

4th International Research Conference on Social Security

Antwerp, 5-7 May 2003



"Social security in a long life society"

Sickness absence in Europe - a comparative study

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Sickness Absence in Europe – a Comparative Study

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Summary

Sickness absence of employees since the early 1980's is compared across eight countries: Denmark, Finland, France, former West Germany, the Netherlands, Norway, Sweden and the UK. Measured as absence during a whole reference week in Labour Force Surveys, sickness absence is considerably higher and fluctuates more in the Netherlands, Sweden and Norway than in the other countries.

Women are more prone to be absent than men in all countries except Germany. Sickness absence of elderly employees is generally higher than that of younger ones. High employment rates of persons aged 60-64, in particular those of women, contribute to high rate of sickness absence in Sweden. High unemployment rates tend to decrease absence rates of employees aged 60-64 in the Netherlands and Sweden. Compared with other countries, the rules for Dutch and Swedish health insurance provide ample opportunities for employees themselves to determine absence.

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Introduction

Sickness absence from work has increased rapidly in Sweden in recent years. The portion of persons who have been absent from work due to illness or injury more than 30 days has doubled in five years. At the same time the sickness benefit payments from the public health insurance have increased by 170 % in fixed prices causing a serious problem for the insurance scheme.

The question asked in this study is, is the level and development over time of sickness absence similar to that in other European countries or is Sweden unique? Surprisingly, there are no large-scale long-term international comparisons of sickness absence in the literature. The reason for this is probably that data on benefit payments from public health insurance schemes are not well suited for comparisons. National data on benefit payments depend on specific characteristics of the schemes and can therefore not be comparable across countries.

Instead of trying to work with national social insurance data, this study uses data from the labour market surveys of European countries. It examines the influence of demographic and labour market variables on the sickness absence **of employees** aged 20-64 in Denmark, Finland, France, former West-Germany¹, the Netherlands, Norway, Sweden and the UK during 1983-2001. This study summarizes the results of the study, which to date is only available in Swedish (Bergendorff et al. 2002, Nyman et al. 2002).

The Data Method of Analysis

The study is based on data from the national Labour Force Surveys (LFS) collected by EUROSTAT, supplemented with data collected directly from Norway for 1989-1994, Finland for 1984-1994 and Sweden for 1987-1994.

Labour Force Survey data are well suited for cross-country comparisons. Since the same measurement technique is employed in the survey in all countries, the data are comparable across countries, regardless of whether days of absence with sickness are compensated by employers, as during the first two weeks in Sweden and during the first year in the Netherlands, or by public insurance schemes.

In Labour Force Surveys sickness absence is measured by asking survey respondents whether they had a job but were absent from work during the whole reference week due to own illness, injury or temporary disability³. Therefore, these data give no information on sickness absence shorter than

¹

Referred to as Germany in this paper.

³

All causes are called sickness in this paper.

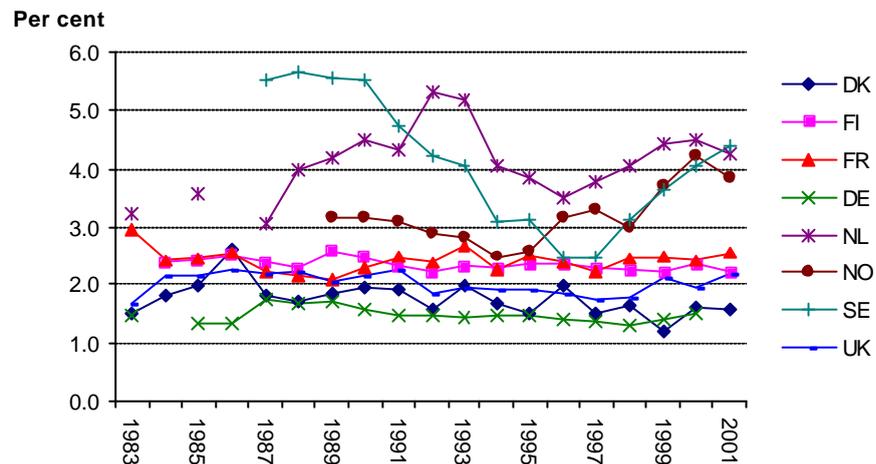
one week or on the duration of sickness absence beyond the reference week (EUROSTAT 1998).

