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## Early exit from the labour market through the unemployment pathway in Finland

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## **SUMMARY**

The focus of the study is on patterns of early exit from the labour market in Finland with a special emphasis on the unemployment pathway. The period under review extends from the early 1980s to the turn of the century. The data for the study were obtained from individual-level files formed by combining census data with statistical registries of social security. The study takes a comparative macro-level approach, with comparisons being made between different periods of time. The results are interpreted primarily from the point of view of the connection between early exit, increasing economic openness and structural change in society. In the 1980s, utilization of the unemployment pathway in a given branch depended primarily on how open the branch was to international competition. In the deep economic recession of the 1990s the rate of exit was highest in the branches with primarily a domestic focus, which were hardest hit by the recession. The exit rates were remarkably high also in the previously public-sector branches recently opened to competition. After the recession, in 1996-1998, adjustments to international competition seemed to explain a great deal of early exit behaviour through the unemployment pathway.

Keywords: early retirement, unemployment pathway, unemployment pension, aged workers





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## **INTRODUCTION**

### **Aim of the study**

The turn of the century is a critical time for the labour market position and income security of older workers. In Finland as elsewhere in Europe, the large age groups born after Second World War are nearing the age at which older workers become eligible for benefits enabling an early exit from the labour market. Whether they, like the birth cohorts before them, will take advantage of such benefits, is one of the most critical issues as we analyse the sustainability of social security schemes and consider the ways in which they might need to be modified to account for demographic ageing and economic globalization.

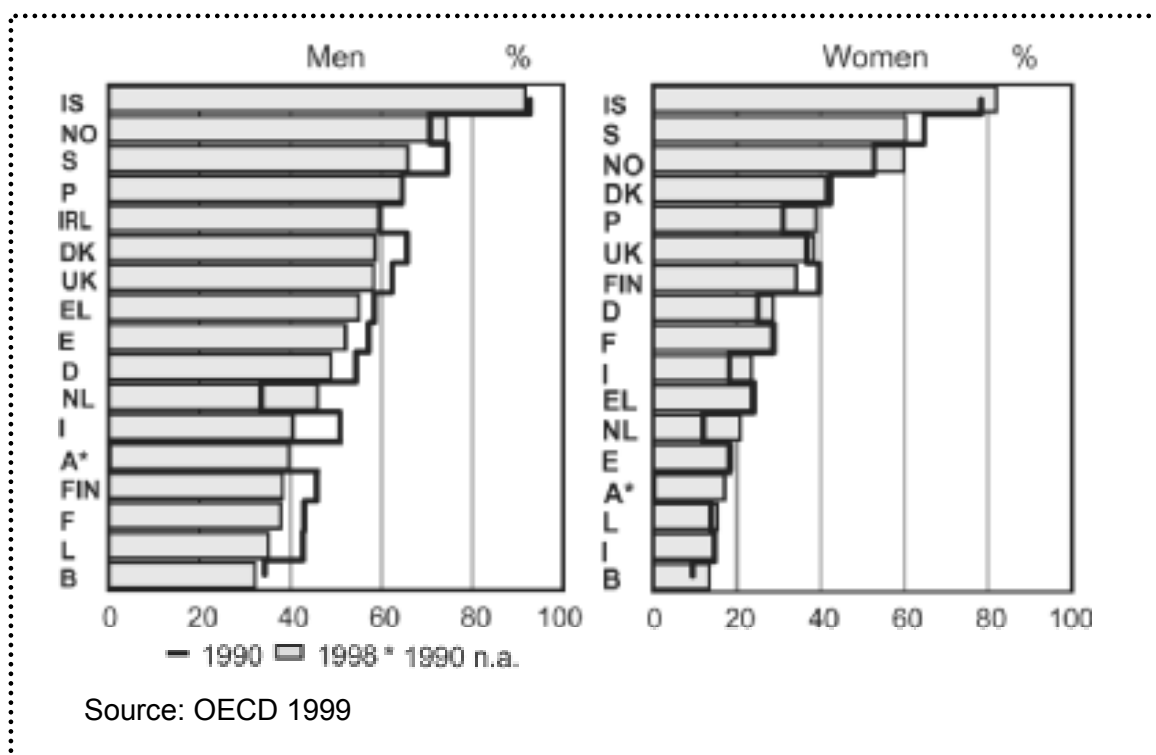
The unemployment pension and other special benefits aimed at older unemployed workers are an important target of research and re-evaluation. In 2000, early exit benefits based on labour market considerations were available in nearly all EU Member States (MISSOC 2000). Unemployment pensions were awarded under both first-pillar public schemes and second-pillar schemes implemented through collective agreements. First-pillar unemployment pensions were available in Germany, Spain, France, Austria, Portugal and Finland. Pensions due to reorganizations and downsizing in specific industries were paid in Belgium, Italy, Luxembourg and the Netherlands. In Denmark, a benefit named *etterløn* – based on voluntary exit from the labour market – was paid out of the unemployment insurance. In addition or as an alternative to early exit benefits based on labour market considerations, several countries provided the older unemployed with access to an extended unemployment benefit, which some countries coupled with an exemption from the standard requirement to seek employment (see Blöndal and Scarpetta 1998, 69; Missoc 2000).

