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UNION MEMBER-SHIP AND THE EROSION OF THE GHENT SYSTEM: LESSONS FROM FINLAND*

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ABSTRACT

Union density declined in Finland by more than 10 percentage points in less than ten years. This paper analyses the reasons behind the decline, using micro data from the 1990s. According to our results, the changes in the composition of the labour force and the changes in the labour market explain about a quarter of this decline. The main reason for the decline appears to be the erosion of the Ghent system, due to the emergence of an independent UI fund that provides unemployment insurance without requiring union membership. Interestingly, we find evidence that the decline in the union density can be attributed to declining inclination of the cohorts born after the early 1960s to become union members.

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TIIVISTELMÄ

Ammatillinen järjestäytymisaste on alentunut Suomessa runsaat kymmenen prosenttiyksikköä alle kymmenessä vuodessa. Tutkimuksessa eritellään tähän johtaneita syitä käyttäen yksilötason aineistoa 1990-luvulta. Tulosten mukaan työvoiman koostumuksen tai työmarkkinoiden muutoksilla ei voida selittää kovinkaan merkittävää osaa ammatillisen järjestäytymisasteen alenemisesta. Pääasiallinen syy muutokseen näyttäisi olevan Ghent -järjestelmän perusteiden mureneminen, jonka on aiheutunut ammattiliitoista riippumattoman työttömyyskassan synty. Ikäpolvien välillä on suuria eroja järjestäytymisessä. Tulosten valossa erityisesti 1960-luvun alun jälkeen syntyneet ikäpolvet liittyvät aiempia harvemmin liittoihin.

1. INTRODUCTION

In the early 1960s, only about a third of the Finnish workers were union members. After that, the union density increased almost every year up to the mid 1990s, reaching its highest level ever in 1993, when nearly 85 per cent of employees were union members. After the recession in the early 1990s this thirty-year-long trend increase in the union membership was reversed. The union density declined by more than 10 percentage points in less than ten years. This rate resembles the decrease in the union density during the Thatcher years in the UK (e.g. Blanchflower and Freeman, 1994). Thus, it seems that the universal decline in the fraction of unionized workers that started in the early 1980s in a number of industrialized countries has finally reached Finland.

This paper analyses the dynamics of union membership in Finland during the turbulent 1990s. In particular, the paper evaluates to what extent the recent decline in the union membership can be explained by the changes in the composition of the labour force, the changes in the economic environment and the changes in the institutions.

The Finnish case has a broader interest for several overlapping reasons. First, the unions have a tremendous effect on the labour market. The unions not only negotiate the wages of their own members but the union contracts largely determine the wage increases of some 95 per cent of the workforce, owing to to the extension of the contracts to the non-members. The unions also run most unemployment insurance funds that pay out earnings-related unemployment benefits. Even the pension system is largely controlled by the unions, who have their representatives on the boards of all pension insurance institutions. No major labour market reform has been implemented without consent of the unions and, in fact, most reforms have been a result of tri-partite negotiations between the unions, the employer organisations and the government. If the decline in union density continues and the union power is significantly reduced, both the labour market and the way in which public policies are designed and implemented may face fundamental changes.

Second, union density has traditionally been very high in all Nordic countries, even from the European perspective. One of the main reasons is that eligibility for the earnings-related unemployment benefits has been *de facto* tied to union membership in all the Nordic countries except Norway. This system, where the unions administer government-subsidized unemployment insurance funds, is known as the Ghent system.[1] Only recently an independent

[1] The name of the system comes after the Belgian town Ghent (Gent in Flemish), where it was first introduced. Unemployment insurance funds emerged as an inititative of trade unions in many countries, because there was no compulsory unemployment insurance available. The government has subsidized these funds in Finland on the condition that their resources are not used to fund strikes (e.g. Kuusi, 1931, p. 791-809). Since the introduction of compulsory unemployment insurance, unemployment insurance

unemployment insurance fund emerged and gained popularity. The emergence of the independent UI fund has gradually broken the connection between earnings-related unemployment benefits and union membership.

Third, there was rapid structural change in the Finnish labour market during the 1990s. The share of the service sector has increased at the expense of the more traditional manufacturing sector. Within manufacturing, the electronics industry and the Nokia-led telecommunications sector has reported double-digit growth rates, while other sectors have declined in their relative importance. The general education level has rapidly improved so that the gap in the education level between the youngest and oldest generations is currently among the highest in the OECD countries (e.g. OECD, 2004a). All these changes may have contributed to the decline in union density.

Another important change in the 1990s' labour market is a substantial increase in uncertainty. At the beginning of the decade, the national unemployment rate surged from 3 to 17 per cent. Unemployment has declined since 1994, and was around 9 per cent in 2004, but the unemployment risk that the workers face has remained higher than before the recession. Increased uncertainty is also due to an increase in the share of workers on temporary contracts during the latter part of the decade. An increase in unemployment risk may increase union density when the unions administer the UI funds (e.g. Blaschke, 2000; Checchi and Visser, 2001; Lesch, 2004).

The paper is organised as follows. Section 2 provides a description of the relevant institutions. Section 3 introduces the data set that is used to address the issues at hand. Section 4 contains our analyses of contributing factors to the decline in union density. Section 4.1 documents the basic facts of the decline. Section 4.2 reports the estimation results on the impact of the changes in the composition of the labour force and unemployment risk for the decline. Section 4.3 presents a decomposition of union density into year effects, age effects and cohort effects. Section 4.4 analyses the flows in and out of unions. Section 5 concludes with some general remarks and lessons from the Finnish experience for other countries with similar institutions.

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funds that are run by trade unions have ceased to exist in most countries. Holmlund and Lundborg (1999) provide a theoretical elaboration of incentives to join unions in a system where the unions administer unemployment insurance benefits through government-subsidized UI funds. Several studies show that union density is higher in countries with the Ghent system (e.g. Lesch, 2004).

2. FINNISH LABOUR RELATIONS

The Finnish union movement has a long history. The first national trade union, the printers' union, was established in 1896. The employers formally recognized the unions for the first time in January 1940. Since 1968 the labour market organisations and the government have negotiated centralized income policy agreements in an effort to stabilise the macroeconomic environment. These tripartite income policy agreements have often also included changes in the social security system and taxes. There has been a substantial increase in union density since 1960. This long-term pattern is documented in Table 1. Other institutional changes that have contributed to the increase in the union density in Finland have been previously analysed by Pehkonen and Tanninen (1997).

Most blue-collar unions are organised according to industries. Employees with academic qualifications are mostly organised according to professions. There are altogether 81 trade unions that belong to three central organisations. The largest central organization is SAK (Confederation of Finnish Trade Unions) that has 1 060 000 mainly blue-collar members. STTK (Finnish Confederation of Salaried Employees) has 643 000 white-collar members and AKAVA (Confederation of Academic Professional Associations) 424 000 members. Reflecting the rapid changes in the education structure of the labour force, AKAVA membership has steadily increased during the 1990s (Figure 1). STTK membership has remained more or less constant since 1993, and the SAK membership has declined.

The unions negotiate collective wage agreements with the employer organizations. Collective labour contracts are also binding for the non-union members in the industries where more than half of the employees are union members. Hence, the coverage of collective bargains in Finland is around 95% of all employees, one of the highest rates in the OECD (e.g. Layard and Nickell, 1999; Checchi and Lucifora, 2002).

Along with wage bargaining, the unions administer unemployment insurance funds that provide their members with earnings-related unemployment benefits. These funds collect membership fees but the fees cover only 5.5 per cent of the unemployment expenses. The rest is covered by direct subsidies from the government (~40%) and by mandatory UI contributions collected from both the employers and the employees. In terms of funding, the Finnish UI system resembles systems in Belgium, Sweden and Denmark, which are the other Ghent countries.[2]

[2] The UI system in Belgium is not always classified as a Ghent system. In Belgium the private sector unemployment insurance funds are administrated by trade unions but coverage of unemployment insurance is not conditional on union membership.