Summary of the Results

The general picture

Since the 1980's, sickness absence of employees aged 20-64 has been considerably higher in Sweden (SE), Norway (NO) and the Netherlands (NL) than in Finland (FI), Denmark (DK), France (FR), Germany (DE) and the United Kingdom (UK).

Figure 1 Sickness Absence, One Week or More, of Employees Aged 20-64, 1983-2001



In Norway the sickness absence of employees fluctuates from 2.5 to 4.3 %, in Sweden from 2.5 to 5.7 %, and in the Netherlands from 3.0 to 5.3 %⁴. The variation over time is much more pronounced in these three countries than in the other countries. In Denmark, Finland, France, Germany and the UK less than 2.5 % of employees were absent from work due to sickness throughout the entire period. Germany has the lowest sickness rate, less than 1.5 % since 1991. Furthermore, computation of the average sickness absence rate for the 12 countries that have been EU member countries⁵ since 1983 has been less than 2 %. Sweden is, thus, almost unique in having such a high rate of sickness. Only the Netherlands and Norway exhibit similar trends.

It is also apparent that sickness absence increased rapidly in Sweden, Norway, and the Netherlands in the late 1990's. However, the absence rates are still

⁴ Figures are not age standardized.

⁵ Belgium, Denmark, France, (former West-) Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain and the UK.

below those of the late 1980's in Sweden and of the early 1990's in the Netherlands. There is no evident trend in any of the other five countries.

Age, gender and sickness absence

In all the countries examined, older employees have higher sickness rates than younger ones (Table 1). Certain patterns appear. For example employees aged 60-64 have particularly high rates in Norway and Sweden. In the Netherlands those aged 60-64 have, remarkably, considerably lower sickness absence rates than employees aged 50-59.

Table 1 Sickness Absence of Employees (%) by Age Group, Average 1983-2001

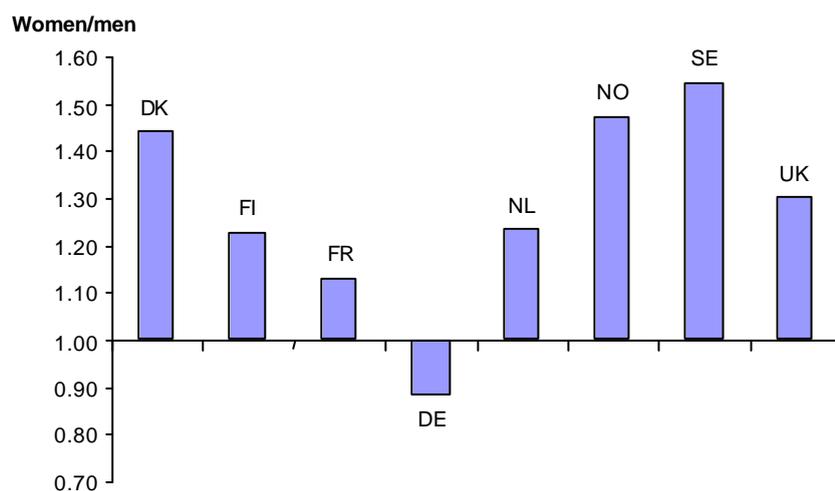
Country	Age					Total %
	20 – 29 %	30 – 39 %	40 – 49 %	50 – 59 %	60 – 64 %	
Finland	1.3	1.8	2.5	4.4	5.3	2.3
France	1.8	2.1	2.5	3.9	4.0	2.4
Denmark	1.5	1.6	1.7	2.3	2.7	1.7
Germany	0.9	1.1	1.4	2.7	3.2	1.4
Netherlands	3.2	3.9	4.5	5.9	4.9	4.1
Norway*	2.4	2.7	3.1	4.3	7.2	3.2
Sweden**	2.5	3.1	3.9	4.4	9.1	4.2
UK	1.8	2.1	2.5	3.9	4.0	2.0
Total	1.5	1.8	2.2	3.3	4.1	2.1

* Beginning in 1989

** Beginning in 1987

Female employees have higher sickness absence rates than male employees in all countries except Germany. Differences between women and men are particularly large in Denmark, Norway and Sweden (Figure 2).

