Another indicator of the flexibility associated with the normal employment relation on the Danish labour market is the low share of persons with temporary contracts - indicating that the general flexibility in the standard employment relation fulfils the employer’s needs without calling for a large number of special hiring arrangements. Thus, in the fourth quarter of 1999, 91 per cent of all employees had no time limit in their employment contracts. The remainder were trainees of various kinds (4 per cent) or substitutes and "misc." (5 per cent), cf. Statistiske Efterretninger 2000:14, Table 8.

2.2 Assessment of employment security
2.2.1 Legislation and collective agreements

One well-known feature of the Danish labour market is the importance of collective agreements in regulating the employment relationship. About 88 per cent of all wage earners are members of a trade union and 85 per cent are covered by a collective agreement (DA, 2000, p. 172). In some cases and for some groups of wage-earners, collective agreements are supplemented by legislative arrangements. Thus there is a special legislation regulating the right to paid vacation and stating the right to equal treatment. Similarly the employment conditions for white-collar workers are in some respects regulated by a special piece of legislation (The Salaried Employer’s Act).
A number of studies have compared the strictness of employment protection in Denmark with other countries. Figure 2.12 summarizes the results from the latest OECD study (OECD, 1999, chapter 2).

![Overall EPL Strictness Late 1990s](chart)

*Figure 2.12: Overall strictness of employment protection legislation (ELP) in the late 1990s. Average indicator for regular contracts, temporary contracts and collective dismissals. Source OECD, 1999, table 2.5.*

Denmark is ranked in figure 2.12 as having a low level of employment protection compared to most other industrialized countries - and much lower than the other Nordic countries with whom Denmark is commonly grouped.

Taking a closer look at employment protection in Denmark, the following points can be noted (for a more detailed overview see Cazes et al (1999) and OECD (1999), annex 2A):

- A dismissal is acceptable if caused either by the conditions of the enterprise (lack of work) or by the behaviour of the employee (lack of competence, substantial absence without cause, criminal offences etc.). An employer is not allowed to dismiss an employee on the grounds of gender, religion, pregnancy etc.

- The length of the notice period is variable depending on the duration of employment. Furthermore the notice period differs between white-collar and blue-collar workers. For white-collar workers there is a general minimum notice period of one month, which increases with duration of employment up to a maximum of six months after nine years of employment. For blue-collar workers the notice period is typically much shorter and workers employed for less than nine months may be dismissed without notice.

- Severance pay is only for white-collar workers having been employed for more than 12 years.
In case of unjustified dismissal a compensation of up to 12 months of pay may have to 
paid by the employer. Reinstatement is possible, but rare.

Available information about the recipients of unemployment benefits suggests that about 
half of those receiving benefits are unemployed because they have been dismissed by their 
employer. The other half is unemployed due to a number of different reasons (including having 
self-quit their previous job, having finished an activation programme, having been on leave, or 
having ceased as self-employed), see Statistiske Efterretninger Arbejdsmarked, 2000:37. Only a 
small minority are unemployed due to temporary dismissals, which might indicate that the general 
flexibility of the employment relation makes this option less relevant.

2.2.2 Perceived employment security

Does this high level of job mobility and the low level of employment protection lead to 
a widespread feeling of job insecurity among the Danish employees? Paradoxically, this is not the 
case. As shown in figure 2.13, the share of Danish workers not strongly agreeing with the 
statement "my job is secure", in 1996 was about 45 per cent and thus considerably lower than for 
all the other countries in the sample. This feeling of job security was found for all subgroups 
among the workers (OECD, 1997, table 5.2). Though this might also reflect the positive situation 
on the Danish labour market at the time of the survey, there are no clear indications that Danish 
workers are reacting to the high level of flexibility with a strong feeling of insecurity.

Figure 2.13: The share of workers not strongly agreeing that their job is secure, 1996. 
Source: OECD (1997), table 5.2.
Note: The figures show the proportion of the population replying affirmatively to the question: Are you worried about your job security? There are no figures for Japan and the USA. The figures stem from a survey conducted in 1998 by the Dublin Institute. Source: The Dublin Institute, Employment Options of the Future, 1999. Cited from Regeringen (2000).

**Figure 2.14: Perceived job security. Proportion of population worried about the “security” of their job.**

Similar results are found in a more recent survey asking the question: Are you worried about your job security? The results from this survey are shown in figure 2.14 and clearly confirm the picture of a very high level of job security in Denmark.

There are at least three explanations for this fact. One is the predominance of SMEs in the Danish industrial structure, implying that strong internal labour markets are less important than in other countries. It is easier to shift from one firm to another due to lower entry barriers at the firm level.

A second explanation is the relatively generous unemployment benefits paid to unemployed workers from the first day of unemployment and for a considerable time period (see section 2.3.1.1).

Third, the general improvement in the Danish labour market situation since 1994 may also have influenced the answers, especially in the study cited in figure 2.14.
2.3 Labour market policies and flexibility
2.3.1 A survey of current policies
2.3.1.1 The unemployment benefit system

The vast majority of the unemployed (about 85 per cent) are members of an unemployment insurance fund and receive unemployment benefits of 90 per cent of previous income with a maximum of DKK 145,000 (US$ 17,500) per year. Unemployment benefits may be claimed from the first day of unemployment and for a maximum period of four years including periods of activation (see section 2.3.2). The first two days of unemployment benefits are paid by the employer and the remaining days by the unemployment insurance fund. The latter are financed mainly by state subsidies and - for a minor part - by membership contributions. The membership contributions are not related to the actual expenditure for unemployment benefits, and the State thus covers the full costs of unemployment benefits at the margin.

An employee is eligible for unemployment benefits, if he or she has been a member of an unemployment insurance fund for one year and has been employed for at least one year during the past three years. The latter condition was tightened in 1999. Previously, the criterion was six months of employment within three years. An unemployed person must also be actively seeking work and take part in activation programmes and other activities as stipulated by the Labour Office.

Unemployed persons not qualifying for unemployment benefits can apply for state-financed social benefits administered by the municipalities. The level of social benefits is generally the same as unemployment benefits, but social benefits are means-tested. If, for instance, the spouse has an income, an unemployed person may receive no benefits at all.

For low income groups, the rather generous level of unemployment or social benefits combined with the effects of high income taxation and some income related social benefits (e.g. for housing costs) implies high net replacement rates (see. figure 2.15). Thus, for an average production worker the replacement rate is around 70 per cent. For low income groups the net replacement rate is around 90 per cent, and highest for single parents.

Within the Danish labour market system, the potential disincentives from these high replacement rates are handled by stipulating that the unemployed are actively seeking jobs and by “offering” mandatory full-time activation after 12 months of unemployment for adults and six months of unemployment for young unemployed aged less than 25 years. Thus activation is seen as having both a skilling/qualifications effect and a motivation effect (see section 2.3.3.2).
2.3.1.2 Towards a more active labour market policy

During the years from 1979 to 1993, the main pillar of the active policy towards long-term unemployment was a programme of job offers, training and support to unemployed starting as self-employed. This programme showed poor results, enabling only a minority of participants to become employed on the open labour market. This, together with a new sharp increase in unemployment from 1990 to 1993, increased the political pressure for finding new measures to break the vicious circle of long-term unemployment. The result was a general labour market reform being put into force on January 1, 1994. Its main characteristics were:

- Introduction of a two-period benefit system with an initial “passive” period of four years and a subsequent “activation” period of three years; during the “passive” period an unemployed person would receive benefits and also be eligible for 12 months of activation
- Changing the assistance to the individual long-term unemployed from a rule-based system to one based on an assessment of the needs of the individual unemployed (introducing the individual action plan as an important instrument)
- Decentralizing policy implementation to regional labour market authorities, which were empowered to adjust programme design to fit local needs
- Cutting the connection between job training and the unemployment benefit system implying that any employment with a wage-subsidy would no longer increase the duration of the period in which an unemployed person was eligible for unemployment benefits
- Introducing three paid-leave arrangements (for child-minding, education and sabbatical) to encourage job rotation by allowing employed (and unemployed) persons to take leave while receiving a benefit paid by the State and defined as a proportion of unemployment benefits.
Since 1994 Danish labour market policy has undergone a number of further reforms, mainly involving a shortening of the maximum period that an unemployed individual can receive benefits without being in activation (the "passive" period). As mentioned above, in 1994 this period was four years (with an option for activation for 12 months during this period). In 1996 this "passive" period was reduced to two years. Also in 1996, for young unskilled unemployed the period was reduced to only six months. In 1999 it was decided to further reduce the "passive" period for adult unemployed to one year. Thus by the end of 2000, Denmark had fully implemented the first two of the EU Employment Guidelines.

