

# Unemployment and Economic Policy in Denmark in the 1930s

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## 1. Introduction

Popular historical accounts commonly depict Denmark in the 1930s as a heavily depressed economy with mass unemployment. Most scholars, however, acknowledge that the situation was not that simple and that Denmark surmounted the depression relatively easily compared to other countries. The paper's account of the Danish economic performance points out that the economy displayed a remarkable stability from an international perspective, and that the average growth rate was high from the late 1920s to the end of 1930s. From this perspective, it is hard to believe that Denmark experienced unemployment of the same scale as the mass unemployment in countries like Germany and the USA.

Yet, the Danish unemployment did rise to a level that caused considerable concern in society, but the estimates of the actual magnitude of the problem vary due to lack of data. The paper focuses on the reliability of the Danish unemployment data and on some of the attempts to improve the data. The official unemployment records have always been criticised for being incomplete and the usual way to solve the problem is to add an estimated number of unemployed to the registered number of unemployed. The paper argues that the method is problematic as it does not take into account whether the jobless did search for a new job or rather voluntarily withdrew from the labour market. It is remarkable that publications on the Danish unemployment in the 1930s hardly ever discuss the possibility of effects on the labour supply. At the same time, the arguments presented by researchers to substantiate the existence of an unreported unemployment often turns out to be that the persons involved were not fully available for work. It is reasonable to ask whether they belonged to the labour market at all. The neglect of the supply effects tends to lead to an overrating of the unemployment problem in the early 1930s.

The unemployment remained high on the political agenda throughout the 1930s, and consequently one would expect to see the implementation of a comprehensive employment policy carried out. However, to a certain extent the unemployment problem became subordinated to the problem of the

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balance of payments and the political disagreements in parliament. The macroeconomic policy did produce favourable results with respect to unemployment, but the unemployment never became the main target. It was primarily the concern for the balance of payments and the intentions to help the depressed agricultural sector that governed the policy, but even from an employment perspective, it is indeed difficult to point to an alternative macroeconomic policy that would have produced a better result. This is hardly the case if one examines the employment policy directly targeting the labour market. The number of measures was small, and they seldom gave rise to much job creation. A political deadlock in parliament contributed strongly to this meagre result, and the number of measures increased to some extent in the late 1930s, when the government got a majority in both chambers of parliament.

## 2. The Danish economic performance in the 1930s

The impact of the Great Depression was different in even close, neighbouring countries. Some countries experienced a severe depression and never recovered fully during the 1930s, while other countries only experienced a brief recession followed by a strong recovery. Christina D. Romer's cross-country analysis of the changes in industrial production indicates that Denmark was among the countries that suffered the least during the depression. Compared to countries like the USA, Germany and Canada the Danish recession started late and the decrease in industrial production never came near the dramatic decreases experienced by some countries (Romer 1993).

Romer's observations are in accordance with the conclusions of the chief-economist of the Danish Ministry of Social Affairs, Jørgen S. Dich, who made a study of the development in employment in 20 countries during the 1930s.<sup>2</sup> Like Romer, Dich observed that the downturn and recovery did not take place simultaneously, and he analysed the business cycle for each country by comparing employment in the pre-depression peak year and in the trough of depression. Dich pointed out that neither Denmark nor Britain was among the prominent victims of the Great Depression, and compared to other countries both Denmark and Britain managed to overcome the depression with only moderate decrease in employment. Britain experienced the smallest decrease of all countries, and though the recovery by 1937 was moderate, employment was clearly about the pre-depression

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<sup>2</sup> Dich (1939; 85) based his analysis on the ILO employment indexes published in International Labour Review (August 1939; 273-275). The journal did not include data from Norway and Sweden, and Dich used indexes for industrial production as a proxy for the employment in the two countries.

level. The Danish economy experienced a greater setback as the employment dropped 17 per cent from 1930 to 1932 but it was still less than in most of the countries investigated. The employment, however, improved quickly and by 1937, the Danish economy had recovered significantly. In 1937 the recovery of the British and Danish employment was only surpassed by Japan, Estonia, and the two other Scandinavian countries, all 4 countries with a setback in line with the Danish.

Both Romer (1993) and Dich (1939) based their analyses on data from the manufacturing industries, but this sector only accounted for a quarter of the Danish economy. The development within other parts of the economy followed a somewhat different pattern leaving the overall economy remarkably stable. The recession in the urban sectors did not start simultaneously as some sectors were affected already in 1930 while others only suffered a backlash in 1932. Furthermore, the downturn in the urban sectors was counterbalanced by the development within in the agricultural sector, which continued to grow even in 1932. Many of the important urban sectors had recovered by 1933 and their growth potentials were adequate to neutralize the steady decline in the agricultural sector during the next couple of years. A closer examination of the Danish economy involves an analysis of the detailed national account system, but the fundamental argument of the counter-cyclical development within the agricultural sector is illustrated in figure 1, which contains a subdivision of the economy into its four main sectors.<sup>3</sup> The combined result of the heterogeneous developments at the sector level was that the Danish economy continued to grow right until 1932 when real GDP dropped a mere 3 per cent. As indicated in figure 2 the modest Danish recession did not last long, and by 1939 real GDP had increased by 20 per cent compared to the previous peak year of 1931.<sup>4</sup>

However, an almost persistent growth throughout the late 1920s and the 1930s did not guarantee in itself that the Danish economy was on the right track. The growth might turn out to be small compared to the long-run growth, and the level of real GDP might have been small from the very beginning. There was every reason to expect that the Danish economy had not returned to an equilibrium situation in 1926. The early 1920s had been extremely turbulent, and the Danish currency returned to the pre-war parity only in 1926 after a period of major fluctuations (Johansen

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<sup>3</sup> The four main sectors consist of the following subsections: a) Agriculture and fishery, b) Manufacturing, Public Utilities and Construction, c) Wholesale and Retail Trade, Hotels and Restaurants, Finance and Business Activities, d) Transport and Communication, Housing, Public and Personal Services

<sup>4</sup> The relatively modest decrease in real GDP is not unique for Denmark but can be found in a number of countries (Maddison 1982).