Figure 2 Sickness Absence, Ratio of Employed Women to Employed Men, Ages 20-64, Average 1983-2001



Employment and sickness absence

Sickness absence rates are correlated not only with age and gender but also with employment rates. In countries where employment rates of persons aged 60-64 are high, as in Norway and Sweden, sickness absence rates tend to be high as well. Similarly, countries where the employment rate of women, in particular those of elderly women, is high also tend to have high sickness absence rates.

Employment rates of older women have been high in Norway and Sweden for over two decades. In the meantime, a considerable increase in the employment rates of women aged 50-59 has occurred in particularly the Netherlands, Germany and France. Therefore, female employment rates in these age groups have converged, but despite this large differences still remain between the eight countries.

Table 3 shows the employment rates of men and women aged 20-64 in 2000.

Table 3 Employment Rate (%) for Persons Aged 20-64, by Country, 2000

Country	Women			Men		
	20-49	50-59	60-64	20-49	50-59	60-64
Denmark	79	72	23	88	82	38
Finland	74	72	20	83	71	26
France	66	56	10	83	72	11
Germany	70	55	14	87	76	29
Netherlands	74	48	11	92	79	26
Norway	80	75	44	87	85	58
Sweden	76	80	43	80	82	49
UK	72	64	25	87	77	47

In Norway and Sweden the employment rate of women aged 60-64 was as high as 43-44 % compared to 11 % in the Netherlands, 20 % in Finland and 23 % in Denmark in 2000.

For men there are similar, but less pronounced differences in employment rates. The employment rate of men 60-64 is higher than that of women in all countries, but generally speaking rates have been falling for men since at least the 1970's. In Norway the employment rate for men in this age group was 58 % and in Sweden 49 %, compared to 26 %, for example, in Finland and the Netherlands in 2000.

It is important to note that the employment rates of the older workers are influenced by overall unemployment, and by the eligibility criteria for disability and old-age pension in the various countries. Some countries, for example the Netherlands and Sweden, have at times used disability schemes to help trim down the labor force in times of high unemployment, and

probably still do, although now without the direct support of legislation.⁶ Other countries have used other means. For example both Denmark and Norway have a full-benefit pension age of 67, but there are far fewer older workers in Denmark.

Sickness absence rates are low in countries with lower full-benefit pension ages for old-age pensions than 65 years. Where this age is lower than 65 year -- 60 years in France and until recently 63 years in Germany, for example -- relatively few persons remain at work after age 60⁷.

Those who continue to work after reaching the full-benefit pension age in these countries are probably not typical of the population as a whole at that age. First, they probably constitute a group of healthy people. They are certainly healthy in the sense that they have not already exited through disability prior to age 60. This "healthy worker effect" probably also explains why persons in the age group 60-64 in the Netherlands have lower sickness absence rates than those aged 50-59 (Table 1).

A hypothesis is that sickness absence rates are low in countries where early exits from the labour market through disability pensions are particularly frequent. Data available for Denmark, Finland, the Netherlands, Norway and Sweden indicate, on the contrary, that disability pensions in recent years have been most frequent in Norway, Sweden and the Netherlands where sickness absence is high as well. As regards the Netherlands, Norway and Sweden, also partial disability pensions are available. Therefore, sickness benefits and partial disability pensions may be payable simultaneously.

A recent international study of eleven OECD countries edited by Gruber and Wise (1999) presents data that suggest that there is a clear connection between what they call tax force, the implicit tax on continuing to work given that one may qualify for a benefit or benefits, and labour market participation of persons over 54 years of age. Of the eleven countries examined in the study, four stand out particularly: Belgium, France, Italy and the Netherlands. In all of these countries, the tax-benefit incentive to retire early is strong. People leave the labour force earlier on average in these countries than in countries where the incentive is lower. Generally speaking, even the tax-benefit systems in Germany and the UK were more conducive to early retirement than the Swedish system, according to this study.⁸

Note, however, that persons aged 60-64 constitute a relatively small portion of total employees aged 20-64. In fact, high sickness absence rates in Norway

⁶ See, for example, Aarts and de Jong 1996 and Wadensjö and Palmer 1996

⁷ The full-benefit pension age of men and women is 67 years in Denmark and Norway, 65 years in the Netherlands, Sweden and Finland, 60 years in France, 65 years (63 years until recently) in Germany and 60 years for women and 65 years for men in the UK (Social Security Administration 1999, 2002).