The employees that are not members of a UI fund are entitled to basic allowance paid by the Social Insurance Institution (KELA). KELA also pays labour market support for the unemployed who have exhausted their 500 days' benefit entitlement or who do not meet the employment condition required for the earnings-related UI benefits. Both the basic allowance and the labour market support are, in most cases, substantially lower than earnings-related UI benefits. Entitlement to higher unemployment benefits is one of the most important reasons to join a union. In a recent survey by Taloustutkimus (2003), 58% of the union members stated that earnings-related benefits were a "very important" reason for their membership. Pehkonen and Tanninen (1997) report similar findings from earlier surveys.

It has always been possible to join a UI fund without becoming a union member, but this option has been used by very few workers. The 1984 law regulating unemployment funds does not contain any reference to the trade unions. Still, the first independent UI fund emerged only in 1992.[3] Its emergence was stimulated by the increase in demand for unemployment insurance among non-union members that occurred with the large increase in unemployment in the beginning of the 1990s. The independent UI fund grew rapidly in the latter part of the 1990s. As a result, it was the largest single unemployment fund with around 200 000 members in 2002.

The union fees are around 1-2% of wages and salaries (Table 2). In many professional unions (AKAVA members) the union fee is fixed, usually much lower than 1% of the wages. An interesting feature of the Finnish system is that the union fees are tax deductible and that the fees are mainly collected by employers. These factors support union density. Membership fees of union-run unemployment insurance funds are much lower than the total union fee (between 0.1-0.6% of wages and salaries). The membership fee of the independent UI fund was only 65 Euros for 2005. Hence, there are substantial monetary incentives to switch from the trade union membership to the independent UI-fund. On the other hand, the unemployment insurance fees of union-run funds are usually lower than the fee of the independent fund, particularly so for the AKAVA and STTK members. This is quite natural, because access to these unemployment insurance funds is restricted to particular professional occupations that have lower than average unemployment risk.

[3] This independent UI fund is officially called in Finnish "Yleinen työttömyyskassa" but better known by its popular name "Loimaan kassa". It originally gathered members only from the private sector. Now it also covers the public sector workers. A similar independent UI fund, called "Alfa-kassan" also emerged in Sweden in 1998. However, its membership is still much lower than that of the independent UI fund in Finland. Nowadays 'Alfa-kassan' has 69000 members or 1.6% of all Swedish employees. One reason for the lower share is probably the higher fee. Membership of Swedish Alfa-kassan costs SEK 1380 (in 2005) ~ 150 euros per year, about three times the Finnish independent UI fund fee.

3. DATA

To analyse the factors associated with the decline in the union density we need data that gathers information on union membership and its potential determinants from a representative sample over a long period of time. The best available source of data is the Income Distribution Survey (IDS), conducted by Statistics Finland.

IDS is an annual household survey. Its main purpose is to monitor disposable income growth in various population groups and to observe the changes in the income and wage dispersion. Each year the survey collects information from 10 000 households with approximately 25 000 individuals. The survey uses a rotating panel design where each household remains in data for two consecutive years and half the respondents are replaced each year by new households. For our purposes this is an important advantage, since we can also observe transitions in and out of unions at the individual level. The survey data includes weights that account for the sampling probability and the attrition rate. These weights are calibrated to yield marginal distributions that match known population totals. We use these weights in all calculations. The data also includes relevant background information on the individuals such as age, education and the labour market status that is helpful in an effort to decompose the decline in the union density during the 1990s. These variables are mainly based on various administrative registers.

Information on union membership is based on the interview responses and it is available from 1991 onwards.[4] Individuals are asked to identify the central organization to which they belong. If respondents do not know their central organization, they are asked about their trade union and these responses are classified to the central organization level by Statistics Finland. A separate question on UI fund membership was included in the survey for the first time in 1992.

We concentrate on the wage and salary earners defined according to the interview questions on main activity. Self-employed persons, pensioners and students and other groups outside the labour force are therefore excluded from the analysis. Those who are unemployed at the interview date are included in our sample unless they have been out of work for more than 6 months and are no longer classified as wage and salary earners. After these restrictions the annual sample size is, on average, 10 000 individuals.

In addition to collecting information on union membership and the relevant background variables we use the IDS data to calculate the unemployment risk that the individual faces. We use the panel feature of the data, and estimate separate probit-models for each year of 1991 –

[4] The IDS data also contains information on tax deductions due to union and UI fund fees. However, the tax deductions do not distinguish the union fees from UI fund fees. In addition, the tax deductions refer to the payments during the whole year while the interview responses refer to union membership at the time of the interview.

2000, explaining the likelihood of becoming unemployed in year t+1 with gender, age (5 groups), education (5 groups), 14 industry and 11 regional dummies (all measured in year t). Based on the estimated coefficients we then calculate the expected unemployment risk for the whole sample (and those not observed in t+1). Our measure of unemployment risk varies both in cross-section and over time. Including this measure as an explanatory variable in an equation explaining union membership together with all the control variables and time dummies identifies the effect of unemployment risk from differential changes in unemployment in different population groups.

4. ANALYSIS OF CONTRIBUTING FACTORS

4.1. Basic facts of the decline

Aggregate numbers on union membership reported in Figure 1 are affected both by the structure and size of the labour force, and by the fraction of the potential members that belong to the unions. The effect of employment growth is eliminated in Figure 2, which displays the changes in union density during the 1990s. The figure also shows the fraction of workers that belong to the unemployment insurance funds, which in most cases implies belonging to the respective union.

The striking observation from the figure is the rapid increase in union density during the first years of the 1990s and the large decline after 1993. On the other hand, the share of UI-fund members has declined by only 3 percentage points during the late 1990s. The growing divergence between the union density and UI fund membership reflects the increasing importance of the independent UI-fund. In the beginning of the decade only few non-union members were members of a UI fund. At the end of the decade their share increased to approximately 10 percent.

Other data sources confirm the patterns observed from the IDS data. For example, according to the Working Life Barometer by the Ministry of Labour, union density has declined from 0.85 in 1993 to 0.79 in 2000. In 2003, the trade union density was 0.72, representing a 13 percentage point decline from its peak in the year 1995. The share of wage and salary earners that are members of the independent UI fund was 0.10 in 2003 according to the same data source. A question about the union membership is also occasionally included in the Labour Force Survey (LFS). For the years when both LFS and IDS data are available, the difference in union density is generally below 1 percentage point. In contrast, OECD (2004b) misses the swings in the

union density entirely and reports that the union density has remained roughly constant between 1990 and 2000.

Union membership has some interesting features in Finland (Table 3).[5] In contrast to most other countries, women are more likely to belong to unions. Union density is also higher for those with more education. Otherwise, density patterns are more similar to other countries (e.g. Schnaber, 2003). Young workers are less unionized. Also, temporary workers and those with the lowest wages are less likely to be union members. Union density is higher in the public sector and in the third sector compared with the private sector. (Comparable data from other countries is reported by, for example, Visser, 2003.)

A potential reason for the large changes in union density in the 1990s is that the job cuts during the recession hit the marginal workforce (’outsiders’) hardest, so that the core members of the unions (’insiders’) remained in the workforce. However, this explanation does not gain much support from the IDS data (Appendix 1). The changes in union density were roughly similar even when the number of union members is divided by the number of people of working age.

As reported in Table 3, the decline in union density has taken place more or less across the board. Some exceptions include the oldest workers, the workers with highest education and those working in the public sector. These are also groups where the union density has been the highest in the past. Table 4 shows that the proportion of wage and salary earners that belong to the independent UI-fund is highest in the private sector and among workers with primary or secondary education.

4.2. Changes in labour force composition and unemployment risk

Union density varies substantially across the labour market segments. Thus, it is interesting to analyse the contribution of the changes in the labour force composition to the union density during the 1990s. In this paper we estimate simple discrete choice models explaining union membership with factors such as gender, age, education, unemployment risk, industry, region and year. We use data from 1992 to 2000 because the independent UI fund was first reported in 1992, and because consistent industry classification could be created only up to 2000.