1987). A standard of reference is required to estimate how far real GDP diverged from the long-run growth path. In figure 2 the growth path from 1900 to 2000 is applied to indicate the long-run trend in real GDP. It is important to bear in mind that the choice of a reference period has an influence on the outcome and that the results must be interpreted carefully.

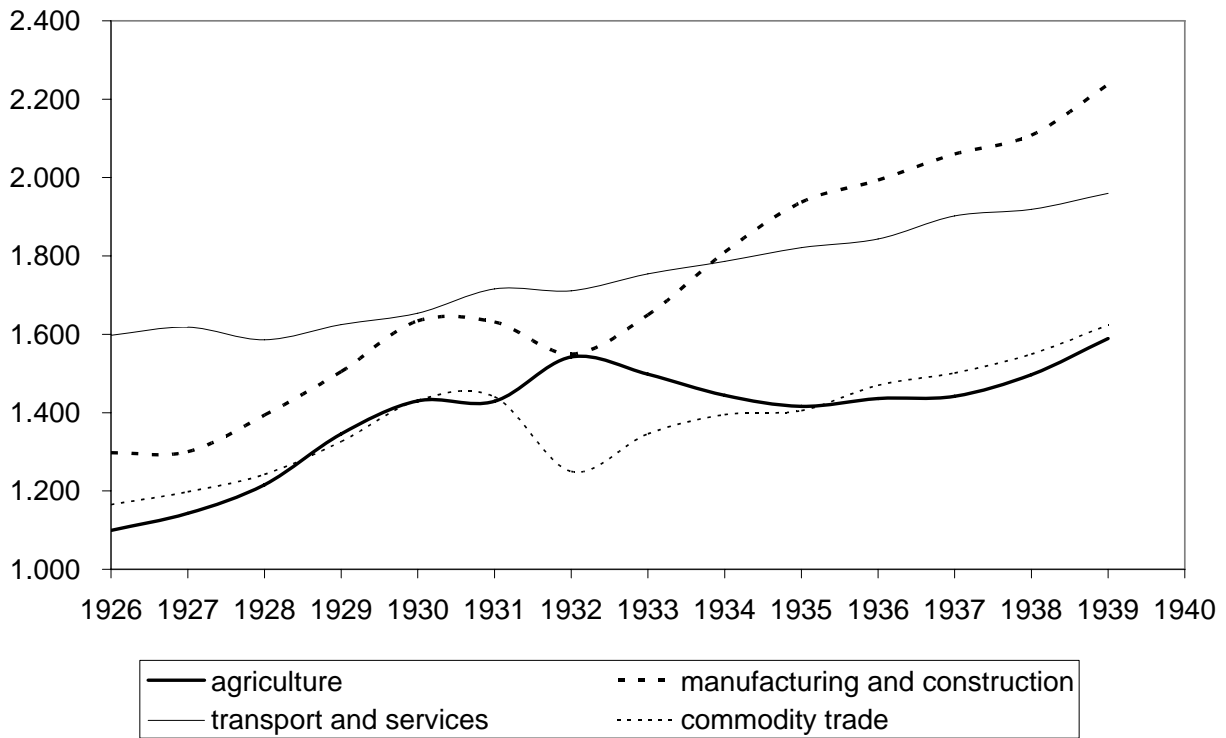
Figure 2 confirms that Denmark had not quite returned to her long-run growth path. In 1926 the actual GDP was below the number one would get when calculating the trend value. However, while the level of GDP was somewhat lower, the average growth rate from 1926 to 1938 came close to the Danish long-run growth rate. Furthermore, seen from the long-run perspective the special feature of the years from 1929 to 1931 is that GDP rose to about the trend level, and that GDP did not experience a setback as the international depression started to evolve. The effect of the downturn in 1932 was primarily to make the Danish national income once more drop to a level just below the long-run path, and although the growth rates from 1933 to 1938 did not quite match the long-run growth, they came quite close to it.

The intention of the short analysis of the Danish business cycle is not to play down the employment problem but rather to try to see the problem from another perspective. Producing goods and services required manpower and unless productivity changed rapidly, the ongoing economic growth throughout the 1930s must have favoured the maintaining of employment. However, the growth might still not have been sufficient to avoid changes in unemployment, as indicated by Okun's law.<sup>5</sup> Secondly, the analysis does not take into account that the Danish economy went through a structural change in the 1930s, and that the yearly migration of 20-30,000 workers from the agricultural sector increased the pressure on the urban sectors.

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<sup>5</sup> According to "Okun's law" the economic growth must proceed at a certain level just to keep the rate of unemployment stable (Okun 1962). It is generally held that part of the Danish unemployment problem was due to demographic factors that led to a higher increase in the labour force in the 1930s (Dich 1939).

**Figure 1. The main sectors of the Danish Economy 1926-1939 (value added, 1000 DKr 1929-prices).**



**Figure 2. The actual and long-run trend in real GDP 1918-1942( 1000 DKr 1929-prices).**



Source: Hansen (1974)

### **3. The Danish unemployment problem.**

Even though the Danish economy got through the 1930s with limited fluctuation in production, the over-all performance was not satisfactory. The unemployment increased dramatically at the early stage of the recession, and although the number decreased within a couple of years, the official number of unemployed remained high throughout the decade. There is little disagreement among scholars that unemployment became a major problem, but the estimates of the magnitude of the unemployment problem diverge significantly. The controversy is due to the fact that the statistic data on the Danish labour market are rather poor and especially official data on the aggregated employment and the labour force are lacking. The records on the unemployment are extensive, but they are primarily based on data from unemployment insurance funds. Since membership of the Danish unemployment insurance system took place on a voluntary basis, only a fraction of the labour force is included, and one needs an estimate of the unemployment outside the insurance funds to calculate the total unemployment. However, before turning to the problem of unemployment outside the unemployment insurance funds, the official data from the funds have to be investigated further.