⁸ The other Scandinavian countries were not in the study.

and Sweden are more determined by high sickness absence of the numerous employees aged 20-49, not by high rates of those aged 60-64 or those aged 50-59 (Table 1).

The results of multivariate regression analyses indicate that for persons aged 60-64 employment rates are positively correlated with sickness absence rates in Sweden only⁹. The high rate of sickness absence in Sweden is attributable to the country's high employment rate for women aged 60-64, but also to that of older men. As seen in Table 1, high sickness absence rates in the Netherlands are, on the contrary, caused by high rates of employees aged 20-59.

The correlation of sickness absence rates and employment rates of those aged 60-64 may well appear in countries such as Sweden and Norway, where the employment rate of older workers is very high. In these countries it is less likely that older workers will exit the labour force during good economic times, since they are more needed, and more likely that they will exit during poorer economic times, because employers will attempt to retain younger workers. In the next section this will be discussed in greater depth.

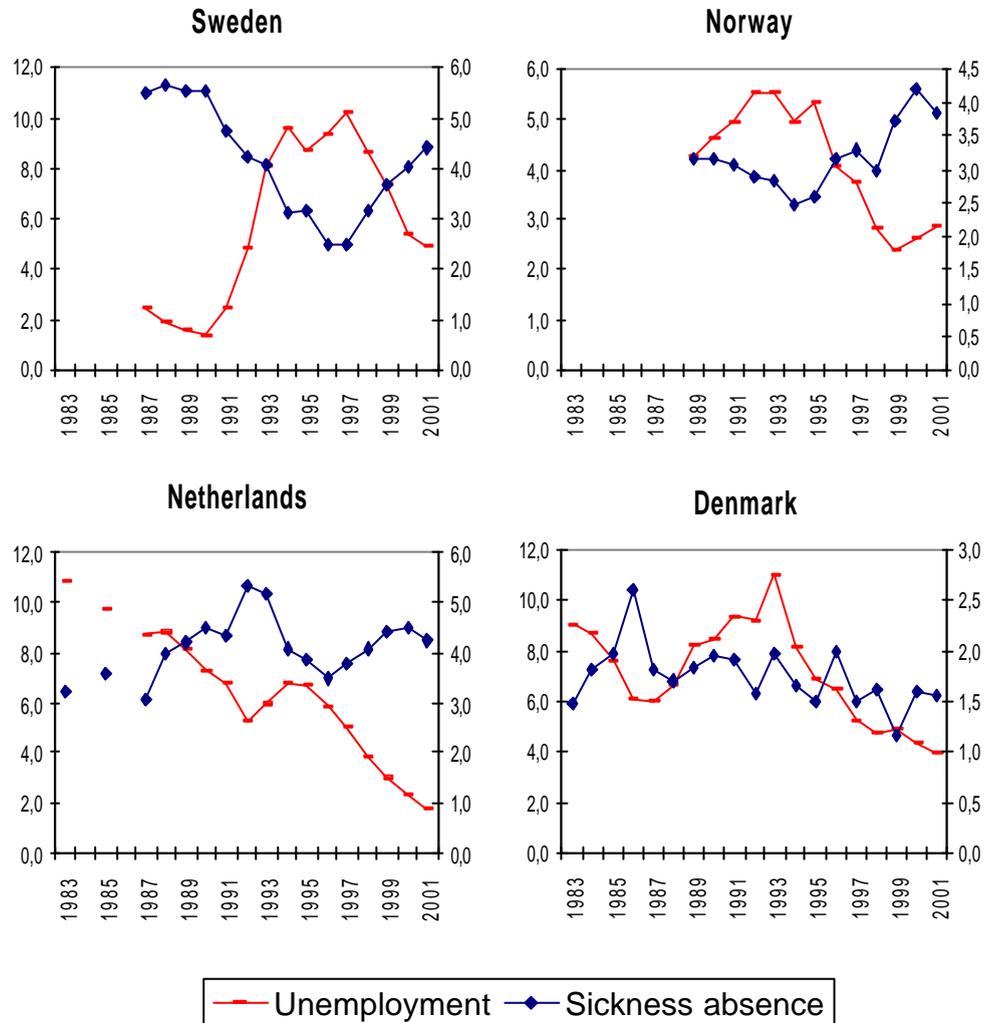
Unemployment and sickness absence

In Sweden, Norway and the Netherlands, the correlation of sickness absence and unemployment follows a clear pattern over time. In periods of high unemployment, sickness absence is low, and vice versa. While a similar pattern is slightly discernible in the other countries, it is less clear and is found only during certain portions of the period (Figure 3). In Figure 3 unemployment rates and sickness absence rates for Denmark are presented as an example of a country where this pattern is not very clear.

⁹

Norway and Finland were not included in the regression analyses due to lack of data. The similarity of employment rates of Norway and Sweden suggests, however, that these results may be valid for Norway as well.

Figure 3 Sickness Absence of Employees and Unemployment (%),
Ages 20-64, 1983-2001¹⁰



¹⁰

Unemployment rates to the left, sickness benefit rates to the right.

The results of regression analyses show that increases (decreases) in the unemployment rate reduce (increase) sickness absence only in the Netherlands and Sweden and only among employees aged 60-64¹¹. There are two hypotheses discussed in the literature that purport to explain this phenomenon – the discipline hypothesis and the selection hypothesis. The discipline hypothesis maintains that the tendency to report sick is lower in a recession than during an economic boom because people are more afraid to lose their jobs in a recession.

The selection hypothesis says that employees with a poorer health status are more likely to find employment during good times, and are more likely to be without employment in bad times. With regard to older workers, this means that companies will find ways to lay off older workers in a recession. Unemployment is one alternative, exit through severance pay or occupational old-age pension agreements and public disability schemes are others. As the economy improves unemployed older workers may find their way back into employment. In addition, in good times persons who are marginally older workers are more welcome to stay as they continue to age. It is likely that both of these two mechanisms operate in parallel with the changing state of the economy.