After the "passive" period, the "activation period" commences and lasts for three years. If full-time activation during this time does not result in normal employment, the unemployed individual loses the right to receive unemployment benefits, but may still be eligible for means-tested social security.

Figure 2.16 presents the main changes in the system since 1994. Not shown in the figure is the option for unemployed to take parental leave or leave for educational purposes, which may prolong the total duration of unemployment benefits by up to one year for each leave. The most remarkable feature of the changes in the system from 1994 onwards is the gradual reduction on the passive period from four years in 1994 to one year by the end of 2000 and the resulting reduction of the total duration of unemployment benefits (excluding leave periods) from seven to four years. While the Danish system of unemployment benefits was previously characterized by both a generous compensation level and extremely long duration, compared to other European countries, the latter is no longer the case, though Denmark is still in the upper end of the range (see Regeringen, 2000, table 13.1).

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Figure 2.16: Changes in the sequence and duration of passive and active periods in the Danish unemployment benefit and activation system before and after the reform of 1994. Source: Adapted from Ministry of Labour (1999), figure 2.3.
The changes in the profile of Danish labour market policy since the mid-1990s have placed Denmark in the upper range of the OECD countries when they are ranked by expenditure on both active and passive measures of labour market policy, see figure 2.17.

![Bar chart showing share of GDP (percent) 1998 by country.](Image)

**Figure 2.17:** Expenditure on active and passive labour market policy, 1998. Share of GDP. Source: OECD (2000).

The data in figure 2.17 illustrate both the high level of expenditure on passive benefits (unemployment benefits and unemployment pensions) and on active benefits, where Denmark is ranked second (after Sweden).

**2.3.2 Participants in active and passive measures**

In line with the more active profile of Danish labour market policy, the relation between persons in active measures and open unemployment has changed in recent years. While open unemployment has decreased from 343,000 persons in 1994 to 158,000 persons in 1999, the
number of participants in active measures (including educational leave) has been almost stable at around 100,000 full-time persons, see table 2.1. As a result the “degree of activation” measuring the relation between participants in activation programmes and open unemployment has increased significantly.

Table 2.1: Participants in active measures and open unemployment, full-time persons, 1994-1999

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Job training</td>
<td>59 800</td>
<td>51 500</td>
<td>48 600</td>
<td>49 000</td>
<td>46 100</td>
<td>42 100</td>
</tr>
<tr>
<td>Educational leave</td>
<td>12 300</td>
<td>32 500</td>
<td>31 400</td>
<td>23 900</td>
<td>22 900</td>
<td>13 800</td>
</tr>
<tr>
<td>Labour market training</td>
<td>23 400</td>
<td>17 900</td>
<td>23 200</td>
<td>23 800</td>
<td>27 300</td>
<td>39 200</td>
</tr>
<tr>
<td>Other activation</td>
<td>2 100</td>
<td>3 300</td>
<td>3 200</td>
<td>4 000</td>
<td>4 700</td>
<td>6 400</td>
</tr>
<tr>
<td>Total number of participants</td>
<td>97 600</td>
<td>105 200</td>
<td>106 400</td>
<td>100 700</td>
<td>101 000</td>
<td>101 500</td>
</tr>
<tr>
<td>Open unemployment</td>
<td>343 000</td>
<td>288 000</td>
<td>246 000</td>
<td>220 000</td>
<td>183 000</td>
<td>158 000</td>
</tr>
</tbody>
</table>

Source: Statistics Denmark (AMFORA)

Figure 2.18 describes the trends in the different active programmes. The number of participants in job training has diminished, especially due to a decline in job training in the public sector. This situation primarily reflects an effort to increase the effects of activation programmes by putting more emphasis on upgrading the skills of the participants and less on traditional job training in the public sector, which often consisted of tasks like garden-work.
Participation in educational programmes apart from educational leave has therefore increased together with “other activation”. The fall in participation in educational leave is partly caused by stricter rules for taking leave from unemployment and partly by changes in the economic incentives faced by regional labour market authorities. Before 1999 educational leave was financed separately by the State and not from the budgets of the regional labour market councils.

The actual number of participants is somewhat larger than the number of full-time participants. For 1999, figure 2.19 shows both the total number of participants and the number of participants converted to a full-time basis for the major activation programmes.

![Figure 2.19: The number of actual and full-time participants in the major activation programmes, 1999. Source: Author’s calculations based on Statistiske Efterretninger: Arbejdsmarked 2000:24, table 2.](image)

As indicated by the relative size of the pillars in figure 2.19, the average share of the year in which a person participates in a programme is between one-quarter and one-third. Thus - as for open unemployment - there is a fast circulation through the programmes, which indicates the positive manner in which they may contribute to the flexibility of the total employment system. These data, of course, say nothing however about the employment situation of the participants after leaving the programmes. This issue is examined in section 2.3.3.

Finally, but not reflected in the above figures, available evidence suggests that on average the participants in active programmes are now less employable than was the case a few years ago. In this sense, the upswing on the Danish labour market has acted as a “filter”, in that the stronger among the unemployed have already returned to employment, leaving those unemployed with severe skill shortages or other employability problems behind.

### 2.3.3 Evidence of micro effects of active measures

During the last decade the knowledge about the employment effect of active labour market programmes in Denmark has increased dramatically, mainly for two reasons:
• The political focus on active labour market measures following the labour market reform of 1994
• The increased use of administrative registers to construct data sets describing the transitions between different labour market situations at the individual level (longitudinal data sets).

The main purpose of the present section is to summarize the most recent outcome from evaluations of the effects of active programmes on the labour market situation of the participants. As an introduction, the section contains a brief outline of the results from earlier evaluations of the effects of Danish labour market policy.

2.3.3.1 Previous effect evaluations
The labour market reform of 1994 was initially evaluated from 1996 to 1998. Results have been published from general evaluations of the implementation process and from a number of evaluations of the effects of the various instruments. A survey can be found in Madsen (1998).

In relation to the activities for the unemployed, evaluations have shown a number of remarkable results:

• The individual action plans are conceived by the unemployed as positive and relevant instruments to plan their return to normal work
• The unemployed were generally satisfied with the programmes in which they took part (job training, education etc.)
• Based on a large-scale longitudinal data set with information on the individual unemployed, it was estimated that most of the programmes also reduced subsequent unemployment for participants. The exceptions were educational leave (decided by unemployed) and some other forms of education. But both private and public job training and education targeted at increasing the employability of the unemployed had significant effects in the form of lowered subsequent unemployment.
• Also, not surprisingly, the improved state of the economy since 1994 had contributed to the success of the activation programmes.
• Programmes, directed at the younger unemployed (under 25 years of age) and involving stronger obligations to undergo education and a lowering of unemployment benefits after six months of unemployment, have proved to be a success in the sense that most of the young unemployed in the target group left unemployment to either take up normal employment or to begin an education course.
• The estimated share of persons employed with subsidies for job training, which would have been employed anyway ("deadweight") is small compared to international experiences (a level of 20 to 30 per cent).

These results are mainly from evaluations based on data from 1995 to 1996. The new evaluation discussed in the following section therefore provides an opportunity to study the robustness of these results in the light both of the change in the overall economic situation and the adjustments in the activation programmes.