### **4. Unemployment among the members of the unemployment insurance funds.**

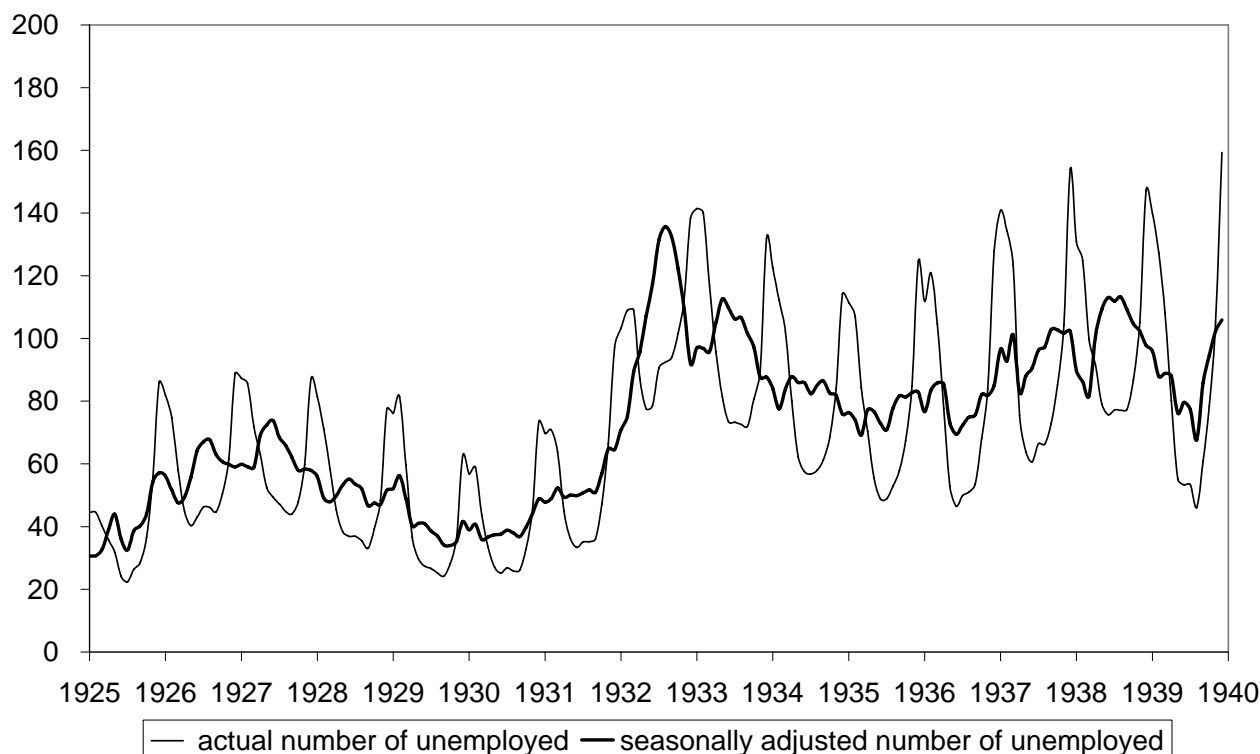
Unemployment among the members of the unemployment insurance funds increased dramatically between 1930 and 1932. The official number of unemployed reached 100,000 on an annual basis equal to a rate of unemployment of 32 per cent. The scale of the problem becomes even more shocking when data on a weekly basis are applied. In February 1933 146,000 out of a total number of 338,000 members were jobless and in several unemployment insurance funds the rate of unemployment peaked at 60 to 70 per cent. Figure 3 shows unemployment among the members of the insurance funds on a monthly basis. The seasonal component in the data is prominent and to indicate the effects of the business cycle a transformation of the data is required.<sup>6</sup> The seasonally adjusted series indicate that the increase in unemployment came quite swiftly around 1932, and although unemployment decreased during the next years, it remained high. However, from 1935 the number of unemployed started to rise once again, and continued to increase until 1938. The high rate of unemployment among the workers with insurance is generally applied as a benchmark on the

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<sup>6</sup> The estimate of the seasonal components rests on the assumption that the season exhibits seasonal multiplicative effects.

gravity of the Danish recession. But it is important to bear in mind that only a minor part of the Danish labour market had acquired a membership to an unemployment insurance fund. If the rate of unemployment among the members in 1932 is recalculated on the basis of the total labour force, the percentage is reduced dramatically from 32 per cent to only 5.7 per cent (Topp 1995).

**Figure 3. The number of unemployed members of the Danish unemployment insurance funds (1000 persons).**



Source: “Arbejdsløsheden”. Statistiske Meddelelser 1932, 1937 and 1942 and own calculations.

The reliability of the official data from the unemployment insurance funds has been challenged for a long time. Dich (1939; 29) pointed out very early that a fraction of the spells of joblessness was actually never recorded due to the lack of economic incentives of the members. In the early 1930s, only some of the unemployment insurance funds had rules that made it mandatory for unemployed members to register as soon as they lost their job and to keep a close contact with the funds as long as they were unemployed. The other funds, like the major insurance fund organising the unskilled workers, did not have the same strict rules, and to a certain extent it was left to the members to keep the fund informed on their current job status. The members of the Danish funds only received unemployment benefit after a waiting period and only for a specific number of days every year. The incentive of an individual member to contact the unemployment insurance fund was low if an

unemployment spell did not qualify for a benefit, either because the spell was short or because the member had already been supported the maximum number of days. The lack of a comprehensive reporting of all spells of joblessness implied that the registered number of unemployed underrated the number of jobless within the funds.