Other factors influencing differences of sickness absence between countries

Data available in Labour Force Surveys for analyses of sickness absence across countries are limited. Therefore, in this section some other possible causes of differences among countries are discussed.

Health status

Health status is an important predictor of working capacity and sickness absence. No epidemiological indicators of health status that were available, such as life expectancy at birth, life expectancy at age 65, obesity, smoking or consumption of alcohol indicate such large differences across countries that they could account for differences in sickness absence. By contrast, health status seems to be relatively good in the countries with high sickness absence.

Working conditions

Differences in working conditions may cause differences in sickness absence. From the following studies it is evident, however, that there are no clear correlations between reported working conditions and sickness absence across countries.

¹¹

Norway and Finland were not included in the regression analyses due to lack of data. The similarity of employment rates of Norway and Sweden suggests, however, that these results may be valid for Norway as well.

The second survey of the European Foundation for the Improvement of Living and Working Conditions conducted in 1995/1996 indicate that many workers are subjected to repetitive work for example in Finland, France, Sweden and the Netherlands. On the other hand, painful and exhausting working postures as well as heavy loads are common in France but uncommon in the other seven countries (Paoli 1997, Ilmarinen 1999). The third survey conducted in 2000 indicates that more workers in Finland, Sweden and France report stress at work than in the other countries. Furthermore, more workers in Finland, Sweden, and the Netherlands report working continuously at high speed than in other countries (Paoli and Merllié 2001). Finland and France have low rates of sickness absence, however, whereas Sweden and the Netherlands have high rates of sickness absence.

Public Insurance Coverage of Sickness Absence

Public insurance coverage for sickness absence are based on different social security models that were adopted in the eight countries decades ago. Even if the basic models are similar in some countries, there are still considerable variations across countries. The main branches of the social security system of the country, such as the old-age pension system and benefits associated with family policy, have substantial influence in determining who participates in the labour force, and, hence, in the composition of the labour force in various countries. In turn, the structure of the labour force has an impact on sickness absence.