2.3.3.2 Effects of active measures - a general evaluation
In a study published in March 2000, the Ministry of Labour presents results from using a new database developed by the Ministry (Arbejdsministeriet, 2000). The database has
information about the labour market situation of all individuals and also about their participation in labour market programmes and contact with the social security system. This makes it possible to apply a number of advanced statistical measures of programme effects at the micro-level.

The study focuses on three potential micro-level effects of active labour market programmes:

- The **motivation effect** which implies that an unemployed person more actively seeks work in the period immediately before the person is obliged to participate in an activation programme. It is thus assumed that participation is partly involuntary, and that the unemployed will try to avoid taking part in programmes by “escaping” into normal employment (or other activities like normal education). The strength of the motivation effects will thus be indicated by the change in the probability to leave unemployment during the period immediately before a person is obliged to take part in an activation programme. Additionally, since participation in activation programmes is mandatory for the unemployed, unemployment benefits or social security will be lowered or totally stopped, if an unemployed refuses to take part in activation.

- The **training (or skill/qualifications) effect**, which stems from the rise in the level of skills during participation. Thus, the chance of getting a job should increase for those having completed one of the activation programmes.

- The **locking-in effects** of activation caused by the fall in the chance of getting a job during the period in which the individual takes part in activation programmes. This can be caused both by a decline in the individual’s own job-seeking activities and by the fact that the Labour Office is less active in finding jobs for those unemployed persons who currently taking part in programmes. The size of the locking-in effects will be measured by the fall in the probability of becoming employed during activation.

In the following subsections the results concerning each of these three effects are summarized.

*The motivation effect of activation*

As described above, one of the main changes in Danish labour market policy during the period since 1994 has been a gradual reduction in the period during which the unemployed would receive unemployment benefits without having to participate in activation. In 1994 this period was four years (with an option for activation for 12 months during this time). In 1996 this “passive” period was reduced to two years. Also in 1996, for young unskilled unemployed the period was reduced to only six months. In 1999 it was decided to further reduce the “passive” period for adult unemployed to one year.

The reduction in the period of passive benefits may of course have a number of motives. One could be the argument that long periods of passivity will further reduce the prospects for re-employment because the unemployed will lose both general and job-specific skills. Another argument will be the idea of the motivation effect described above. On the other hand early activation incorporates the risk of “deadweight” losses in the sense that activation will be offered to those unemployed who would otherwise have found a job by themselves. Thus, a central dilemma in the design of labour market policy is finding the right timing of passive and active measures.
In figure 2.20 the motivation effect is estimated by looking at the probability of leaving the benefits system and taking up normal employment. As shown in the figure, the probability to leave unemployment falls during the first year of unemployment. However, during 1998 unemployed with more than two years of consecutive unemployment were affected by the implementation of the above mentioned shortening of the passive period from four to two years. The rise in the probability to leave unemployment to take up ordinary employment for those with longer unemployment spells than two years (to the right of the vertical dotted line in figure 2.20), could thus be interpreted as a result of the motivation effect. Also, one notes that the younger age groups have a higher propensity to leave unemployment and are more affected by the new two-year limit than the older unemployed.

The impression of a change in the probability to leave unemployment is supported by the data in figure 2.21, which reports the relative increase in the probability to leave unemployment, when 1998 is compared to the previous year. As shown by the figure, there is an increase in the probability to leave unemployment for all groups - probably as an indication of the improvement in the overall employment situation from 1997 to 1998. However, the increase is larger for those groups, which were mostly affected by the shortening of the passive period (having been unemployed for more than two years as indicated by the vertical dotted line in the figure).
Figure 2.21: Estimate of the "motivation effect" measured by the relative increase from 1997 to 1998 in the probability to leave unemployment (age group 30 to 49 years). Source: Arbejdsmisteriet, 2000, Figure 1.2.

A final indicator of the relevance of the motivation effect is found in figure 2.22, which shows the relative change from 1995 to 1998 in the probability to leave unemployment and take up employment for young unskilled unemployed, who were in the target group of the special youth measure implemented in 1996. Again, the pattern supports the argument of the motivation effect in the sense that the largest increase in the probability to leave unemployment is for those young unemployed who have been unemployed for about 26 weeks (indicated by the vertical dotted line in the figure) and thus are about to begin one of the measures of the youth programmes - and at the same time have their unemployment benefits cut by half.
Thus the overall conclusion from the evaluation of the motivation aspect of active measures in Denmark is that significant effects can be identified in the data. However, one should also be aware of the specific dilemma posed by this observation. *If one wants to increase the size of the motivation effect, one could be tempted to change the content of activation programmes in order to make them less attractive to the participants.* However, this would probably also imply that the *quality* of the programmes would be lowered when measured by their content of training and other activities to improve the skills of participants. Thus, for those unemployed individuals who are unable to get a job before entering activation, the overall outcome might be less positive.

*The training effect*

Another potential effect for the individuals taking part in active programmes is that they increase their chance of gaining employment after participation due to the increase in their skills/qualifications and thus in their employability. It is well known from the literature on the methodology of evaluations that there are a number of pitfalls in focusing solely on the share of participants who become employed after leaving the programme. Participants may become employed for reasons unrelated to their participation and different employment outcomes of different programmes may be due to differences in the characteristics of participants rather than in the content of the programme.

In the new study from the Ministry of Labour, these well-known problems are tackled by applying the statistical technique of fixed-effects models. The study applies a simple version of
the fixed-effect technique, where the effects of participation in different measures are estimated by averaging the change in unemployment after leaving activation for all individuals in a specific programme. The change is measured relatively to the average unemployment situation for each individual, which is interpreted as a sort of b-spline labour market status for the individual person. The methodological point is therefore that each individual is compared only to itself, thus reducing the need for a separate control group, which might differ from the participants in observable or unobservable characteristics. Figure 2.23 illustrates the basic idea behind the effect measure based on the fixed-effect method.

![Data for each individual](image)

Figure 2.23: Principle of the fixed-effect method for estimating employee effects of programme participation using time-series data for individuals. Source: Adapted from Arbeidsministeriet, 2000, Figure 5.1.

To apply this form of analysis, information is needed on the individual labour market histories of all participants. In the analysis discussed below, reduction in unemployment is measured as the reduction in the share of the period in which the persons received transfer income (unemployment benefit, social security, sickness payment etc.). The data thus take into account not only unemployment benefits but all kinds of transfer income related to social policy and labour market policy. A reduction in this measure is thus a reliable indicator of a genuine improvement in the employment situation of a given individual - as having either gained employment or taken up some form of education.

Considerable interest is of course associated with isolating the effects of different labour market programmes. Figure 2.24 summarizes the results from the simple fixed-effect estimates in the recent study, where the reduction in unemployment for each programme type is calculated
as the average relative reduction in individual unemployment for all individuals having participated in this specific programme.

In most respects the results reported in figure 2.24 are similar to the outcome of previous Danish studies applying the fixed-effects method (Langager, 1997). The findings are also in line with international experience (Martin, 2000).

Thus, the largest reductions in unemployment are estimated for participants in private job training. Public job training, training in job search and labour market training with support from the Labour Office have positive, but lower effects. For “Other training” (typically training in very basic skills) and for educational leave chosen by the individual unemployed, the effects are positive but very small. The interpretation of the meagre results from educational leave taken by unemployed individuals is that the content of the education had too little vocational relevance. Additionally, in recent years the access to educational leave has been reduced for the unemployed.
Again, these results merit careful interpretation. First, the possibility remains that the
different effects reflect some form of heterogeneity among participants in that the Labour Office
allocates different groups of participants to different measures, according to assumptions about
their ability to benefit from specific programmes. Therefore, the larger effects of private job-
training could still be obtained if much larger groups were included in this measure. Second, the
differences observed may not reflect differences in the quality of the programmes as such. For
instance, differences in recruitment procedures and number of job-openings between the private
and the public sector could lead to different outcomes of public and private job training, irrespective of the content of different programmes.