Dich's investigation indicated that about half of the insured who lost their jobs and were not entitled to receive a benefit, did not report to the unemployment insurance fund covering the unskilled workers. The problem occurred to a minor extent within the funds covering the skilled trades, where Dich estimated that only one out of six members did not report that they were out of job, if they knew that they did not qualify for relief. An estimate of the number of non-reported jobless members may be established based on Dich's investigation. In 1932 on average 20,000 out of 47,000 unemployed members of the funds for unskilled workers did not receive unemployment relief, so if an equal number of members were jobless but did not register, it follows that the total number of jobless was 67,000 rather than 47,000 persons. Due to the more comprehensive registration among the funds covering the skilled workers, it can be estimated that only about 4,000 skilled workers did not register that they were jobless in 1932.

It is tempting to argue that the 24,000 jobless persons represented a "hidden unemployment" among the members of unemployment insurance funds and that the estimate of the average number of unemployed must be increased from 100,000 to 124,000 in 1932. A calculation along this line of thought has recently been published by Jørgen Peter Christensen (2002). Christensen estimates that 7,500 members of the funds did not register although they were jobless in 1932 and argues that this additional source of unemployment must be included. However, the argument seems to be rather dubious. The common definition of unemployment stipulates that a person is unemployed if the person does not have a job, but the person must furthermore be available for work and actively searching for a job. The non-registered, jobless members did not meet these conditions. The Danish unemployment insurance funds also provided job services to employers who needed to expand their staff, and a decision for a jobless person not to contact the insurance fund or the public labour exchange offices would clearly diminish the chance of finding a new job. It is likely that some of the jobless members did not report simply because they left the labour force permanently, but apart from this type of "discouraged workers" undoubtedly some of the members left the labour force temporarily on a voluntary basis.

The question is whether it is plausible to assume that the jobless members did not register because they did not search for a job. Unfortunately, our knowledge of the actual functioning of the Danish labour market in the 1930s is limited. One might have expected that the recession had initiated a vast amount of labour market research, but apart from Jørgen S. Dich, research especially on the interaction on the micro-level is extremely meagre. However, a single study carried out by K. Vedel-Petersen (1934) does give some insight into the problems of the labour market. Though the survey utilized a small sample and only investigated micro-data from three unemployment insurance funds in 1933/34, the result was so distinct according to Vedel-Petersen that it represented a general feature of the Danish labour market.

Vedel-Petersen investigated whether insured workers returned to the same firm after an unemployment spell or whether they got a job in a new firm. It appeared that Danish workers had an exceptionally close affinity to specific firms. The likelihood of being reemployed at the very same firm was high, and it did not seem to depend on whether the member had experienced a single or several unemployment spells during a year. If an unemployed member had an equal chance of getting a job in any firm within the trade, the sheer number of firms would make it very unlikely that the member became reemployed at the old firm. But in fact, the survey displayed that 50 to 75 per cent of the unemployed returned to their old firm. The unemployed members' search activity seems to have been extremely low, and just as the unemployed members were waiting for a new job-opportunity at the old firm, the firms themselves relied on the option of sending for the former workers when needed. The functioning of the labour market did not only suffer from a fragmentation due to the existence of a "reserve army" of unemployed within the individual trades, but to a certain extent even the individual firm had its own "reserve army" of former workers awaiting a new job. The larger firms had a better possibility to stabilise the employment but if – like in Denmark – there were many and small firms, the unemployment generated from friction would be higher:

“To me the following conclusion can be drawn from this study. The current explanation that there will always be a certain minor unemployment in every society because the workers shift jobs from one firm to another firm must be transformed to a new that there will always be a comparatively high unemployment in society owing to the existence of many small, independent firms with a fluctuating amount of work. To a far less extent than hitherto expected, the redundant labour force will find a job somewhere else but rather will wait for another job - not within the trade - but at the specific firm. It is likely that the level of

unemployment will increase when every firm must keep its own reserve-army, and that unemployment is a prerequisite for maintaining the firms' output-flexibility." (Vedel-Petersen 1934; 221 translated from Danish)

Vedel-Petersen furthermore argued that the unemployment insurance system was to the advantage of the firms to the extent that the benefit compensated for the loss of incomes, but that the main costs were levied on the workers themselves. While the first argument sounds familiar and is in accordance with a modern discussion on the exploitation of the unemployment insurance system by making the public pay for temporary layoffs, one would hardly accept the second argument. It is true that the workers lost incomes due to the waiting period and a low unemployment benefit, but when accepting a job in a firm a part of the wage would always be a risk premium reflecting the likelihood of spells of unemployment. As pointed out in figure 3, the Danish unemployment displays marked seasonal fluctuations. The workers, especially within the building and construction sectors, knew in advance that the risk of being unemployed during the winter was high, and they only entered these trades if they were compensated in one way or the other. If the unemployment benefit only partly compensated for the income losses, a wage above the average wage was needed to maintain the workforce in the long run.

Vedel-Petersen's analysis makes it likely that in a similar manner part of the unregistered unemployment among the members of the funds was due to temporary layoffs where the workers expected to get a job at the old firm at a later stage. They did not look for a new job nor register their joblessness but rather left the labour market temporarily. In the mid-1930s the regulation of the unemployment insurance system changed, and it became mandatory to report any unemployment spell to the insurance funds. Consequently, an increasing number of previously unreported temporary layoffs must have entered the official unemployment records. It is difficult to estimate the effects of the institutional change in registration on the natural rate of unemployment. However, if the object is to produce a more accurate measure for the business cycle's impact on the Danish unemployment, the number of unemployed in the late 1930s has to be reduced to take into account that a number of temporarily unemployed members were not available for work. This seems to be far more rewarding than to expand the number of unemployed in the early 1930s along the lines indicated by Dich (1939) and Christensen (2002). A more pragmatic solution would be simply to stick to the old numbers and always keep in mind that the natural rate of unemployment was rising due to changes in the institutional set-up.