Eligibility criteria for benefits from the insurance scheme determine who is entitled to compensation for income lost during sickness absence. Incentives included in health insurance schemes, such as number of waiting days, compensation rates and the rules regarding the requirement of a medical certificate influence the propensity of people to utilize the scheme.

Within the scope of this study, it has not been possible to analyze the effect of the scheme regulations. The information available, however, suggest that the provisions governing these public insurance schemes are presently the most generous in the Netherlands, Norway, and Sweden and the least generous in the UK and France. The compensation rate is 100 % in Norway¹² and also in the Netherlands, where collective bargaining agreements stipulate that sick pay and benefits shall provide full compensation for lost wages. In Sweden 80 % of lost wages are compensated by the health insurance¹³, and collective bargaining agreements provide an additional 10 % during three months.

In all public insurance administrations there is some form of control to ensure that those applying for benefits belong to the correct target group. In Finland a medical certificate is required on the first day of sickness absence and in Germany on the third day. In Sweden, on the other hand, and to an even

¹² Up to a ceiling.

¹³ Up to a ceiling. However, for a large part of employees, earnings above the ceiling are covered by collective agreements.

higher degree in the Netherlands, medical certificates are required only at a later stage of a sickness spell. Therefore, individuals have a considerable influence on the decision to grant themselves sick leave in these countries.

In countries with long-term sickness benefit periods, in particular in the Netherlands where wage compensation nowadays is paid by employers during 365 days, the social insurance administration becomes involved at a late stage. In Germany, on the other hand, the health insurance administration monitors the sickness absence at workplaces and advises employers on health promotion measures, if necessary. In France the health insurance administration exercises detailed control of persons on sick leave by visiting them at their homes, and of physicians by reducing compensation to those who certify too many patients as incapacitated to work.

There are other differences between countries as well. In Germany, for example, coverage of sickness absence is financed by the public health insurance, which also includes health care services. The insurance administration can therefore influence the provision of health care services for those in need and when feasible, decrease sickness benefit payments by providing services without unnecessary delays. In Germany and also in Finland health promotion measures are implemented by the health insurance administration to decrease sickness absence.

These few examples suggest that the health insurance scheme as well as the manner in which the insurance administration implements the insurance scheme may have a significant impact on the extent of sickness absence.

Conclusions

The results show remarkably high sickness absence in Norway, Sweden and the Netherlands. Sickness absence of older workers increases during economic booms and decreases during recessions in the Netherlands and Sweden whereas in Norway and Sweden sickness absence is positively correlated with high employment rates of elderly persons. The costs of the sickness absence tend to be high in these countries. On the other hand, in Norway and Sweden, many men and women 60 and older participate in the labour force, produce goods and services and pay taxes. As far as Sweden is concerned, the costs of sickness absence is at least to some extent a price paid for the traditional Swedish labour market policy. This policy emphasizes the importance of participation for both genders and older workers.

This study is based only on aggregate data, not individual data. Furthermore, the data series cover only a limited number of variables. Longitudinal individual data would have been preferable for identifying the determinants of sickness absence. Analyses of individual data could explain if and why people change their sickness absence behavior. Such analyses could also identify the

incentives in the public health insurance schemes that may influence sickness absence.

Researchers studying sickness absence in a cross-country perspective face many difficulties. Not only regulations governing sickness benefits differ between countries. Social insurance schemes are characterized by a reciprocity that may differ between countries as well. Those who are on unemployment benefits or permanent disability benefits in one country may, *ceteris paribus*, be on sickness benefits in another country. Nevertheless, it is important to encourage efforts to develop common and comparable indicators of sickness absence for the EU countries. These indicators should reflect both the occurrence and the duration of sickness absence. Furthermore, the consideration should be given to the various supplementary systems that replace a portion of the income lost when a person is on sick leave. Such indicator systems should include wage compensation paid by employers, sickness benefits paid by the public scheme, and the compensation provided by collective agreements on the labour market. Similarly, the provisions of other relevant systems in the social insurance scheme, such as the unemployment benefit, the disability pension and the old-age pension scheme, should also be taken into account.

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