We classify the outcome variable into three categories: trade union members, members of the independent UI fund, and non-members. We use the simplest possible discrete choice model that incorporates three alternatives, the multinomial logit –model. Since the multinomial logit –

[5] Schnaber and Wagner (2005) document factors that account for union membership for a number of European countries (including Finland) using data from European Social Survey. Their results are in line with ours.

model is based on the "independence of irrelevant alternatives" assumption (IIA), implying that the odds ratio between two alternatives is independent of the availablility of a third alternative.[6]

We report the results from a multinomial logit –model in Table 5. To make the table easier to read we report marginal effects instead of parameter estimates. Each entry in the table can be interpreted as the change in probability of choosing a particular category owing to a unit change in the independent variable. When all independent variables are categorial variables, this simply provides the adjusted difference, compared with the omitted base category. Since the choice probabilities add up to one, a relevant significance test is a joint test where the variable has no effect on the choice between the three options. This is reported in the column on the far right.

As we are trying to explain the changes in union density, we are primally interested in the year effects. The first model reports the year effect without controlling for any other variables. The results are similar to the aggregate figures reported earlier. The year dummies for 1993 and 1994 have large positive effects on union membership. The year effects turn negative in 1996 (compared with 1992) and grow in absolute value after that. The year effects on the independent fund membership grow over time reaching 8.7% in 2000.

The second set of estimates includes a large number of control variables in addition to the year dummies. The effect of changes in the composition of the labour force can now be evaluated by comparing the year effects in the two models. This comparison reveals that the changes in the composition of the labour force explain only a rather small share of the decline in the union density. The difference between the largest positive effect (1993) and the largest negative effect (2000) is 10.5 percentage points when only year dummies are included and 8.1 percentage points after adjusting for the changes in other covariates. The changes in the other covariates also explain less than 25% of the increase of the independent UI fund.

Disentangling the effects of major changes in the explanatory variables over the decade is helpful in understanding the limited role of structural change. For instance, the education level has increased rapidly over the 1990s, but the increase in the education level does not contribute to the decline in the union density, because the more educated are more likely to be union members. The two most important factors that have contributed to the decline in union density are the decrease in the relative size of the public sector (where union density is high) and the

[6] The IIA assumption is not valid if some alternatives are close substitutes. However, it is far from clear which two alternatives in our case would be closest substitutes. An appealing option would be to estimate correlation structure between the three alternatives, for example, using the multinomial probit –model, but that is computationally difficult when the attributes are individual and not choice-specific. We tested the IIA assumption using the Hausman test and the Small-Hsiao test. Neither of these tests indicates that the IIA assumption would be violated.

growth in business services (where union density is low). However, even these factors account for only a rather small fraction of the observed decline in union density.

Perhaps the most interesting explanatory variable is the unemployment risk that employees face. According to the point estimates, the increase in unemployment risk decreases the probability of remaining outside the UI-funds and increases the probability of joining unions and an independent UI fund. However, these effects are not statistically significant. Also, while the changes in unemployment could explain the cyclical fluctuation in union density, the changes in unemployment cannot explain the trend decrease in union density. Unemployment in 2000 is still substantially higher than before the recession.[7]

Some interesting variables that could be used to explain the changes in union density are not available in the IDS data. We, therefore, supplemented the analysis, using data from a Quality of Work Life Survey (QWLS), a cross-section survey conducted jointly with the Labour Force Survey. We used data from 1997 and 2003. The results regarding the effects of the variables that are also available in the IDS data were very similar (Appendix 2). In addition, the results based on the QWLS data revealed that the union density is higher in large firms and that union membership increases with tenure. More interestingly, calculations from the QWLS data show that perception of job insecurity is positively correlated with union membership. QWLS data also show that the lower union density of temporary workers is fully explained by other covariates. Since the QWLS data only contains two cross-sections with a smaller sample size, and contains no information on the membership in the independent UI fund, it is not well-suited for analysing the reasons behind the changes in union density. However, the results give no indication that variables missing from the IDS data could explain the observed decline in union density.

In addition to the basic model, we estimated a multinomial logit –model with five alternatives, treating the three central organisations for employees as separate outcomes (Table 6). The results were somewhat different compared with those reported in Table 5. Though we could not explain the changes in the aggregate union density by the changes in the explanatory variables, we can, to some extent, explain the changes in the relative sizes of the central organizations. For instance, employees with academic qualifications are mostly members of AKAVA. The increase in the number of AKAVA members can be explained by the increase in the average

[7] According to the Labour Force Survey the unemployment rate was 3.2% in 1990 and 9.8% in 2000.

level of education. Similarly, the decline in the SAK membership can be partially explained by the changes in the composition of the labour force.[8]

4.3. Cohort effects

It would be interesting to know whether the decline in union density can be attributed to the cohort or the time effects. Perhaps younger generations are less likely ever to join unions and the union decline will continue as the less unionized younger cohorts gradually replace the older cohorts. Unfortunately, a full decomposition into age, time, and cohort effects is impossible without strong structural assumptions. Age, time, and cohort are linearly dependent and therefore any time effect can always be interpreted as simultaneous cohort and age effects.

Even though the age, time and cohort effects cannot be unambiguously identified, some meaningful linear combinations of these effects can be identified. In particular, the second differences, i.e. the changes in slopes of the effects, can be identified only assuming that age, time and cohort effects are additively separable. In addition, by normalizing the slope of one of these effects to some constant, the slopes of the two other effects can also be identified. Deaton (1997) proposes normalizing the year effects so that they add up to zero. This implies that any time trend will be attributed to cohort and age effects. Given that union density has declined substantially during the period that we observe, this normalization is not particularly appealing in our context. A more plausible assumption is to restrict the cohort or age effects to zero over some range where no major changes should occur.

Below, we decompose age, time and year effects by restricting the age effects to mean zero in the range between 35 and 45 years. Otherwise, we allow fully flexible age, time, and cohort profiles by estimating the effects with a full set of dummy variables. As usual, we create the base category by dropping one of the dummy variables in each set: the first year, the oldest cohort and indicator for age 35, so that the effects measure relative differences to this base category. We also restrict the age, time and cohort effects to be additively separable, implying no interactions between these effects. This is a necessary but not an innocent assumption requiring, for example, that all cohorts react to the changes in the environment in the same way.

The results from the decomposition are presented in Figure 3. We restrict the sample to wage and salary earners between the ages of 18 and 64, and use data for the years 1991-2002. Thus, the youngest cohort is born in 1984, and the oldest in 1927. First, in the top left-hand panel we plot age profiles of every fifth cohort over the range of years when these cohorts appear in the

[8] According to the Hausman test the IIA assumption does not hold when there are five alternatives. This is quite natural since most workers cannot choose between the central organisations. Hence, the multinomial logit results may be biased.

data. This plot reveals that the age profiles of union membership are reasonably similar for different cohorts. Union density quickly increases up to around 30 and then stays roughly constant until close to retirement age. Thus, our normalization that implies no trend betwen ages 35 and 45 appears to be consistent with the data.

Our decomposition results are plotted in the other three panels of Figure 3. The top right-hand panel shows the time effect. The strong upswing in union density at the beginning of the 1990s and the consequent decline that was reported earlier in Figure 2 produces large time effects. In addition, the more recent upswing in union density around the year 2000 can also be seen clearly. This temporary increase in union density was associated with the burst of the ICT bubble that increased demand for union services among affected workers. The bottom left-hand panel shows the age effects. The flat segment between ages 35 and 45 is a product of our normalization, but other features of the age profile are genuine differences across age groups. Union density among the youngest age groups is substantially lower than among those in middle age. Union density peaks at around age 55. The most plausible explanation for this is that employees have better incentives to join unions close to the early retirement age, because early retirement schemes provide extended unemployment benefits for the employees who are covered by the unemployment insurance (Hakola and Uusitalo, 2005).

Perhaps the most interesting result of this decomposition is the cohort pattern reported in the bottom right-hand panel. The cohort profiles indicate that a large fraction of the decline in the union density during the 1990s can be attributed to the decrease in union density among the cohorts born after the early 1960s.[9] The large cohort effect conveys a bleak future of unions in Finland, because the cohorts born since the early 1960s gradually replace older more unionized cohorts, leading to a continuing decline in union membership. Finding that younger cohorts are less likely to become union members is not a feature of only Finnish labour markets. Bryson and Gomez (2005) argue that the fraction of cohorts born after the mid sixties that have never been union members has also increased in the UK.