The upwards trend in the level of unemployment from the mid-1930s was only partly due to a more accurate registration of spells of joblessness. The unemployment insurance funds experienced a steady increase in the number of members, and the membership ratio among wage earners increased from 31 per cent in 1929 to 42 per cent in 1939. The increase in the membership ratio was to some extent caused by the higher risk of unemployment and by the structural change in the Danish economy that made an increasing part of the labour force employed in the urban sectors with a stronger tradition and need for unionization and membership of unemployment insurance funds. However, the incentives to join an unemployment insurance fund also increased as more unemployed members became entitled to unemployment benefits due to a number of changes in the legislation. The Danish unemployment insurance system was originally designed for short-term unemployment, and the number of days each year a member could draw unemployment benefit was limited. From 1927 the funds had been permitted to open special funds and continue to support the members for an additional period if the general level of unemployment was high. Only a few funds took advantage of this option, but the attitude changed in 1932 when new legislation introduced a lower ordinary public subsidy to insurance funds that had not established a special fund for the long-term unemployed.<sup>7</sup>

The economic consequences of the 1930s on the organized workers is usually analysed by focusing on the changes in incomes caused by the rise in the general level of unemployment and by the seasonal fluctuations. From this perspective, the decrease in employment in the winter 1932 to 1933 was surely devastating as indicated in figure 4. Only 57 per cent of the members had a job in February 1933 while 43 per cent were unemployed, and although the situation improved somewhat during the next years, the average rate of employment remained below the level of pre-recession years. However, the lack of a job was not equivalent to a complete loss of income as the majority of the members received unemployment benefit. Figure 4 indicates that the share of members who made an income from a job or from the benefit remained remarkably stable and that the seasonal fluctuation was offset to a large extent. The lesson drawn from the figure is that the unemployment insurance system was not able to accommodate the sharp rise in unemployment from late 1931. However, due to the ongoing modifications of the unemployment insurance system the share of unemployed members without benefits declined to about five per cent from 1935. A high degree of security was introduced by making the unemployment insurance system more comprehensive by

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<sup>7</sup> Nils Edling (2006) gives a survey of the Danish unemployment insurance system in a comparative perspective.

reducing the requirements for entering a fund and by increasing the compensation period. The replacement ratio, on the other hand, remained low. In 1933 the maximum benefit was 21 or 28 kroner a week, depending on whether the member had a wife and family to keep, and the allowance was restricted to two thirds of the former income. Even before the deduction for the waiting period, the compensation amounted to less than 40 per cent of the average wage of a full-time employed person.<sup>8</sup> But the basic principle that the unemployment insurance – funded by the members and the public- in the majority of cases provided an income to the members which made it possible to survive, became institutionalised in the mid-1930s.

**Figure 4. The share of unemployment insurance funds members earning an income or receiving unemployment benefit.**



Source: Socialt Tidsskrift 1931-1941.

## 5. The unemployment outside the unemployment insurance funds.

Only about one third of the Danish wage earners were members of an unemployment insurance fund in 1930, and though the percentage increased, the membership ratio was still below 50 per cent

<sup>8</sup> Arbejdsløshedsforsikringen i Danmark 1932-1957

in 1939.<sup>9</sup> Estimates of unemployment outside the insurance funds have to be based on rather rough calculations, as very few studies have been carried out during the 1930s. It is commonly agreed among economists that the rate of unemployment was lower among the uninsured wage earners as the incentives to join an unemployment insurance fund depended on the job security. However, the estimated numbers differ quite a lot. According to Svend Aage Hansen (1974) the average number reached 200,000 uninsured persons in 1932 or twice the number of unemployed member of the funds. Though Peder Jørgen Pedersen (1976) pointed out that the method applied by Hansen was problematic, the basic rule of thumb that the total unemployment was three times as high as the number recorded by the funds can still be found in recently published scholarly works.<sup>10</sup> This perception of a mass unemployment in Denmark is in sharp contrast to Pedersen's own estimate, which indicates that on average 18,000 unemployed persons were not insured in 1932 (Pedersen 1977). Pedersen's estimate does seem to be extremely low at first, but it is in accordance with a study by Dich (1932) indicating that only 20 per cent of the unemployment was levied on wage earners outside the insurance funds in 1930.

Topp (1997) presented an alternative estimate of unemployment among the uninsured wage earners based on the official data published by the Danish labour exchange office. The labour exchange data are usually considered an unreliable indicator of the unemployment problem. However, by focusing on two distinct periods - from November 1931 to April 1932 and from July 1932 to April 1933 - it is possible to benchmark the unemployment outside the insurance funds. The study exploits the fact that the Danish parliament twice passed a legislation that temporarily made unemployed persons without insurance entitled to unemployment benefit if they registered as in search of work at the labour exchange office. The recorded number of unemployed without insurance increased dramatically during both periods reaching a maximum of 47,000 persons in February 1933. The incentives to keep registered did not last long, and as soon as the temporary acts expired, the registered number of unemployed dropped markedly. The high number of unemployed registered during the two periods must include a large portion of the unemployment

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<sup>9</sup> The fraction of the total labour force covered by the unemployment insurance was considerably lower due to the high number of self-employed and domestic staff. The unemployment insurance funds had 288,000 members 1930. The number of wage earners excluding domestic help was 929,000 and the total labour force 1,716,000 the same year (Kærgaard 1991).

<sup>10</sup> “.. [in] February 1933 145,000 or 44% of the members of the unemployment insurance funds were out of job. If the uninsured workers are included, the number of unemployment is tripled” (Hertz 2000).

outside the unemployment insurance funds. Any unemployed person had an economic incentive to be registered, and apart from this pull-effect, there was a push-effect, too, as the municipalities had an economic advantage when a person on relief was transferred to the new scheme. In the light of this argument the average unemployment in 1932 can be estimated to a maximum of 33,000 wage earners outside the unemployment insurance funds, making to total unemployment inside and outside the insurance funds equal to 132,000 or 7.5 per cent of the total labour force.

Christensen (2005) included in his study a new estimate of unemployment outside the unemployment insurance funds. The number is higher than the one estimated in Topp (1997) primarily because Christensen includes “other unemployment among the blue-collar workers” and “unreported unemployment among white-collar workers without insurance”. The two new sources of unemployment amount to an additional 30,000 persons in 1932, which means that a total of 52,000 wage earners without insurance were unemployed.<sup>11</sup> Christensen’s approach is interesting because it questions the basic assumption in Topp (1997) that economic incentives alone would make people disclose their job status. If wage earners concealed that they were out of work due to personal pride and a loss of self-esteem when receiving a public benefit, it is possible to argue that not all jobless persons took advantage of the two temporary acts on financial support to unemployed people without insurance.