Finally, the results have to be evaluated with a view to the costs of the different measures.
Here the study makes a few simple calculations of cost-effectiveness, which indicates positive
budgetary effects for public and private job training and negative effects for education. However,
the estimates are of a very crude nature and, for instance, only include the effects on public
savings in expenditures on unemployment benefits during the first year after leaving a
programme. More refined techniques will need to be applied before reliable estimates of this
nature can be developed.

*Estimates of locking-in effects*

A final element in the recent study is estimates of the locking-in effects of activation
programmes. This is done by applying duration analysis to different groups of unemployed and
obtaining the estimated probability of leaving unemployment during and after participation in a
programme. Persons not participating in a programme are used for comparison. Results from this
analysis are only reported for two groups of participants, see. figures 2.25 and 2.26. The two
groups are chosen as extreme cases as far as formal qualifications are concerned, one group being
unemployed unskilled women, the other unemployed female academics.

![Figure 2.25: Probability to leave unemployment during and after participation in active measures for unemployed female academics, aged 25-49. Adapted from: Arbejdsmøristeriet, 2000, Figure 6.12](image_url)
In figures 2.25 and 2.26 the long unbroken curve shows the probability to leave unemployment for similar persons not participating in the programme (the so-called standard persons). For female academics this curve is somewhat higher and also flatter than for unskilled female workers. This indicates that the the female academics in general have a better chance of leaving unemployment, especially after a long unemployment spell. However, both the locking-in effects and the effects of participation are different. For female academics there is a relatively strong locking-in effect, while the increase in the probability to leave unemployment after participation is small. For the unskilled female worker, there is also a considerable locking-in effect, while the increase in the probability to leave unemployment is much higher after participation - compared to the standard person. On balance the unskilled workers have a net increase in the probability to leave unemployment, while the locking-in effect is considerably higher than the training effects for the academic group.

Thus the immediate conclusion from this study is that great care has to be taken in targeting active programmes in order to obtain positive net gains from activation. However, more analysis is needed to evaluate the generality and robustness of the results herein described.

2.3.4 Flexibility and persons on long-term sickness benefits

In recent years there has been an increased focus on the situation of the persons claiming long-term sickness benefits. There are several reasons. One is that the number of persons in this group has grown significantly since 1994 (see section 4.1 below), while the number of registered unemployed has been falling. The other is the hypothesis that the recipients of long-term sickness benefits are at high risk of becoming permanently excluded from the labour market.
A recent study has focused on the situation of the persons receiving long-term sickness benefits and compared the Danish model to the Dutch system, which since 1992 has been reformed with the aim of reducing the exclusion of persons with health problems from the labour market (Høgelund, 2000). One aspect of the Dutch system is that is it extremely difficult for an employer to dismiss a sick employee during the first two years of absence. By contrast, in Denmark an employee can be dismissed with much shorter notice. The maximum protection is for white-collar workers who can be dismissed after 120 days of absence. Thus in the Danish system the burden of supporting the employees with health problems is laid on the public sector, where the municipalities are responsible for sickness benefits and rehabilitation programmes.

As documented in the study, differences in employment protection have significant consequences for the behaviour of employers. For instance, in Denmark about half of the persons who were absent from work due to back-problems were fired. The corresponding figure for the Netherlands was 11 per cent. Furthermore, it is evident from the data that persons who are dismissed due to their sickness, have a much smaller chance of returning to work than those who are not dismissed.

One immediate conclusion from this study is therefore that the flexible Danish regime of employment protection entails a risk of increasing the number of persons marginalized from the labour market, because persons with health problems are quickly dismissed by employers and have greater problems in returning to work, compared to a model where more responsibility is on individual employers.

On the other hand, the Dutch model gives the employers strong incentives to conduct a careful screening of applicants for vacant jobs in order to select persons with lesser risks of long-term sickness. Another strategy is to use temporary employment contracts to a larger degree. The Dutch model could make it more difficult for persons with health problems to gain employment if they do not have a stable relationship with an employer in the first place.

Current debate on reforms to the Danish policy on the long-term sick are therefore focused of ways to create more active and earlier interventions - also involving the employers - but without creating too strong an incentive to discriminate against persons with actual or potential health problems.

2.4 Summing up

This chapter has presented information about three main features of the Danish employment system.

First, it has been shown that there is a high and stable level of labour turnover (hires and separations) of about 30 per cent of total employment every year. Also, the level of job turnover (creation and destruction) is high, at 10-15 per cent of employment every year. The level of worker and job flows varies somewhat across sectors, with only minor differences between the public and the private sector. Across establishments of different sizes there is some variation in worker and job flows, with the highest level in the smallest and the medium sized establishments. Finally, there are significant differences in the level of job turnover between occupational groups. The lowest level is found for white-collar workers and the highest for unskilled young workers.

Second, this high level of labour turnover must be seen in relation to the few restrictions placed on employers by the Danish employment protection regulations. Here, the Danish protection regime is similar to the liberal Anglo-Saxon regimes found in the Canada, Ireland, the United Kingdom and the United States - and in contrast to other Nordic or European countries.
Third, a surprising finding is that in spite of the high rates of labour and job turnover, Danish employees do not perceive their jobs as insecure. A possible explanation is found in the somewhat generous and state-financed unemployment benefit system, which protects the individual from economic hardships caused by unemployment.

The interplay between the “soft” regime of employment protection and the extensive system of unemployment (and social) benefits implies that the costs of the high level of flexibility are carried by the State - and thus by the tax-payer in general. Few burdens are laid on firms with regard to social responsibility.

Fourth, the Danish model depends to an increasing extent on an active labour market policy, which in relation to the unemployed functions both as an incentive to job-search and as an instrument to upgrade skills according to the changing demands of the labour market. The evaluation results presented in this chapter suggest that most of the activation programmes have significant positive effects both when it comes to motivation and training of the unemployed.

In many respects, the interplay between the flexible employment relation, the unemployment benefit system and the active labour market policy seems to be well-functioning when examined in isolation. In the following chapter, the purpose is to take a broader perspective and look at the general labour market effects of Danish employment protection and labour market policy.
3. Labour market effects of employment protection and labour market policies

This chapter takes a broader view at the interplay between the labour market, employment protection and labour market policies. Three themes are covered. First, the focus is on the functioning of the Danish labour market and labour market policy, when it comes to inclusion or marginalization from the market. Does the flexibility of the employment relation have a price in the form of exclusion from normal employment of those not capable of fulfilling the demands made on them by a highly effective employment system?

Second, the relation between marginalization, policy reforms and the business cycle is analysed. To what degree should the apparent success of the Danish employment system, when it comes to lowering unemployment and other forms of inactivity, be attributed to either to the general upswing in the economy or to the policy reforms of the 1990s.

Finally, the chapter looks at the other possible causal effect of labour market policy reform: a lowering of structural unemployment, which could explain the absence of higher inflation rates after the steep decline in unemployment since 1994.

3.1 Evidence on inclusion and marginalization

In section 2.3.3 the results from recent evaluations of active measures were presented. Do the active measures lead to a reduction in unemployment for the individuals at the time they are obliged to participate in activation programmes (motivation effect) or after participation (training effect)?

In the present section a broader view is taken on exclusion and marginalization in relation to the labour market. Focus is on the movement of persons between different positions inside and outside the labour market. The material is mainly from two recently published studies (Finansministeriet, 2000; Det Økonomiske Råds Formandskab, 2000).

3.1.1 Persons on transfer income

Figure 3.1 shows the growth in the number of persons aged 15-64 years receiving transfer income in full-time equivalents from 1979-1998. During these 20 years the number almost doubled from 450,000 persons to over 800,000 persons. The figure does not include persons in active labour market measures for unemployed - another 75,000 persons in 1999.