4.4. Changes in union status

As each individual is observed in the two consecutive years in the IDS data we can also examine transitions between union membership, UI fund membership and non-membership. Below, we will use this feature for two purposes. First, we will demonstrate that gross flows in and out of unions are large, compared with the net change in union density. Second, we will

[9] The pattern of the cohort effects is very similar when we apply Deaton's (1997) original method in which the year effects add up to zero. The estimates for the youngest and the oldest cohorts are less precise due to a smaller number of observations. This explains the apparent year-to-year variation.

examine the sources of growth in the independent UI fund by calculating the fraction of new members that were previously union members.

Gross flows in and out of unions are reported in Figure 4. The inflow rate is defined as the number of individuals entering unions between the years t-1 and t, divided by the average number of union members in the years t-1 and t. The outflow rate is calculated in the same way, based on the number of individuals exiting unions between t-1 and t. As some new members come from outside the labour force, the data is no longer restricted to wage and salary earners, but includes all individuals in the IDS sample.

Gross membership flows are large, compared with the net change in the union membership. The turnover has also increased during the decade. This change is masked in the aggregate analysis of the trade union density. Gross flows are also substantially larger than what would be produced by simple population dynamics. The size of the average age cohort is around 66 000. If the oldest cohort left the unions when retiring, and the youngest joined when entering the labour force, and nothing else happened, the resulting gross flows would be about a third of the size that we observe in the data.

Gross flows also reveal that the net increase in the union membership in the early 1990s was caused both by the increase in the inflow of new members to unions and the decrease in the outflow from unions. After 1995 the inflow and the outflow have been almost equally large. The net change in union membership has been close to zero, on average, but the union density still declined because of the strong growth in employment (16% between 1993 and 2002).

The flow between the unions and the independent UI fund represents only a rather small fraction of the total changes in union status. Despite this, there has been a constant outflow of workers from trade unions to the independent UI fund during the 1990s. On average, 47% of the annual gross inflow to the independent UI fund is due to the former union members switching to the independent UI fund (Figure 5). On the other hand, around half of the new members of the independent UI fund were not union members before joining the independent UI-fund.

An analysis of switches from unions to the independent UI fund reveals that young, high-wage workers that live in the southern part of the country have been most likely to switch from trade union to the independent UI fund (Appendix 3). This suggests that these switches are more driven by employees' preferences that are captured by the cohort effects than direct monetary incentives induced by the lower fees of the independent UI-fund.

The switches have been substantially less likely for those employees who are employed in the public sector. AKAVA and STTK members have switched to the independent UI fund more

often than SAK members, though this pattern has changed in more recent years. The transitions between the unions and the independent UI fund occur in both directions; about 16% of the UI fund members join unions every year. These transitions are most common for the young and highly educated workers that are employed in the public sector (Appendix 4).

5. CONCLUSIONS

The union density in Finland declined from 84% in 1993 to 73% in 2002. According to our results, about a quarter of this decline can be explained by the changes in the composition of the labour force or other changes in the labour market. The main reason for the decline appears to be the emergence of an independent UI fund that provides unemployment insurance without requiring union membership. The independent UI fund erodes the link between the unemployment insurance and union membership that has supported union density in the Ghent countries. A similar development may well take place in other countries where unions are involved in the administration of UI funds. Interestingly, a large part of the decline can be attributed to a decrease in union membership in the cohorts born after the early 1960s. This suggests that union density will continue to decrease as the younger less unionized cohorts gradually replace the older cohorts in the labour market. In the service sector, the union density may decrease to a level where union contracts are no longer extended to non-members. Therefore, decline in union density may cause fundamental changes in wage formation.

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Table 1. The union density in Finland 1960-2002.

Year	1960	1965	1970	1975	1980
Union density	29.3	32.7	51.4	65.6	70.0
Year	1985	1990	1995	2000	2002
Union density	69.0	72.5	81.5	75.7	73.4

Source: Ebbinghaus and Visser (2000), for 1960-1990; Authors' calculations from the IDS data for 1995-2002.

Table 2. Union and UI fund fees as a share of gross wages in 2005.

Official name of union	English translation	Union fee (2005)	UI-fund fee (2005)
SAK			
KTV	The Trade Union for the Municipal Sector	1.4%	0.35%
Metallityöväen liitto	The Finnish Metalworkers' Union	1.7%	0.60%
Palvelualojen ammattiliitto	Service Union United	1.5%	0.35%
Rakennusliitto	The Finnish Construction Trade Union	1.9%	0.50%
AKAVA			
Opetusalan Ammattijärjestö OAJ	Trade Union of Education in Finland	1.2-1.3%	34.80€(~0.12%)
Insinööriliitto	The Union of Professional Engineers in Finland	321-357€(~0.8%)	40€(~0.1%)
Tekniikan Akateemisten Liitto TEK	The Finnish Association of Graduate Engineers	264€(~0.6%)	40€(~0.09%)
STTK			
Julkis- ja yksityisalojen toimihenkilöliitto	The Federation of Public and Private Sector Employees	1.28%	49.20€(~0.2%)
Palkansaajajärjestö Pardia	Pardia	1.05-1.3%	30€(~0.12%)
Tehy	The Union of Health and Social Care Professionals	1.2%	40€(~0.17%)
Independent			
Yleinen työttömyyskassa	YTK Unemployment Fund		65€(~0.2%)

Source: Membership fees in 2005 according to the web pages of each union.
Notes: Membership fee includes UI fund fee. In the cases when the union or unemployment fund fee is fixed, we have calculated the fraction of salaries using the average wages of the representative occupation. In some AKAVA and STTK unions the members belong to several different UI funds. The UI fund fee displayed in the table is the mode.

Table 3. The trade union density according to various characteristics.

	1991	1995	2000
Gender			
Females	0.79	0.83	0.80
Males	0.72	0.80	0.72
Age			
15-24	0.53	0.62	0.46
25-34	0.74	0.78	0.70
35-44	0.81	0.84	0.79
45-54	0.82	0.86	0.83
55-64	0.77	0.82	0.85
Education			
Primary	0.73	0.81	0.74
Secondary	0.77	0.81	0.75
Tertiary	0.82	0.84	0.82
Wage			
1st (lowest)	0.66	0.70	0.62
2nd	0.81	0.87	0.81
3rd	0.81	0.87	0.81
4th (highest)	0.77	0.82	0.78
Type of contract			
Permanent	.	.	0.77
Temporary	.	.	0.70
Sector			
Private	0.72	0.77	0.70
Public	0.85	0.90	0.89
Third sector	0.65	0.76	0.81
Industry			
Agriculture and forestry	0.64	0.74	0.69
Manufacturing	0.80	0.85	0.82
Energy and water supply	0.88	0.87	0.89
Construction	0.75	0.81	0.72
Trade	0.62	0.67	0.56
Hotels and restaurants	0.63	0.68	0.60
Transportation	0.74	0.74	0.69
Communications	0.87	0.90	0.82
Finance and insurance	0.76	0.85	0.71
Other private services	0.56	0.69	0.60
Public administration	0.86	0.91	0.87
Education and R&D	0.84	0.85	0.86
Health care and social services	0.86	0.90	0.89
Other public and personal services	0.63	0.76	0.71
Regions			
South	0.70	0.77	0.69
West	0.81	0.87	0.82
East	0.82	0.89	0.85
North	0.85	0.87	0.85

Source: Authors' calculations from the IDS data.
Note: Information about the type of contract is available from 1999.

Table 4. The proportion of members of the independent UI fund.

	1992	1995	2000
Gender			
Females	0.02	0.03	0.06
Males	0.02	0.04	0.08
Age			
15-24	0.01	0.03	0.04
25-34	0.02	0.03	0.08
35-44	0.02	0.04	0.08
45-54	0.02	0.04	0.07
55-64	0.02	0.03	0.05
Education			
Primary	0.01	0.03	0.07
Secondary	0.02	0.04	0.07
Tertiary	0.02	0.04	0.05
Wage			
1st (lowest)	0.01	0.03	0.05
2nd	0.01	0.04	0.06
3rd	0.02	0.04	0.07
4th (highest)	0.04	0.06	0.10
Type of contract			
Permanent	.	.	0.08
Temporary	.	.	0.04
Sector			
Private	0.03	0.05	0.10
Public	0.008	0.01	0.02
Third sector	0.009	0.03	0.04
Industry			
Agriculture and forestry	0.007	0.01	0.07
Manufacturing	0.02	0.04	0.06
Energy and water supply	0.01	0.02	0.05
Construction	0.02	0.05	0.09
Trade	0.04	0.07	0.16
Hotels and restaurants	0.02	0.06	0.11
Transportation	0.02	0.04	0.09
Communications	0.01	0.01	0.05
Finance and insurance	0.04	0.05	0.12
Other private services	0.04	0.08	0.10
Public administration	0.01	0.01	0.05
Education and R&D	0.02	0.01	0.02
Health care and social services	0.004	0.01	0.02
Other public and personal services	0.01	0.04	0.06
Regions			
South	0.03	0.05	0.10
West	0.01	0.02	0.03
East	0.01	0.02	0.05
North	0.004	0.005	0.03

Source: Authors' calculations from the IDS data. UI fund membership is first reported in 1992.