The number involved can be estimated to some 19,000 persons, if the difference between Topp’s and Christensen’s numbers is applied as a rough estimate of the number of jobless who concealed their job-status in 1932. Whether the number would be that high is open to discussion, but in support of Christensen’s approach, one might argue that the attitude towards receiving public charity has changed a lot since the 1930s. On the other hand it is far from obvious that this group of jobless people should be numbered among those looking for jobs. The lack of a registration at a labour exchange office signifies a reduced search activity, and from this perspective, it is more reasonable to argue that the group was outside the labour market on a voluntary basis. The argument might provoke some, but it highlights a fundamental problem in many economic history studies of the labour market. It is usually assumed that the labour supply remains stable and that consequently any increase or decrease in employment results in an equal change in unemployment. Though it is acknowledged in theory that a change in employment will also affect the participation

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<sup>11</sup> Christensen was known as a meticulous scholar and it is beyond doubt that the new estimates were well-founded, but unfortunately he was not able to complete the book, and the posthumous edition contains only sparse documentation on this subject.

rate, the effects on the labour supply is often neglected due to inadequate data.<sup>12</sup> In the case of a decrease in employment like the early 1930s, one has to take into account that only some of the jobless persons search for new jobs, while others decide to leave the labour market.

## **6. The total unemployment in Denmark.**

The disagreement between Christensen (2002) and Topp (1997) becomes of minor importance when estimating the total Danish unemployment, see figure 5. Christensen's data indicate that the rate of unemployment was about two per cent higher than that estimated by Topp. However, the total unemployment is still below 10 per cent of the labour force in 1932. Due to the higher unemployment in 1930 and 1931 the influence of the recession is less pronounced when applying Christensen's data. Apart from the estimate of the level of the unemployment, the two studies agree on the development of the unemployment from 1932 to the end of the decade. Both studies identify a steady decrease from 1932 to 1935 and display an increase in the rate of unemployment in 1937 and 1938. The rise in the Danish unemployment in the late 1930s is unique compared to the steady decline in the rate of unemployment in Norway, Sweden and UK (Grytten 1995). The steady increase in monthly unemployment data presented in figure 3 does not give reason to believe that the international recession in 1937 influenced the Danish economy to any major extent. It is more likely that the trend reflected an increase in the natural rate of unemployment resulting from the expansion of the Danish unemployment insurance system and the tighter control of the members of the funds.

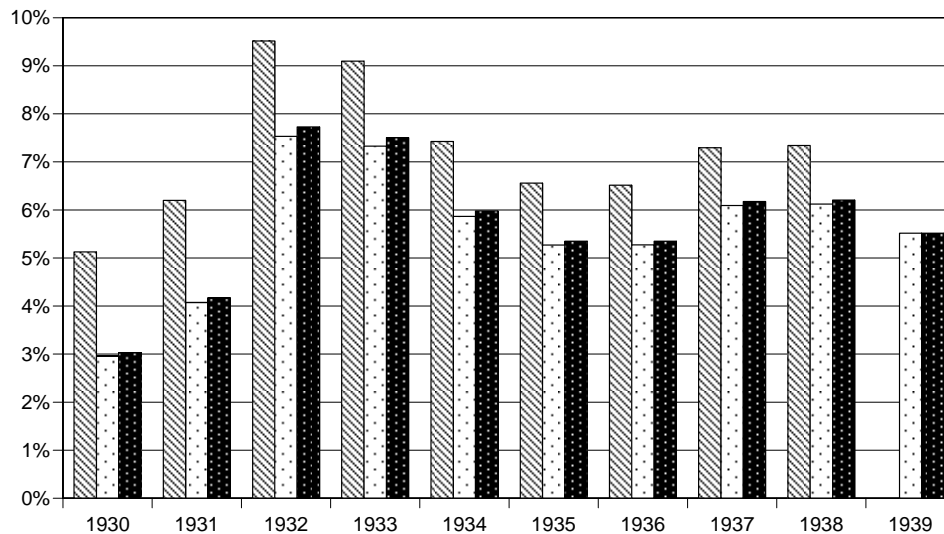
The choice of Christensen's estimate in preference of Topp's estimate is only of interest if one assumes that there existed a number of jobless persons inside and outside the unemployment insurance funds who must be regarded as unemployed and actively searching for jobs despite the fact that for some reason they were not registered. Following the line of thought of this paper, one would argue that this group of wage earners was not actively searching for jobs but had rather moved outside the labour market. In this case one should rather deduct the estimated number of jobless people with low or no search activity from the estimated labour force than add the number to the number of unemployed persons. Figure 5 displays the revised rate of unemployment based on

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<sup>12</sup> The assumption that changes in the employment influence both the unemployment and the labour supply is an integrated part of the studies of the Danish fiscal policy; see Topp (1995) and Christensen (1992).

this assumption.<sup>13</sup> The reduction in the labour force makes the new rate of unemployment somewhat higher than the original rate estimated by Topp, but it does not fundamentally change the rate of unemployment, as the number of persons involved is minimal compared to the size of the labour force.