Measured as a share of the adult population in the same age group (15-64 years), the group of transfer income recipients grew from about 15 per cent in the late 1970s to about 25 per cent in the late 1990s. From a longer-term perspective, the rise is even more dramatic. In 1960 the share was down to about 6 per cent. In recent years, however, the trend has been pointing downward due to the combined effects of the economic upswing and more active policies (see section 3.2).
The rising trend in the number of recipients of transfer income is found for most of the subgroups:

- The number of persons receiving unemployment benefits has a clear cyclical component and reached its maximum in 1993.
- Persons receiving sickness benefits (paid by the municipalities to persons out of work due to health problems) is also cyclical. Contrary to unemployment, the number of persons receiving sickness benefits has increased in recent years.
- The number of persons getting the invalidity pension has increased steadily since the late 1970s, but has stabilized somewhat since the mid-1990s. One reason is stricter eligibility criteria and a more active policy towards persons at risk of becoming invalidity pensioners.
- The number of persons receiving the unemployment pension for persons aged 60-66 years has increased steadily since the scheme was introduced in 1979. Also, in recent years there have been attempts to reduce the inflow, both as a reaction to the stricter situation on the labour market and the long-term demographic trends.
• The number of persons receiving *social security* for reasons other than unemployment also rose during the years leading up to the crisis of the early 1990s and has fallen slightly since then.

• Finally, the large-scale *parental leave* introduced in 1994 had a significant take-up, which has dropped somewhat in recent years as a reaction to the lowering of the benefits paid to persons on leave.

The rising trend in the share of the adult population receiving some form of transfer income is not unique for Denmark, but a feature shared with the other Nordic countries, see. figure 3.2.

![Graph showing the share of the adult population receiving some form of transfer income, full-time persons, 1980-1998 (or latest year) in the Nordic countries. Source: Calculations based on Kvist (2000).](image)

**Figure 3.2**: Share of the adult population receiving some form of transfer income, full-time persons, 1980-1998 (or latest year) in the Nordic countries. Source: Calculations based on Kvist (2000).

Thus, in all the Nordic countries in the late 1990s about one-quarter of the adult population is economically inactive and supported by the welfare state. *The high and rising share of inactive adults is not a unique feature of the Danish employment system.*

Table 3.1 presents more detailed information about the number of persons on transfer income in Denmark from 1994-1999.
Table 3.1: Recipients of transfer income, age group 15-64 years, 1994-99

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Insured unemployed</td>
<td>279,000</td>
<td>238,000</td>
<td>204,000</td>
<td>183,000</td>
<td>148,000</td>
<td>127,000</td>
<td>-152,000</td>
</tr>
<tr>
<td>Non-insured</td>
<td>65,000</td>
<td>51,000</td>
<td>42,000</td>
<td>37,000</td>
<td>34,000</td>
<td>33,000</td>
<td>-32,000</td>
</tr>
<tr>
<td>unemployed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social benefits</td>
<td>74,000</td>
<td>65,000</td>
<td>69,000</td>
<td>71,000</td>
<td>69,000</td>
<td>56,000</td>
<td>-18,000</td>
</tr>
<tr>
<td>Sickness benefit</td>
<td>39,000</td>
<td>43,000</td>
<td>48,000</td>
<td>50,000</td>
<td>50,000</td>
<td>49,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>16,000</td>
<td>17,000</td>
<td>18,000</td>
<td>20,000</td>
<td>22,000</td>
<td>32,000</td>
<td>17,000</td>
</tr>
<tr>
<td>Maternal benefit</td>
<td>35,000</td>
<td>36,000</td>
<td>35,000</td>
<td>36,000</td>
<td>35,000</td>
<td>35,000</td>
<td>0</td>
</tr>
<tr>
<td>Leave</td>
<td>49,000</td>
<td>77,000</td>
<td>58,000</td>
<td>43,000</td>
<td>40,000</td>
<td>31,000</td>
<td>-18,000</td>
</tr>
<tr>
<td>Early retirement</td>
<td>117,000</td>
<td>120,000</td>
<td>126,000</td>
<td>133,000</td>
<td>145,000</td>
<td>153,000</td>
<td>36,000</td>
</tr>
<tr>
<td>(unemployment pension)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other benefits</td>
<td>8,000</td>
<td>23,000</td>
<td>46,000</td>
<td>42,000</td>
<td>36,000</td>
<td>30,000</td>
<td>22,000</td>
</tr>
<tr>
<td>Invalidity pension</td>
<td>267,000</td>
<td>271,000</td>
<td>272,000</td>
<td>273,000</td>
<td>272,000</td>
<td>269,000</td>
<td>2,000</td>
</tr>
<tr>
<td>In total</td>
<td>948,000</td>
<td>941,000</td>
<td>918,000</td>
<td>888,000</td>
<td>852,000</td>
<td>815,000</td>
<td>-13,300</td>
</tr>
</tbody>
</table>

Note: Persons are measured in full-time equivalents. Persons in active labour market programmes are not included. In 1999 this group represented approx. 75,000 persons (full-time).
Source: Finansredegørelse 2000, Treasury, p.142

Two features may be observed from table 3.1. First, the recipients of transfer income are a heterogenous group. Some are in positions close to the labour market, such as insured and uninsured unemployed. Others, such as recipients of social benefits, sickness benefits and rehabilitation benefits, are somewhat further distanced from employment, while persons receiving unemployment or invalidity pensions must be considered as being in positions that strongly marginalize them from normal employment. Persons on leave (including maternal leave) are in special positions.

Second, the total number of persons receiving transfer income decreased by 133,000 from 1994 to 1999. However, this development has been different for different subgroups. The number of unemployed and recipients of social assistance has fallen sharply. On the other hand the number of persons on sickness benefits and in rehabilitation has increased, probably as the result of a number of persons with employability problems becoming more visible to the labour market and social policy authorities as overall unemployment diminished from 1994 onwards.

Looking at the background characteristics of the persons receiving transfer income, the results are hardly surprising (Finansministeriet, 2000, table 5.3):

- The share of unskilled persons is much higher among the unemployed than among the employed. For unemployed uninsured persons, the share of unskilled is 77 per cent compared to 33 per cent among the employed. Also among recipients of unemployment pensions there is an over-representation of unskilled persons and of women.

- Looking at age groups, one finds a significant over-representation of persons above 50 years among recipients of sickness benefits.
Finally, there is a strong over-representation of ethnic minorities (persons born outside Denmark), when comparing the recipients of social security with the employed (46 per cent versus 5 per cent).

Section 3.1.2 takes a closer look at the mobility between the different positions inside and outside employment.

### 3.1.2 Mobility in and out of the labour market

In a recent study from the Economic Council of marginalization and exclusion, the attachment of the adult population to the labour market is studied applying a number of categories as described in table 3.2. The fundamental criteria used in the categorization are the level of unemployment and whether the individuals are receiving some form of other transfer income. Thus, at one end of the spectrum is a group with low unemployment levels over long periods of time. At the other end are the recipients of social security and permanent transfer income (invalidity pension and unemployment pension). The study uses the term "middle group" to characterize a segment of about one-quarter of the adults, which neither has a stable position on the labour market (measured by low unemployment), nor falls into the groups of strongly marginalized or full-time recipients of transfer income. The size of the group is calculated as a residual, which is of course less satisfactory from a methodological point of view. On the other hand, the group does represent the reality of a labour market with a high level of mobility and consequently also the risk that some individuals have an attachment to the labour market which is less stable - without implying marginalization in the strong sense of the word.