Table 5. Results from multinomial logit -models with three alternatives.

The year effects only:					**The year effects and the control variables:**				
	Out	Union	UI fund	Khi^2 from Wald-test		Out	Union	UI fund	Khi^2 from Wald-test
1993	-4.5	3.5	1.1	28.6	1993	-4.6	4.0	0.5	35.9
1994	-3.7	1.9	1.8	20.2	1994	-4.0	2.8	1.1	25.6
1995	-3.5	0.5	3.0	25.8	1995	-3.6	1.6	2.1	29.6
1996	-3.7	-1.9	5.6	49.5	1996	-3.7	-0.2	3.9	48.8
1997	-3.6	-3.1	6.6	64.3	1997	-3.9	-0.8	4.7	59.7
1998	-1.8	-5.3	7.0	58.6	1998	-2.3	-2.8	5.1	50.1
1999	-1.6	-7.3	8.9	81.2	1999	-2.3	-4.4	6.6	63.0
2000	-1.7	-7.0	8.7	80.8	2000	-2.3	-4.1	6.4	60.8
		Control variables							
		Female				-5.5	5.6	-0.1	114.5
		Married				-3.4	3.5	-0.1	44.7
		Children				-0.4	0.3	0.1	0.6 (n.s.)
		Age less than 24 years				22.2	-21.2	-1.0	288.1
		Age 25-34				4.6	-4.9	0.3	49.5
		Age 45-54				-0.2	0.2	0.0	0.1 (n.s.)
		Age 55-64				0.2	0.3	-0.5	2.0 (n.s.)
		Full-time worker				-14.8	13.5	1.3	244.7
		Upper secondary or vocational education				-1.4	1.3	0.1	5.6
		Polytechnic or lower university degree				-2.0	-0.9	2.8	60.0
		Higher university degree				-3.7	2.0	1.7	28.0
		Ph.D degree				-4.4	4.3	0.1	24.3
		Manufacturing				-10.8	10.8	0.0	106.9
		Energy and water supply				-10.5	12.6	-2.0	53.0
		Construction				-6.4	5.3	1.1	30.8
		Trade				-3.0	-0.5	3.4	15.2
		Hotels and restaurants				-4.3	-0.6	4.9	20.1
		Transportation				-5.8	5.2	0.7	24.0
		Communications				-9.8	11.3	-1.5	63.4
		Finance and insurance				-7.9	7.7	0.2	42.6
		Other private services				-3.0	1.1	1.9	9.9
		Public administration				-10.0	12.0	-2.0	100.3
		Education and R&D				-8.1	10.2	-2.2	65.5
		Health care and social services				-10.6	13.6	-3.0	128.8
		Other public and personal services				-4.1	4.4	-0.3	10.2
		Urban				-1.9	2.0	-0.1	15.0
		Unemployment risk				-6.2	4.7	1.5	2.1 (n.s.)

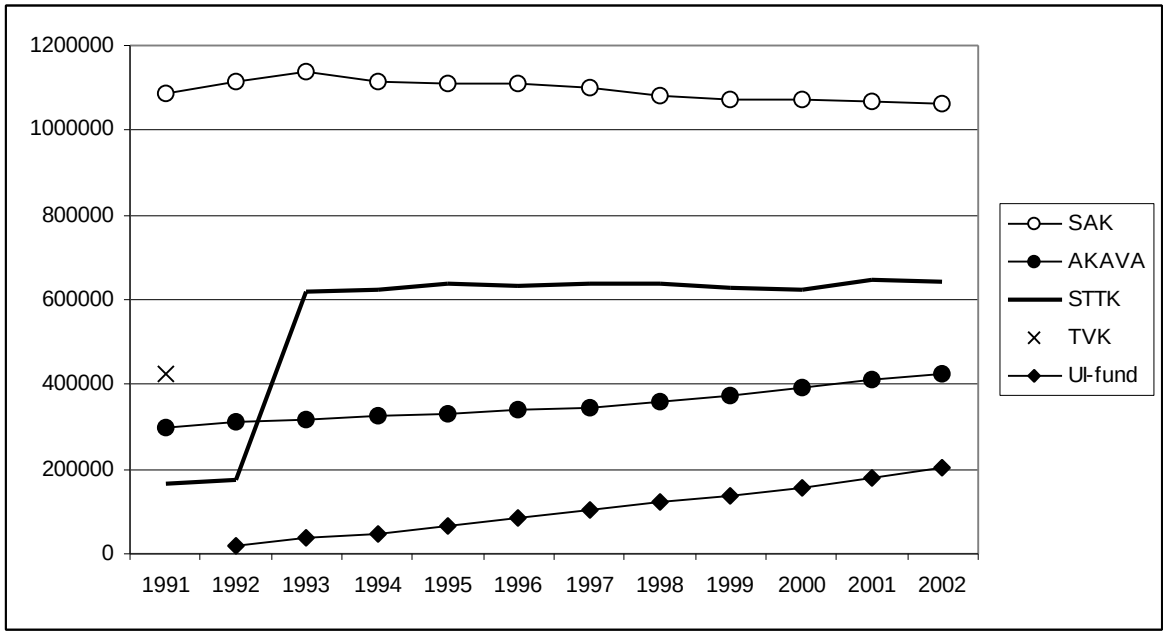
Source: Authors' calculations from the IDS data.
Notes: Marginal effects are reported. The reference group for the year 1992 consists of males who are not married, have no children, are 35-44 years old, are in part-time work, have comprehensive education only, work in agriculture and forestry, and live in rural areas. The measure for unemployment risk is estimated from yearly probit models as explained in the text. Control variables include 11 regional dummies that are not reported in the table. Adjusted Wald test statistics are reported. (n.s.) means that the variable is not statistically significant at the standard 5% level.

Table 6. Results from multinomial logit -models with five alternatives.