**Figure 5. The rate of unemployment in Denmark 1930-1939 (per cent of the total labour force)**



	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
▨ Christensen (2002)	5,1%	6,2%	9,5%	9,1%	7,4%	6,6%	6,5%	7,3%	7,3%	
▤ Topp(1997)	3,0%	4,1%	7,5%	7,3%	5,9%	5,3%	5,3%	6,1%	6,1%	5,5%
■ Topp revised	3,0%	4,2%	7,7%	7,5%	6,0%	5,3%	5,3%	6,2%	6,2%	5,5%

Source: Topp (1997) and Christensen (2002)

## 7. Did Denmark have an employment policy in the 1930s?

Although the combat of unemployment had a high priority on the Danish political agenda, there are few examples of major initiatives specifically focusing on an improvement of the employment situation. The explanation is partly that lack of political consensus on the means to improve employment impeded the passing of major job creation programmes in parliament. The Danish political system remained remarkably stable throughout the 1930s. The Social Democrats and the small Social-Liberal Party formed a government after winning a majority in the first chamber of parliament, and the government stayed in office from 1929 to 1940. However, the Liberal Party

<sup>13</sup> The calculation of the revised rate of unemployment is based on a) the number of unemployed persons estimated by Topp (1995), and b) a revised estimate of the labour force that excludes the number of persons who left the labour market. The number deducted is equal to the number of persons not included in the official statistics estimated by Christensen (2002).

and the Conservatives had a majority in the second chamber of parliament until September 1936, and any piece of legislation required an agreement with either one or both of the opposition parties. The opposition relied on wage flexibility and cutbacks in public spending as the means to overcome the economic problems, while the Social Democrats favoured a planned economy, and from the very outset of the recession, it was difficult to find a common denominator for the economic policy. Throughout the 1930s the government blocked any attempt to reduce the nominal wage level. The policy was clearly beneficial to wage earners with few unemployment spells, but it was not an advantage to all parts of the population. Farmers and agricultural labourers experienced a major decrease in incomes, which inevitably gave rise to tension in the Danish society. Equally, stable nominal wages in a period of deflation did not promote the labour demand and reduced the prospects of obtaining employment for labourers that were not an integrated part of the labour market.<sup>14</sup>

Political disagreements based on ideology were not the only obstacles to a coherent employment policy. From the turn of the century, an inflow of foreign capital had financed the almost chronic Danish trade deficit, and after the breakdown of the international financial markets, Denmark had to adapt her imports to the revenues from exports. Being a highly open economy deprived of natural resources, any change in the exports affected not only the involved sectors but also the economy as a whole. Therefore, the paramount political issue in the 1930s became how to maintain the Danish export-capacity and to secure open access to foreign markets, and many proposals to increase employment turned out to be unfeasible due to the lack of foreign exchange.

When analysing the Danish initiatives to promote employment, one has to distinguish between the management of the macroeconomic policy in general and the microeconomic measures applied to influence the labour market directly. According to Garside and Topp (2001), there were great similarities between the macroeconomic policies pursued in Great Britain and in Denmark. In both countries deficit spending never became a part of the political agenda despite theoretical support from economists, and in Denmark the staunch political support of the principle of a balanced budget actually resulted in a contractionary fiscal policy from 1932 to 1937 (Topp 1995). Equally, the politicians in both countries targeted the exchange rate and the monetary policy as the principal macroeconomic instruments. Denmark reluctantly followed Great Britain in September 1931, and after a period of managed floating, the currency was finally fixed to sterling in 1933 at a level that

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<sup>14</sup> Garside and Topp (2001) contain a survey of the Danish theoretical debate on the nominal wage problem.

made the nominal effective exchange rate decrease by 30 per cent (Abilgren 2005). The policy was primarily designed to help the agricultural sector that supplied two thirds of the Danish exports. When the world market prices on agricultural products declined, the farmers experienced a sharp decrease in incomes despite their attempt to meet the losses by expanding production and the volume of export. The departure from the gold standard, and the subsequent depreciations, was clearly regarded as an emergency measure both by the government and the opposition; but the government would not make way for the deflationary policy and retrenchment of the public sector demanded by the opposition.

Between 1933 and 1935 an expansionary monetary policy was carried out primarily to alleviate the agricultural sector by making room for a conversion of the long-term debt. The intentions of the conversion plan were not fulfilled; yet, the lowering of the interest rate did produce positive secondary effects on the urban sectors. The heavily depressed construction sector recovered swiftly and apart from the wholesale and retail trade all urban sectors had recovered fully by 1934, as indicated in figure 1. The drawback of the urban expansion was an increase in imports that proved impossible to keep in check even though Denmark had introduced quantitative restrictions based on import licences in 1932. By 1935 the easy money policy was abandoned, and the balance of payments once more became the main target for the monetary policy, (Garside and Topp 2001).

Considering that the permanent balance of payments problems restricted expansionary measures throughout the 1930s, it is reasonable to argue that the macroeconomic policy pursued in Denmark was rather successful. As indicated in previous section the economy displayed a high degree of stability during the recession, and the average growth rate remained high. The macroeconomic policy did not solve any of the fundamental structural problems in the Danish economy such as the dependency on a large agricultural export, but it did create an environment that gave rise to an increase in the employment within the urban sectors. The depreciations relieved the agricultural sector by increasing the revenue of export in local currency, and the sector regained at least some profitability. In spite of the fact that the policy can neither be described as coherent nor as planned, it is difficult to point out an alternative policy that would have improved the outcome. (Garside and Topp 2001).

Though the macroeconomic policy helped stabilize the economy by creating a stimulus to the private sector, unemployment remained a key problem, which called for additional measures targeting the labour market directly. However, Kjeld Philip's comprehensive account of the Danish

economic policy leaves little doubt that the politicians did little to promote an employment policy at the micro-level that targeted specific sectors or specific types of unemployment. To some extent the microeconomic instruments were subject to the same constraints as the macroeconomic policy. The Danish balance of payments difficulties precluded measures that gave rise to a substantial increase in the demand for imports and the political deadlock in parliament until 1936 both contributed to limit the number of initiatives to increase the demand for labour.