### Table 3.2: Definitions of the different segments of the adult population

<table>
<thead>
<tr>
<th>Segment</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core group</td>
<td>Self-employed or wage earner employed full-time for three years with an unemployment less than 5 per cent.</td>
</tr>
<tr>
<td>Part-time employed</td>
<td>Part-time employed wage earner employed for three years with an unemployment less than 5 per cent.</td>
</tr>
<tr>
<td>Middle group</td>
<td>Employed, but not included in any other group (residual)</td>
</tr>
<tr>
<td>Marginalized</td>
<td>Self-employed or wage earner being unemployed for more than 80 per cent of the last three years (both full-time and part-time workers)</td>
</tr>
<tr>
<td>Social security recipients</td>
<td>Receiving social security or sickness benefits during the last year and not being registered as unemployed</td>
</tr>
<tr>
<td>Permanent transfer income</td>
<td>Persons receiving invalidity pension or unemployment pension during the last year</td>
</tr>
<tr>
<td>Outside workforce</td>
<td>Neither employed, marginalized, in education or receiving transfer income during the last year.</td>
</tr>
<tr>
<td>In education</td>
<td>In education during the last year.</td>
</tr>
</tbody>
</table>

Figure 3.3 shows the distribution of the adult population by labour market positions in 1997. In this study 71 per cent of the adults belong to the core of full-time employed, the part-time employed or the middle group, while slightly less than one-fifth are found in the group of marginalized or recipients of social security or transfer income. The background characteristics of the different groups follow a pattern that is not surprising. Relatively more unskilled are found among all other groups than the core group and those adults in education. The largest over-representation of unskilled is found among recipients of social security and permanent transfer income.

The next interesting question is of course, how the individuals over time move between the different positions in table 3.2 and figure 3.2. This information is shown in table 3.3.

![Pie chart showing distribution of adult population by labour market positions in 1997.](image)

*Figure 3.3: Attachment to the labour market, Adult population, 15-64 years, 1997.*
### Table 3.3: Attachment to the labour market 1995-97 compared to 1992-94

<table>
<thead>
<tr>
<th>Status 1992-94</th>
<th>Core</th>
<th>Part-time</th>
<th>Middle group</th>
<th>Marginalized</th>
<th>Social security</th>
<th>Permanent transfer</th>
<th>Outside workforce</th>
<th>In education</th>
<th>Dead</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>75.1</td>
<td>2.4</td>
<td>13.1</td>
<td>0.3</td>
<td>1.3</td>
<td>4.4</td>
<td>1</td>
<td>1</td>
<td>1.2</td>
<td>99.8</td>
</tr>
<tr>
<td>Part-time</td>
<td>21.5</td>
<td>35.6</td>
<td>27.1</td>
<td>0.6</td>
<td>2.3</td>
<td>7.1</td>
<td>2</td>
<td>2.3</td>
<td>1.3</td>
<td>99.8</td>
</tr>
<tr>
<td>Middle</td>
<td>32.9</td>
<td>4.1</td>
<td>38</td>
<td>4.5</td>
<td>5.1</td>
<td>5.6</td>
<td>1.6</td>
<td>6.5</td>
<td>1.7</td>
<td>100</td>
</tr>
<tr>
<td>Marginal</td>
<td>2.8</td>
<td>0.4</td>
<td>38.4</td>
<td>20</td>
<td>9</td>
<td>20.4</td>
<td>1.7</td>
<td>5.9</td>
<td>1.9</td>
<td>99.8</td>
</tr>
<tr>
<td>Social security</td>
<td>6.9</td>
<td>2</td>
<td>32.4</td>
<td>3.6</td>
<td>25.8</td>
<td>16.3</td>
<td>3.6</td>
<td>5.7</td>
<td>3.6</td>
<td>99.9</td>
</tr>
<tr>
<td>Permanent transfer</td>
<td>0</td>
<td>0</td>
<td>0.1</td>
<td>0.0</td>
<td>0.3</td>
<td>93.2</td>
<td>0.3</td>
<td>0</td>
<td>6</td>
<td>99.8</td>
</tr>
<tr>
<td>Outside workforce</td>
<td>16.1</td>
<td>4.6</td>
<td>15.6</td>
<td>0.6</td>
<td>3.4</td>
<td>12.2</td>
<td>35</td>
<td>3.6</td>
<td>8.7</td>
<td>99.8</td>
</tr>
<tr>
<td>In education</td>
<td>8.2</td>
<td>1.8</td>
<td>45.4</td>
<td>1.5</td>
<td>3.2</td>
<td>3.4</td>
<td>1.5</td>
<td>35.4</td>
<td>2.8</td>
<td>99.8</td>
</tr>
</tbody>
</table>

Source: DØR, 2000, table III.2

A number of observations can be made from table 3.3:

- In the core group there is a high level of stability on the labour market. Few persons move to marginalized positions, while there is some mobility out to the positions as members of the middle segment.
- The part-time segment is less stable with large number moving to the core or the middle group. Still, few move to marginalized positions.
- From the middle segment the largest outflow is to the core group, which indicates that the group is characterized by high employability. Note, however, that the risk of moving to marginalized positions is higher than for the two previous groups.
- For the marginalized and the recipients of social security, a rather high level of mobility is found, either to the middle group or to the persons on permanent transfer income. Also, the risk of dying is somewhat higher.
- Finally, there is a considerable flow from being in education to the middle group, probably reflecting the more unstable labour market situation of persons immediately upon completion of education.

*In sum, the study from the Economic Council adds to the picture of the Danish labour market as very dynamic with a high level of mobility between different positions in the labour market.*
3.2 Economic growth, policy reforms and marginalization

A number of specific factors are relevant in explaining the changing sizes of each of the subgroups of recipients of transfer income discussed in previous sections. Changes in eligibility rules and benefits for each of the programmes will influence the inflow of persons to the schemes and the duration of time for which each person receives a specific benefit.

On the other hand, substitution effects may also be at play. If the access to one programme is restricted, an increased inflow to other programmes may be an option. For example, when access to unemployment benefits becomes more difficult due to the stricter tests of individual employability in a tighter labour market, there may be an increased inflow to leave schemes, sickness benefits and unemployment pensions. Such substitution effects offer an argument for analysing the number of persons receiving transfer income as an aggregate rather than as a distinct subgroup.

An obvious hypothesis here could be that the change in the number of persons receiving transfer income is inversely related to macroeconomic growth. The increased demand for labour which follows from high economic growth will lead to a lower increase - or maybe even a fall - not only in open unemployment, but in the total number of persons receiving transfer income. Since the relation of economic growth to the number of persons receiving transfer income can be expected to be of a more long-term nature than that reflected in yearly growth rates, 3-year moving averages are used for both variables (time series of growth rates).

The result from correlating the growth rate of GDP and the growth rate of persons receiving transfer income is shown in the scatter diagram in figure 3.4. Here the pattern of observations suggests an interpretation which is very much in line with the above hypothesis. While the earliest observations (1962 and 1963) fall outside the pattern, the 15 observations from 1964 to 1978 form a distinct downward-sloping pattern, indicating that lower economic growth implies higher growth rates for persons receiving transfer income. In 1979 there seems to be a structural shift in the relationship towards a new lower position of the 16 observations from 1980 to 1995 - but still with a negative slope. Finally, the three observations from 1996 and the following years are found below the pattern from 1980 to 1995. The existence of these structural shifts can be confirmed by simple regression analysis.

Taking into account the possibility of structural changes, the hypothesis seems to stand. For two long time periods since 1964 there is a significant negative relationship between economic growth and the growth rate of the number of persons receiving transfer income - the obvious interpretation being that high economic growth has a damping influence on the inflow of persons to programmes providing some form of income support.

Furthermore, the two structural shifts identified - in the late 1970s and in the late 1990s both coincide with large-scale reforms in Danish labour market policy. The reform in 1979 introduced the job-offer scheme, which was the first comprehensive activation programme since the oil crisis in 1973, and also the unemployment pension. The late 1970s also more generally marked an increased focus on the need to combat unemployment not only as a problem of the business cycle but as a structural problem. The other structural shift in the relationship between economic growth and social exclusion came in the mid-1990s, where the new large-scale labour market reform was introduced. Thus, the shifts in the relationship seem closely related to significant policy changes.