The year effects only:							**The year effects and the control variables:**						
	Out	SAK	STTK	AKAVA	UI fund	Khi^2 from Wald-test		Out	SAK	STTK	AKAVA	UI fund	Khi^2 from Wald-test
1993	-4.7	1.6	0.2	1.9	1.0	16.1	1993	-6.8	4.6	0.1	0.9	1.1	19.5
1994	-3.9	0.6	0.1	1.3	1.8	11.0	1994	-6.0	4.6	-0.6	0.1	2.0	14.6
1995	-3.6	0.7	-0.8	0.7	3.0	13.7	1995	-5.6	4.3	-2.0	-0.2	3.5	17.8
1996	-3.9	-2.0	-0.9	1.2	5.6	26.4	1996	-6.0	1.5	-1.5	-0.3	6.4	25.9
1997	-3.7	-2.8	-1.2	1.1	6.6	34.2	1997	-6.4	2.0	-2.7	-0.4	7.5	30.6
1998	-1.9	-3.5	-2.8	1.2	7.1	32.2	1998	-3.8	0.5	-4.6	-0.3	8.3	29.0
1999	-1.7	-4.8	-2.7	0.4	8.9	42.1	1999	-4.0	-0.9	-4.7	-1.0	10.6	35.4
2000	-1.8	-4.3	-3.8	1.1	8.8	44.5	2000	-3.9	-0.4	-5.5	-0.6	10.3	35.0
				Control variables									
				Female				-8.5	-1.4	9.8	0.1	-0.1	98.3
				Married				-5.2	-1.7	5.6	1.2	0.0	41.7
				Children				-0.6	-0.5	1.4	-0.3	0.1	1.9 (s.n.)
				Age less than 24 years				29.5	-12.3	-14.4	-0.7	-2.0	148.3
				Age 25-34				6.8	-2.6	-5.1	0.6	0.3	31.0
				Age 45-54				-0.4	-0.3	1.2	-0.5	0.0	1.8 (s.n.)
				Age 55-64				-0.2	-3.2	3.4	0.8	-0.9	5.0
				Full-time worker				-19.8	9.1	7.5	0.8	2.4	116.3
				Upper secondary or vocational education				-4.4	-10.2	9.3	5.6	-0.4	88.6
				Polytechnic or lower university degree				-8.8	-41.3	30.8	17.7	1.6	871.4
				Higher university degree				-15.1	-45.4	-17.6	80.3	-2.2	590.4
				Ph.D degree				-13.1	-47.4	-23.1	86.1	-2.6	587.5
				Manufacturing				-15.4	25.5	-15.8	5.4	0.3	105.7
				Energy and water supply				-16.5	26.2	-10.6	4.0	-3.2	40.4
				Construction				-9.1	23.5	-16.1	0.1	1.7	56.4
				Trade				-5.1	14.0	-20.7	6.9	4.9	76.7
				Hotels and restaurants				-6.9	24.9	-24.8	0.1	6.6	69.0
				Transportation				-8.6	18.1	-15.8	5.1	1.2	46.6
				Communications				-15.0	18.5	-3.3	1.9	-2.1	34.8
				Finance and insurance				-8.6	-35.1	29.0	10.9	3.8	79.0
				Other private services				-4.2	-1.7	-5.4	7.5	3.8	15.5
				Public administration				-15.0	1.0	10.7	5.9	-2.6	55.1
				Education and R&D				-10.2	-10.5	-17.9	41.2	-2.6	96.3
				Health care and social services				-15.1	7.0	1.4	11.0	-4.2	73.3
				Other public and personal services				-5.3	7.7	-12.3	10.0	-0.1	27.7
				Urban				-2.9	0.6	1.3	1.1	-0.1	14.2
				Unemployment risk				-6.2	14.9	-15.1	2.2	4.2	3.6

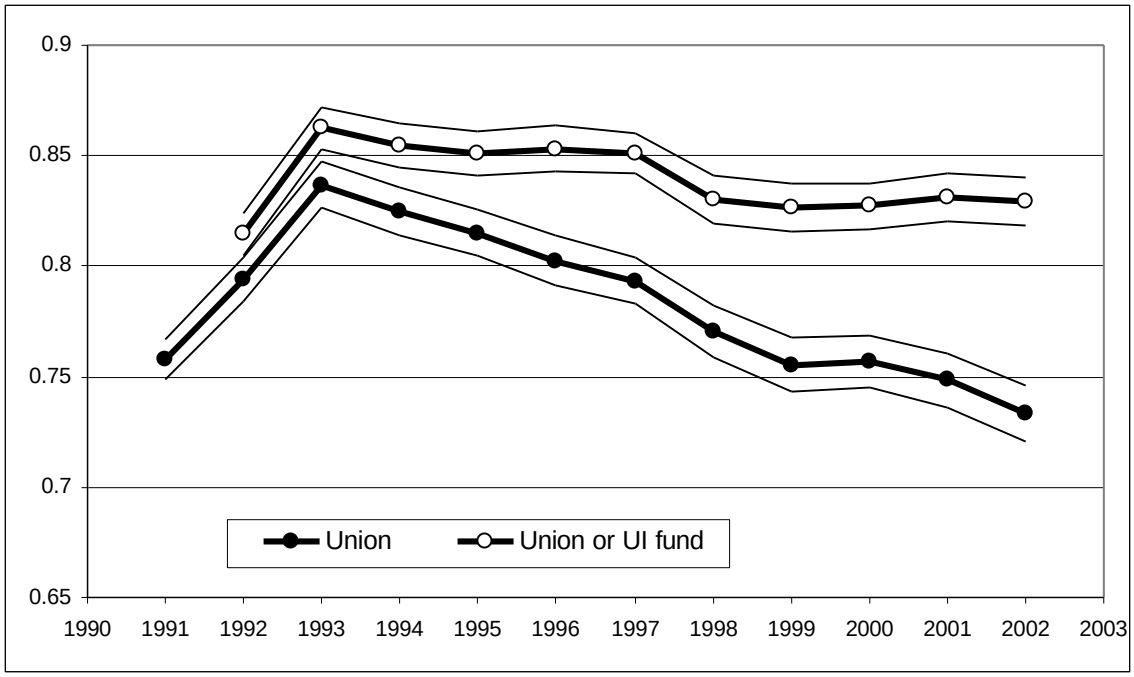
Source: Authors' calculations from the IDS data.
Notes: Marginal effects are reported. The reference group for the year 1992 consists of males who are not married, have no children, are 35-44 years old, are in part-time work, have comprehensive education only, work in agriculture and forestry, and live in rural areas. The measure for unemployment risk is estimated from yearly probit models as explained in the text. Control variables include 11 regional dummies that are not reported in the table. TVK is added to STTK in 1992. Adjusted Wald test statistics are reported. (n.s.) means that the variable is not statistically significant at the standard 5% level.

Figure 1. The evolution of membership in central organizations and in the independent UI fund.



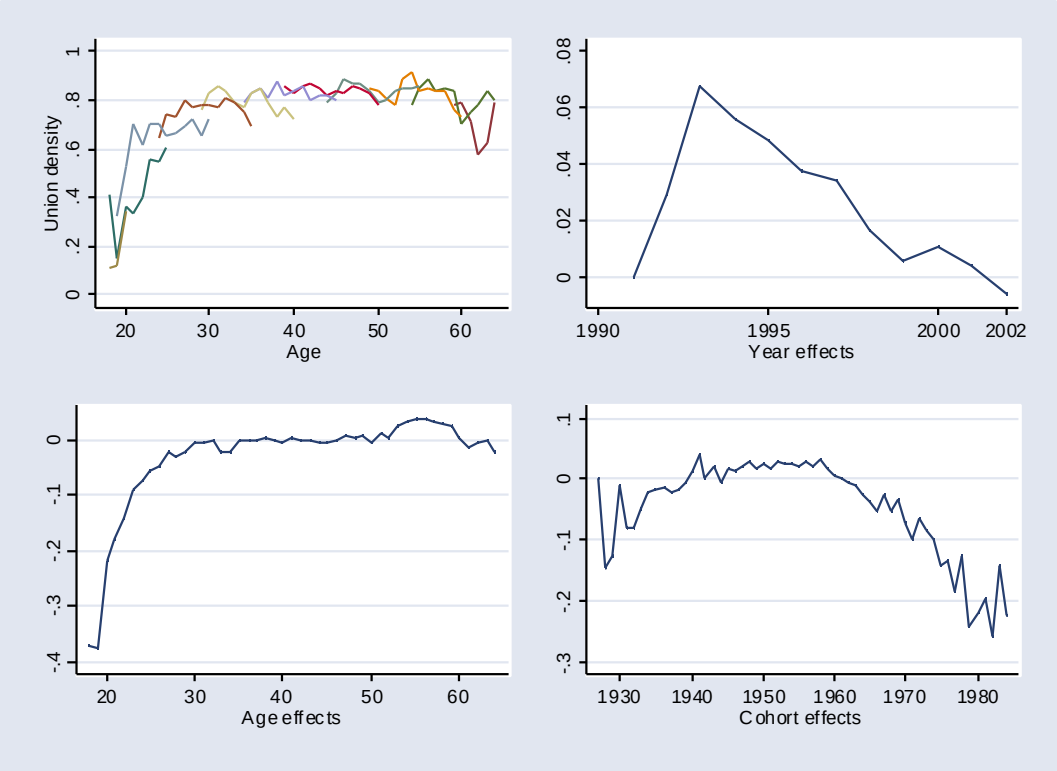
Source: Union membership from the Statistical Yearbook of Finland, various volumes. Independent UI-fund membership from their own records.
Note: TVK was merged into STTK in 1992 owing to TVK's financial difficulties.

Figure 2. The share of wage and salary earners that belong to unions and to UI funds.