Among the initiatives investigated by Philip (1939) only the legislation to increase the public subsidies and loans to land improvement operations from 1932 seems to have had a more substantial effect on employment, while other initiatives had no impact at all like the introduction in 1935 of a subvention of firms with additional employment. One might have expected that the politicians had turned towards public works and the traditional “relief works at reduced wage”. The central and local governments carried out a considerable amount of public investments but the level remained steady throughout the 1930s and did not give rise to additional employment.<sup>15</sup> Though it was possible to obtain government grants to carry out “relief works”, it never became a significant part of the Danish employment policy. Parliament passed several changes in legislation during the 1930s, but relief works gave jobs to less than 100 workers most years. The explanation is quite simple, the government with its close relations to the labour movement did not favour the low wage offered at the relief works, but had to maintain the scheme to accommodate the opposition. Like in many other countries, a special youth employment scheme was introduced in 1933, but even here the results were of minor importance. The funds were limited, and the scheme only involved 500 persons on average each year, while the total youth unemployment was approximately 10,000 persons (Philip 1939).

As indicated in table 1 the annual amount spent on new activation measures was small compared to the amount spent on the unemployment insurance system in the fiscal years 1931/32 to 1936/37. Instead, the government’s direct intervention to improve employment rather took place by making use of the comprehensive quantitative regulation of Danish imports implemented in 1932. The import control system was only introduced as a temporary provision to safeguard the balance of payment, but despite political tension, the system was renewed several times and a close regulation of the imports was never abandoned. The import control system became part of the employment

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<sup>15</sup> Philip (1939) and Topp (1995). The annual public investment amounted to 100 million Dkr, but the investments decreased somewhat during the recession.

policy, as one of the objects of the administration was to reduce the import of manufactured goods and increase the import of raw materials. The steady increase in employment in the Danish manufacturing sector after the recession was to a certain extent promoted by the policy of import substitution, but that there were strict limits on how far the policy could be pursued due to the fear of retaliations from foreign countries. There can be little doubt that the actual administration of the system was not primarily governed by considerations for employment and that there would have been ample room for improvement, had employment aspects had a higher priority.<sup>16</sup>

**Table 1. The annual public expenditure on unemployment and on the employment policy.**

Average expenditures on an annual basis in million DKr (fiscal year)	
Central and local governments' grants to unemployment insurance funds:	
1931/32-1936/37	26
1937/38-1939/40	43
Central government's expenditure on:	
Relief works 1931/32-1936/37	0.03
Relief works 1937/38-1939/40	0.68
Youth unemployment scheme 1933/34-1936/37	0.44
Land improvement 1932/34-1936/37 (1/3 grants and 2/3 loans)	5
Subvention of private firms with higher employment 1935/36-1937/38	-
Subvention of new market gardens 1933/34-1934/35	0.02
Lower age limit on retirement pension 1937/38-	25
Ban on overtime 1937/38-	?
Compulsory two-week holiday 1938/39- (paid by the employers)	?

Source: Statistical Yearbook and Philip (1939)

A major change in the employment policy took place after the government got a majority in both chambers of parliament in 1936, and during the last years of the decade the government was able to carry through a number of new initiatives. The balance of payment continued to be an obstacle but it was now possible to pass a law that improved the wage conditions for workers employed at the relief works, and during the last three years of the decade the number of workers employed at relief works increased dramatically. Furthermore, the new legislation gave a high priority to job creation to young people out of work and to long-term unemployed workers. The total amount of

<sup>16</sup> A study based on a Danish input-output table indicates that an increase in employment between 30,000 and 90,000 persons could have been obtained by an alternative allocation of the import quotas and that even a moderate change in the allocation would have had beneficial effects on employment. (Abilgren and Nørskov 1992).

expenditures was still quite modest compared to the amount spent on the unemployment insurance system, as indicated in table 1. The new initiatives to increase the demand for labour were supplemented by measures to influence the labour supply and to introduce work sharing. A high degree of unemployment prevailed among the elderly labourers, and in 1937 parliament agreed on a reduction of the age limit of the retirement pension from 65 to 60 years. According to Philip (1939) approximately 35,000 persons would benefit from the new legislation, but the effects on the labour supply would be somewhat smaller as married women were also entitled to the pension. An estimate of the expenditures indicates that it was a quite expensive piece of legislation.

Two additional pieces of legislation need to be mentioned as they were both seen as part of the employment policy. In 1938 parliament passed a law introducing a compulsory two-week holiday for anyone employed for a year in the private and public sector financed by a holiday allowance equal to 4 per cent of the yearly pay. The legislation was to a certain extent “a free lunch” as employees in the public sector were entitled to a paid holiday, but it levied an extra cost on the private sector. Secondly, in 1937 parliament introduced a ban on overtime or, in cases where it was impossible enforced, that the labourers took time off in lieu. In both cases an important argument was that the reduction in supply of labour by the employed labourers would give the unemployed a better chance to get a job. However, as pointed out by Philip (1939), the argumentation ignored that both legislations increased the costs of production and that the higher costs would partly offset a positive effect on employment.

## **8. Conclusion.**

The previous sections of the paper have depicted the Danish economy with an emphasis on the stability in economic growth, and though the unemployment problem was severe, it remained a minor problem compared to what was the case in many other countries. It is evident that the official Danish unemployment records underestimate the actual unemployment, but the paper draws attention to the fact that the subsequent estimates of the additional unemployment in the Danish society tend to overrate the magnitude and to neglect that changes in employment affect both the unemployment and the labour supply. The paper furthermore investigates the changes in the unemployment insurance system that led to a higher degree of security by providing at least some income to a steadily increasing part of the wage earners. It is argued that part of the rather atypical rise in the Danish unemployment from the mid-1930s can be attributed to a rise in the natural rate of

unemployment due to an improved unemployment insurance cover and a more comprehensive registration of the unemployment. As regards the actual employment policy the picture sketched becomes more ambiguous. On the one hand, one must give credit to the politicians who conducted a quite successful macroeconomic policy given economic constraints. On the other hand, it is quite remarkable how paralysed the politicians seem to have been when dealing with measures to improve employment directly at the micro-level. This part of the employment policy is not impressive as the initiatives were few and the effects of minor importance. If the notion of “an employment policy” is restricted to the measures at the micro-level, it would indeed be very hard to argue that a Danish employment policy existed until the very last years of the decade.

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