These observations refer to the relation between the business cycle, labour market policy reforms and marginalization from the labour market measured by the total number of recipients of transfer income. Another important question is whether one can identify the effects of policy reform on the macroeconomic performance of the economy. This issue is examined in section 3.3.
3.3 Macroeconomic effects of employment protection and labour market policies

The evaluations discussed in section 2.3.3 focused on the micro-level. However, the coincidence of the implementation of the labour market reform and the dramatic fall in unemployment has stimulated debate on the extent to which the inflation-free macroeconomic upswing can be attributed to the shift in labour market policy in the 1990s (Madsen, 1999).

Figure 3.5 shows the remarkable synchronization between a shift in the Danish Phillips curve in 1993-94 and the reforms in labour market policy. Since 1994 the Danish Phillips curve has assumed an almost horizontal shape, indicating a steep decline in structural unemployment.

A number of factors may be involved in these developments. Changing attitudes and behaviour of firms, employees and the social partners may have an influence. Improvement in the state of the labour market in itself has helped to reduce marginalization. The many positive results from both the process- and the effect-evaluations of the labour market reform argue a case for the change in Danish labour market policy in 1993-94 as a significant contribution to the improved functionality of the Danish labour market in recent years.

![Growth and exclusion 1962-1998](image)

**Figure 3.4:** Economic growth (GDP at factor cost) and change in the number of persons receiving transfer income, 3-year moving average. Denmark. 1962-1998. Source: Author's calculations based on Kvist (2000) and ADAM’s data bank.
A recent study from the Danish National Institute of Social Research aims at summing up the evidence from the large-scale evaluation programme studying the labour market reform of 1994 (Larsen and Langager (1998) and Søndergaard (1998). The question being asked is whether the labour market reform and the subsequent adjustments in labour market policy have had a positive impact in the functioning of the labour market. This question must be answered with considerable care. The evaluators sum up their investigation in the following points (Larsen and Langager, 1998, pp. 34-36).

Concerning the importance of the activation strategy, the empirical analysis shows that:

- the employment goals specified in the individual action plans indicate that there is a considerable planned mobility among the unemployed
- labour market policy seems to function effectively in that planned mobility among the unemployed is larger in those regions where the need for mobility is highest (due to threats of bottlenecks)
- there are significant positive employment effects of both job-training and education for unemployed
- the effective supply of labour among the insured unemployed seems to have increased from 1994 to 1997 probably due to the stricter demands made on the unemployed during the second phase of the reform (for instance in relation to the increased demands on the young unemployed).

Concerning the activities directed at the firms, there are indications that the reform has contributed to the absence of bottlenecks since 1994:

- there is a (weak) indication that the quality of the services of the Labour Office to the firms has improved since the reform when looking at the ability to fulfil the needs for qualified labour (though there are also examples of labour shortages in the short run)
- the introduction of new forms of placement services (in the form of "open" self-service placements) has - together with the surveillance activities and regular contacts with employers - lead to an increase in the transparency of the labour market and thus improved its function as a system to match demand for and supply of labour; the market share of the Labour Office however, is still rather low.

Whether these effects of the reform have lead to an improvement in the general functioning of the labour market, as measured by its ability to adapt to external shocks and to allocate labour efficiently, is harder to evaluate.

The lack of significant shortages of labour since 1994 - in spite of the fall in unemployment and strong growth in employment - could indicate that the functioning of the labour market has been improved. Whether this is solely due to the reform or also to other factors (including changes in wage-setting behaviour) cannot be definitively decided on the basis of the available evidence.
3.4 Summing up

This chapter has looked at a number of aspects of the interaction between the labour market, employment protection and labour market policies.

First, it has shown that the number of economically inactive adults receiving some form of transfer income has been rising until the middle of the 1990s. Thus, strong marginalization mechanisms seemed to be at play. One could interpret this as part of the cost for the high efficiency of the flexible Danish labour market. Though this might be a relevant consideration, one should also note that the same upward trend can be observed in the other Nordic countries - in spite of the differences with regard to the flexibility of the employment relation between the employment systems of the four Nordic countries.

Second, evidence was provided indicating that there is a rather high level of mobility between different positions on the labour market implying both tendencies to marginalization, but also to the inclusion of persons in more marginal positions.

Third, it has shown that higher economic growth tends to reduce the growth in the number of persons receiving transfer income. However, there are also clear effects of the reforms in labour market policy, both in the late 1970s and in the mid-1990s.
Finally, an analysis of structural unemployment indicated that the reform of labour market policy from 1994 onwards has had a positive effect on the functioning of the labour market measured by the relationship between unemployment and inflation, but also by other indicators.
4. The "golden triangle" of flexicurity: Conclusions

This chapter concludes the analysis by amalgamating the results of the previous chapters into a synthesis of the interaction between the flexible employment relation, the social protection system and the active labour market policy. Possible needs for reforms of the Danish model are also discussed.

4.1 The "golden triangle" - a successful employment system

Since the mid-1990s, Denmark has shown an impressive macroeconomic performance. Unemployment has declined from 12 to 6 per cent. Total employment has increased by almost 6 per cent. Inflation remains stable. Not surprisingly, the positive developments in employment and economic growth since 1994 have generated a feeling of success, of being "on the right track", when Danish labour market policy is discussed either within the country or in international fora. In a recent international benchmarking exercise by the Ministry of Finance, Denmark is ranked as above average on labour force participation and employment rates, youth unemployment, active labour market policy and perceived job security (Danish Government, 2000, chapter 13). Also, significant improvements are noted in general unemployment, long-term unemployment and structural unemployment.

The relative success of the Danish model compared to a number of other European countries has stimulated ideas about the development of a "new" Danish employment system in the form of the so-called "golden triangle" shown in figure 4.1.

The triangle image represents the success of the Danish employment system as due to its unique tri-combination of flexibility (indicated by a high level of labour and job turnover), social security (a generous unemployment benefit system) and active labour market programmes, which upgrades the skills of the unemployed and thus supports the ongoing transformation of the economy.

Thus, the "golden triangle" depicts Denmark as a kind of "hybrid" employment system combining the flexibility of a liberal labour market with the social protection and active labour market policy of a Nordic welfare state (see figure 4.1).
A low level of employment protection and many job openings

As shown in section 2.2, the low level of employment protection gives the Danish system a flexibility comparable to Ireland, United Kingdom, Canada and the United States. The low level of protection is reflected in other characteristics of the labour market. The average tenure of employees in 1998 was 8.5 years. Among a number of European countries and the United States, only the United Kingdom and the United States had a lower level of tenure. Similarly, the share of job openings is very high - between 25 and 30 per cent of all job positions are filled with a new person every year. The share of job openings varies somewhat across groups of workers - low for white-collar and higher for unskilled blue-collar workers.

The role of unemployment benefits and social security

In spite of the high level of job mobility, the perceived job insecurity among Danish employees is among the lowest in Europe (see section 2.2.2). The positive development on the Danish labour market in recent years provides part of the explanation, but the relatively high net replacement rate in the Danish system of unemployment benefits is another significant factor. When a worker becomes unemployed, the state-financed system of unemployment benefits (and social benefits for the uninsured unemployed) acts as a safety net, preventing the individual from serious economic hardship. Furthermore, the high level of job openings engenders a high probability of re-entering employment.

The Danish system can be pictured as a model of "flexicurity" in the sense that the uncertainty caused by flexibility in the individual employment relation is counterweighed by a
safety net provided by the unemployment (and social security) benefits and financed mainly by the public budget - and thus by general taxation.

The role of active labour market policy

The inherent risk related to generous social protection and high compensation rates in case of unemployment is of course that the individual economic incentives to return to employment are weakened. In the Danish case this risk is higher for low-income groups, since they comprise the highest net compensation rates in a system with a fixed ceiling on the unemployment allowance (see section 2.3.1).