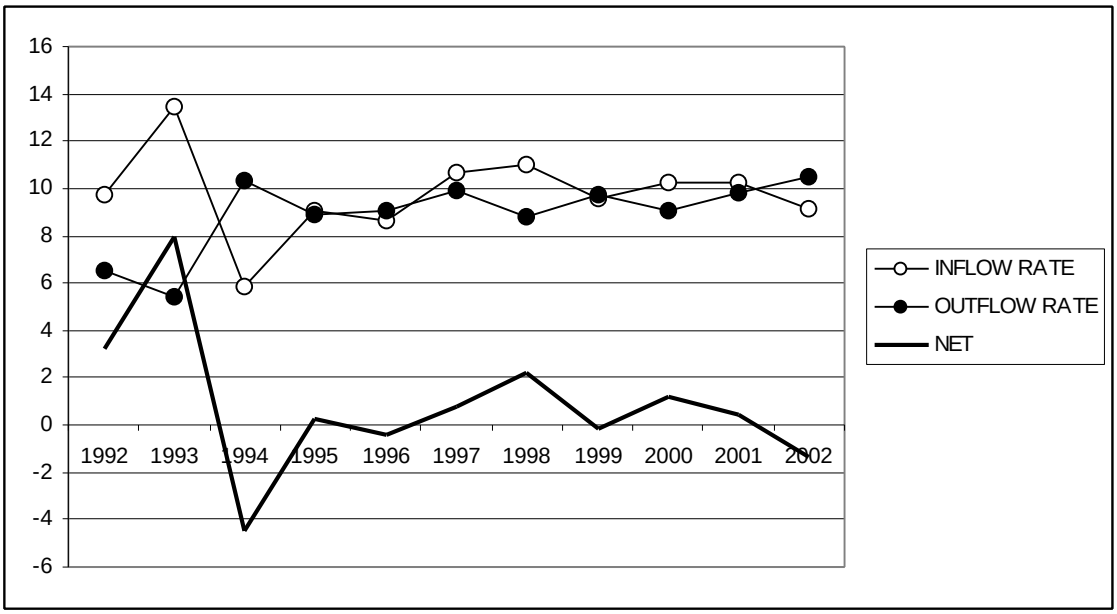
Source: Authors' calculations from the IDS data.
Note: Thin lines indicate 95% confidence intervals.

Figure 3. The decomposition of the union density into year, age and cohort effects.



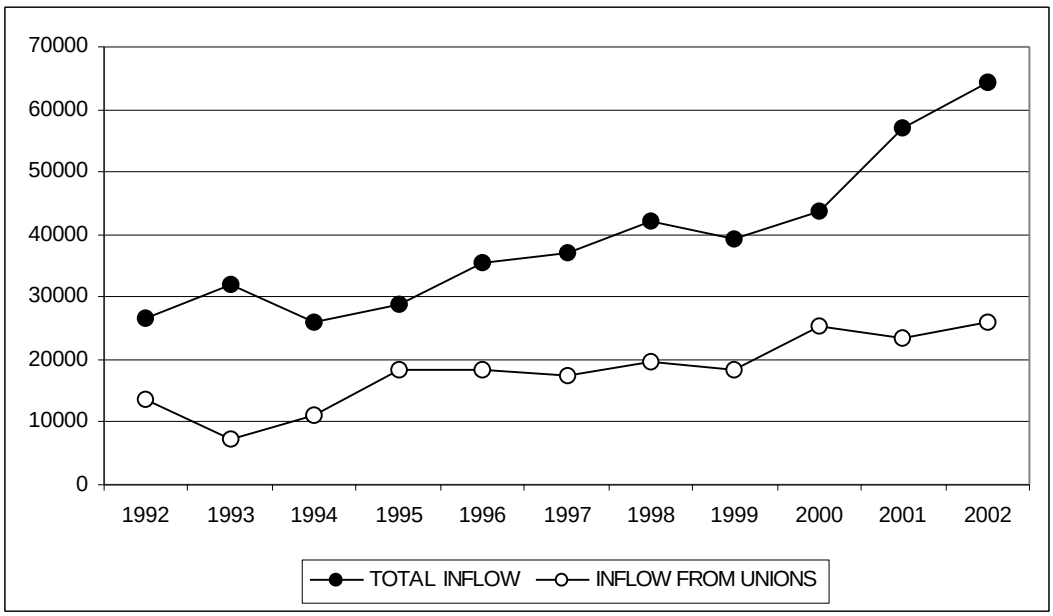
Source: Authors' calculations from the IDS data.

Figure 4. The gross flow rates to unions (inflow rate) and out of unions (outflow rate) and net change (net).



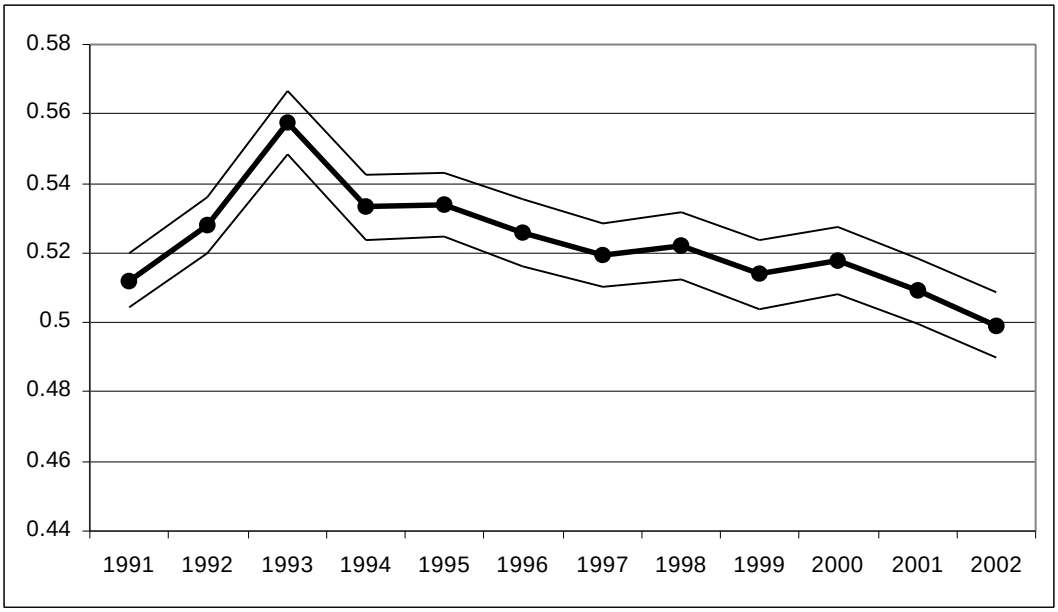
Source: Authors' calculations from the IDS data.

Figure 5. Gross flows from unions (inflow from unions) and the total inflow (total inflow) to the independent UI-fund.



Source: Authors' calculations from the IDS data.

Appendix 1. The share of the working-age population aged 16-64 that belonged to unions during the 1990s with 95% confidence intervals.



Source: Authors' calculations from the IDS data.

Appendix 2. Determinants of trade union membership by using QWLS data for the year 1997.

	Union status, Probit
Female	0.067
	(4.01)***
Age less than 24 years	-0.232
	(5.94)***
Age 25-34 years	-0.038
	(1.90)*
Age 45-54 years	-0.025
	(1.24)
Age 55-64 years	-0.029
	(0.82)
Married	0.035
	(2.09)**
Upper secondary or vocational education=1, 0 otherwise	0.005
	(0.30)
Polytechnic or lower university degree=1, 0 otherwise	0.054
	(2.00)**
Higher university degree=1, 0 otherwise	0.051
	(1.68)*
2nd wage group	0.108
	(5.63)***
3th wage group	0.110
	(5.33)***
4th wage group	0.062
	(2.70)***
Number of unemployment months during the past five years 1-6	0.043
	(2.09)**
Number of unemployment months during the past five years 7-12	0.068
	(2.63)***
Number of unemployment months during the past five years 13-24	0.091
	(3.26)***
Number of unemployment months during the past five years 25 or more	0.103
	(3.45)***
Tenure 5-10 years	0.034
	(1.70)*
Tenure 15-25 years	0.096
	(4.02)***
Tenure over 30 years	0.119
	(3.56)***
Temporary worker	-0.020
	(0.86)
Part-time worker	-0.064
	(2.45)**
Experiences uncertainty=1, 0 otherwise	0.045
	(3.02)***
Manager	-0.066
	(3.90)***
Public sector	0.112
	(4.48)***
Foreign firm	-0.023
	(0.81)
Size of firm 10-49	0.030
	(1.73)*
Size of firm 50-499	0.089
	(4.57)***
Size of firm over 500	0.114
	(4.86)***
Regional unemployment rate	0.011
	(6.43)***
Observations	2813
Observed probability	0.7959

Robust z statistics in parentheses
* significant at 10%; ** significant at 5%; *** significant at 1%
Notes: Marginal effects are reported. Model includes 14 industry dummies that are not reported.

Appendix 3. Determinants of switches from trade unions to the independent UI fund for the years 1992-2000.

	Overall switches, Probit	*Switches from SAK, Probit*	*Switches from STTK, Probit*	*Switches from AKAVA, Probit*
Female	0.002	0.002	0.001	-0.001
	(1.47)	(1.53)	(1.08)	(0.60)
Age less than 24 years	0.009	0.004	0.012	0.025
	(2.13)**	(1.27)	(1.63)	(1.18)
Age 25-34 years	0.004	0.003	0.003	0.001
	(3.02)***	(2.05)**	(2.56)**	(0.52)
Age 45-54 years	-0.000	-0.002	0.001	0.003
	(0.01)	(1.87)*	(0.95)	(1.37)
Age 55-64 years	0.003	-0.001	0.005	-0.002
	(1.42)	(0.65)	(2.45)**	(0.61)
Married	0.001	0.002	-0.001	-0.001
	(0.83)	(1.65)*	(1.08)	(0.42)
Upper secondary or vocational education	-0.001	-0.001	-0.002	0.026
	(0.77)	(1.34)	(2.47)**	(2.06)**
Lowest high-level education	0.007	0.004	-0.001	0.034
	(3.55)***	(1.96)*	(0.56)	(3.06)***
Polytechnic or lower university degree	0.006	0.009	0.002	0.005
	(2.42)**	(1.39)	(0.75)	(1.08)
Higher university degree	0.002	0.024	-0.000	0.004
	(1.11)	(1.79)*	(0.16)	(0.82)
Ph.D degree	-0.000		0.024	
	(0.01)		(1.73)*	
Full-time worker	0.003	0.001	0.002	-0.005
	(1.35)	(0.36)	(1.49)	(0.60)
Owner-occupied housing	-0.001	-0.000	-0.001	0.001
	(0.89)	(0.39)	(0.65)	(0.35)
2nd wage group	-0.003	-0.002	-0.001	0.033
	(1.74)*	(1.93)*	(0.87)	(1.57)
3th wage group	0.004	0.000	0.002	0.076
	(2.14)**	(0.24)	(1.16)	(2.40)**
4th wage group	0.004	-0.002	0.003	0.018
	(1.95)*	(1.65)*	(1.40)	(2.23)**
Urban	-0.000	0.000	-0.001	0.002
	(0.02)	(0.02)	(1.02)	(1.10)
Public sector	-0.009	-0.006	-0.006	-0.006
	(6.18)***	(4.14)***	(5.23)***	(1.81)*
Third sector	-0.003	-0.002	-0.002	-0.003
	(1.14)	(1.02)	(2.10)**	(0.50)
South	0.004	0.003	0.001	0.007
	(2.79)***	(2.18)**	(0.84)	(2.00)**
West	0.001	0.001	-0.001	0.012
	(0.52)	(0.61)	(1.11)	(2.09)**
North	-0.002	-0.001	-0.002	-0.000
	(0.94)	(0.63)	(1.73)*	(0.01)
Year==1993	-0.004	-0.001	-0.002	-0.006
	(3.06)***	(0.37)	(1.60)	(3.14)***
Year==1994	-0.004	0.004	-0.001	-0.005
	(2.68)***	(1.30)	(0.65)	(2.74)***
Year==1995	-0.001	0.000	-0.000	-0.005
	(0.52)	(0.14)	(0.11)	(3.17)***
Year==1996	-0.002	0.005	-0.002	-0.005
	(1.58)	(1.84)*	(2.25)**	(2.75)***
Year==1997	-0.001	0.006	0.001	-0.005
	(0.90)	(2.07)**	(0.46)	(2.39)**
Year==1998	0.000	0.002	0.001	-0.005
	(0.14)	(0.75)	(0.64)	(2.95)***
Year==1999	-0.000	0.008	-0.001	-0.004
	(0.06)	(2.38)**	(0.45)	(2.02)**
Year==2000	0.001	-0.000	-0.002	-0.006
	(0.48)	(0.24)	(2.17)**	(2.69)***
Observations	24423	11316	7400	5170
Observed probability	0.0110	0.0079	0.0107	0.0156

Robust z statistics in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Notes: The first column of the table reports the determinants of overall switches from trade unions to the independent UI-fund and the next three columns report the determinants of switches by the employee's central organizations. Marginal effects are reported. Models include 14 industry dummies that are not reported. The explanatory variables are taken from the previous year. The models are estimated for wage and salary earners.

Appendix 4. Determinants of switches from the independent UI-fund to the trade unions for the years 1993-2000.

	Overall switches, Probit
Female	0.019
	(0.71)
Age less than 24 years	0.172
	(1.97)**
Age 25-34 years	0.093
	(2.82)***
Age 45-54 years	0.050
	(1.66)*
Age 55-64 years	0.028
	(0.55)
Married	0.036
	(1.48)
Upper secondary or vocational education	-0.029
	(0.87)
Lowest high-level education	-0.025
	(0.70)
Polytechnic or lower university degree	0.062
	(1.10)
Higher university degree	0.108
	(1.89)*
Ph.D degree	0.282
	(1.69)*
Full-time worker	-0.066
	(0.91)
Owner-occupied housing	0.000
	(0.01)
2nd wage group	0.036
	(0.81)
3th wage group	-0.003
	(0.08)
4th wage group	0.039
	(0.87)
Urban	-0.000
	(0.01)
Public sector	0.165
	(2.42)**
Third sector	0.060
	(0.63)
South	-0.053
	(1.08)
West	-0.004
	(0.07)
North	0.005
	(0.08)
Year==1994	-0.081
	(1.61)
Year==1995	-0.077
	(1.59)
Year==1996	-0.091
	(1.99)**
Year==1997	-0.099
	(2.21)**
Year==1998	-0.094
	(2.00)**
Year==1999	-0.136
	(3.38)***
Year==2000	-0.115
	(2.60)***
Observations	1272
Observed probability	0.1582

Robust z statistics in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Notes: Marginal effects are reported. Model includes 14 industry dummies that are not reported. The explanatory variables are taken from the previous year. The model is estimated for wage and salary earners.

Appendix 5. The union density in selected countries.

	1961/1970	1971/1980	1981/1990	1991/2000	Maximum value	Year of maximum value
Ghent countries						
Denmark	61.3	69.1	76.8	76.6	79.5	1994
Finland	40	64.5	70.2	77.2	79.6	1995
Sweden	66.4	73.4	81.5	85.9	88.6	1998
Average	*55.9*	*69.0*	*76.2*	*79.9*	*82.6*	*1996*
Non-Ghent countries						
Austria	58.3	52.7	50.4	40.6	60	1960
France	20.1	21	13.8	10.5	22.2	1969
Germany	32.9	34.1	33.9	29.1	35.9	1991
Italy	28	46.9	43	38.7	50.5	1976
Japan	34.1	32.5	27.5	23.3	34.8	1964
Netherlands	39.1	36.6	27.7	24.5	41.7	1960
Norway	51.5	52.1	55.5	54.8	56.4	1990
Switzerland	33.5	31.1	27.9	23.2	37	1960
United Kingdom	40.9	47.6	40.8	32.5	50.1	1979
United States	26.9	22.9	18.2	14.8	29.4	1960
Average	*36.3*	*37.3*	*33.3*	*28.7*	*41.2*	*1970*

Source: Lesch (2004)
Notes: Employed union members in percent of wage and salary earners; ten-year average.