Furthermore, the possibility of return to employment will be small for those unemployed persons with employability problems. Lack of relevant skills (both formal and informal) or other causes of low productivity (health problems etc.) may result in a number of unemployed becoming locked into long-term unemployment instead of returning quickly to employment. In this situation, the role of active labour market policy is twofold. On the one hand, the prospect of becoming activated can motivate the unemployed to become more active in searching for and accepting a vacant job. The activation programmes thus supplement the tests of availability for work, which is part of the standard procedures of the Labour Office in their contact with the unemployed. On the other hand, those unemployed who participate in labour market training and other activation programmes will improve their qualifications/skills and thus their chance of gaining normal employment (cf. the evaluation results discussed in section 2.3.3).

In recent years increased attention has been paid to the role of an active labour market policy in both monitoring the unemployed and improving their skills. A labour market reform in 1994 marked the first step toward a more active line in Danish labour market policy. Subsequent reforms have carried the strategy further and since 2000 all unemployed are activated on a full-time basis after no longer than one year of unemployment. For some groups, e.g. the young under the age of 25, the passive period is less than six months.

The overall evaluation

Overall evaluations of the enhanced model of flexicurity - the Danish “golden triangle” - are generally positive, both when it comes to its achievements at the micro- and macro-level. At the micro-level, positive employment effects are found for most programmes of active labour market policy. At the same time, the coincidence of a drastic fall in unemployment, high economic growth and stable wages and prices since 1994 indicate a significant reduction in structural unemployment (see section 3.3).

The Danish experience in recent years points to the macroeconomic feasibility of a “hybrid employment system” combining, on the one hand, the traditional virtues of a liberal labour market with few restrictions on the employment contract with - on the other hand - a reasonable level of economic protection for the individual wage earner. The Danish model thus fits the picture of a possible “tradeoff” between a very flexible employment relation and a social protection system which defends individuals from the potential costs of a low level of employment security.

4.2 But not without drawbacks

The Danish model, however, is not flawless. The ongoing debate on adjustments and further reforms reflects some of these weaknesses, which has been already touched on in earlier chapters.
Large groups expelled from the labour market

First, the highly dynamic character of the Danish labour market, with a large number of shifts between jobs, also implies continuous testing of the productivity of employees. One outcome of these ongoing selection processes is that some workers are gradually expelled from the labour market if they fail to fulfil the productivity criteria of their employers. The few restrictions put on employers when it comes to layoffs may of course add to the risk of expulsion from the labour market. Those at risk are mainly unskilled workers, who are also put under pressure by the rather narrow wage dispersion of the Danish labour market. Persons with health problems are another risk group.

Thus, a large share of the adult population experience difficulties in fulfilling productivity demands in a highly efficient labour market. As a consequence, by 1999 about 25 per cent of the adult population received some form of transfer income, many on a permanent basis. A situation, it should be noted, that is not unique for Denmark, but common to all four Nordic countries. They have all experienced a growth in the share of inactive adults receiving transfer income to a level of about 25 per cent in the late 1990s, indicating that the mechanisms involved cannot be attributed solely to special features of the dynamics of the Danish labour market, but also to more general aspects of the interplay between the welfare states of the Scandinavian type, modern labour markets and the business cycle. However, even after five years of high economic growth, the share of economically inactive adults in Denmark is still at a very high level.

Unemployment benefits and poverty traps

Another debate related to the “golden triangle” has already been hinted at in section 2.3.1.1. The high replacement rates in the Danish unemployment benefit system increase the risk of economic disincentives, especially for low income groups. While such effects are theoretically plausible, they have been hard to verify empirically (at least at sufficient magnitude) and the general attitude has been to rely on early and intensive activation to counter the problems with the potential disincentives from the unemployment benefit system.

The costs and effects of activation programmes

At the third corner of the golden triangle, some further critical points can be made. While the net effects of most activation programmes on unemployment seem positive, less is known about their cost-effectiveness. Recent estimates from the Ministry of Labour indicate that the net effects on the public budgets are very positive for private job training, almost neutral for public job training and negative for educational programmes, which are the dominant programmes for activating the unemployed (Arbejdsminderiet, 2000, table 5.2).

A further aspect of the cost side of the more active profile of Danish labour market policy is related to the point that it has been implemented during a period of economic expansion. Should a downward change occur in the business cycle, the costs of sustaining the level of ambition to activate the unemployed at an early stage would sharply increase the expenditure of the public sector - at a time when revenues would be falling due to the economic downturn. Thus the political pressure to cut activation programmes could become overwhelming (and supported by the need for Denmark to de facto accept the EMU budget criteria).

Creaming effects

Furthermore, a number of evaluations have shown examples of creaming effects, implying that the strongest among the unemployed are receiving the activation offers with the best quality. This might be rational from a narrow viewpoint of economic efficiency and also understandable if one looks at the practical implementation and delivery of the services of the
Labour Office. Nevertheless, the bias towards the “stronger” unemployed is in conflict with some of the declared political targets of active labour market policy.

**The future challenges for the Danish model**

Taking a longer-term perspective, a number of additional problems can be identified which could increase the forces that are already causing the rise in the number of persons expelled from the Danish labour market:

- The demographic changes during the coming decades which imply a growing number of older workers with a higher risk of marginalization.
- The rising share of immigrants in the Danish population - with the share of persons from non-European countries rising from about 4 per cent currently to about 10 per cent in 2020.
- The increasing wage-competition from low-wage countries - also within Europe - which will be strengthened in case of the inclusion of a number of Eastern European countries in the EU.

When the needs for future reforms are discussed, these challenges will be in the forefront.

**4.3 The current Danish discourse on labour market policy**

The widespread conception of the Danish employment system as a “golden triangle” and the embracing of the “flexicurity” model indicate the generally positive tone of the current Danish discourse on labour market policy. However, as noted in the previous section, there are also critical points made by a number of actors. In particular, the long-term increase in the number of persons receiving permanent transfer income is in focus.

To counter the tendency to exclusion from the labour market two concepts have been central in policy development.

One is the concept of the social responsibility of the employers, which emphasized the need to make firms more aware of the role they play in marginalizing persons from the labour market and of the potential in employing persons with some form of reduced employability.

In recent years, however, the idea of the encompassing labour market has taken over as the core concept when discussing the possibilities to include more persons into active employment (Regeringen, 2000). The broad targets set for the encompassing labour market are:

- every individual has a social responsibility
- preventive measures should be taken at the workplace in order to preserve the full capacity to work during the whole life
- persons with reduced capacity to work should keep a job
- more persons should become employed.

The main actors involved in creating the encompassing labour market are identified as the social partners and the municipalities.

An important specific initiative to support the encompassing labour market is a planned reform of the system of invalidity pensions, which should imply that more persons with reduced capacity to work can become economically active. Other initiatives already implemented are the so-called “flexi-jobs” which are created by permanent wage-subsidies for persons with reduced
capacity to work. These jobs were introduced in 1996. The number of "flexijobs" is still rather small - about 7,000 in 2000. Also the increased focus on adult vocational education, the integration of ethnic minorities and improvements in the work environment are related to the idea of the encompassing labour market.

When it comes to more specific reforms affecting the linkage between employment protection and labour market policy, the general impression is that the period of large-scale changes in active policies and in the unemployment benefit system from 1994 to 1998, has been followed by a pause. The overall evaluations of the functioning of the employment system are generally positive and there is increased awareness of the delicate balance between the different elements of the system as symbolized by the "golden triangle".

Thus, the political agenda contains no plans for further major reforms of either employment protection or labour market policy in general. The present Government's proposals for the fiscal year 2001 thus only comprise minor changes, e.g. in the central steering of regional labour market policy. Also, it is proposed that the waiting period in the present benefit system, where the employer carries the costs of unemployment benefits for the first two days of unemployment, is changed in order to make the employer pay for the first five days. This should imply a stronger disincentive for employers to dismiss workers for very short periods, for instance in the building and construction sector.

But all this must be seen against the background of a political agenda for labour market policy which is remarkably calm - after the hectic reforms of the 1990s. Thus, the lack of reform plans in the Danish agenda of labour market policy does at least indicate that the main political actors seem to share the view that the present balance in the tradeoff between flexibility and social protection is not too far from the optimum.
References


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