Early exit benefits based on labour market considerations have been widely criticized. Unemployment pensions and an extended eligibility for unemployment benefits have been seen as providing a strong incentive to withdrawal from the labour market, as they have in effect made it possible for the employer and employee to set the time at which the employee makes the transition from work to retirement. This has allowed labour market problems to be passed from social partners on to society (OECD 2000). On the other hand, it has been pointed out that special benefits are still needed for the older



unemployed in situations where they stand no realistic chance of re-employment (European Commission 1999a; Auer 2000).

From a broader European perspective, Finland offers an interesting case for the study of early exit from the labour market and especially the utilization of the unemployment pathway to retirement. In comparative welfare state research, Finland has been unequivocally classified - in view of the institutional structure of social protection and the interactions between the labour market and social security – as a Nordic Welfare State (Kosonen 2001). However, in terms of the policies concerning early exit from employment, Finland adheres more closely to the Continental than the Nordic model. Like many Continental European countries, Finland has since the 1970s maintained a variety of benefit systems affording an early exit from the labour market. This has been reflected in the employment rates of the older working-age population, which especially among men have been much closer to Continental European than Nordic levels (Figure 1).



**Figure 1.** Employment rate among 55–64-year-old in the Nordic countries and the European Union, 1990 and 1998.

This study examines the trends in early exit from working life, with particular reference to the use of the unemployment pathway, over the last two decades. Our aim is to gain a better understanding of the mechanisms and background factors motivating the use of the unemployment pathway as a means of exit from employment. The study takes a comparative, macro-level approach – comparisons being made between different periods of time. The frame of reference used in the study will be described in more detail below, but our basic approach is to explore the utilization of benefits targeted at aging workers specifically within the context of increasing economic openness and global competition.

The periods examined 1983-1987, 1989-1990, 1991-1994 and 1996-1998 – are distinctly different in terms of the economic situation and the early exit benefits available. The study focuses mainly on 55 to 59-year-olds, who have been a critical group with regard to early exit since the beginning of the 1980s. The population risk rates indicating transitions from work to early exit benefits are analysed by industry and sector. To provide some background for the analysis, I shall next summarize the major developments during the last few decades in the Finnish economy, the early retirement legislation, and the labour market situation of older workers.

## **Economic development in Finland from the 1980s to the turn of the century**

Throughout the 1980s, economic growth in Finland exceeded the average rates for Western industrial countries. The employment rate increased right up to the end of the decade and the unemployment rate was only half the EU average. Long-term unemployment, in particular, was quite low by international standards. Income transfers and welfare services were expanded, increasing employment in the public sector. Finnish industry was highly successful in the export market up to the end of the 1980s. Although the number of workers in industry decreased by about 100,000, production grew by about 3 % a year. The decline in the industrial workforce began about ten years later than in most leading industrial countries; another important difference was that Finland avoided the deindustrialization crisis experienced by many Western European countries which had relied heavily on mass production and smokestack industry. (Vartia and Ylä-Anttila 1996, 67–78.)

Towards the end of the 1980s, the Finnish economy began to overheat, primarily because of a hasty and considering the overall economic situation badly timed deregulation of financial markets and cross-border capital transfers (Kiander and Vartia 1998; Kosonen 2001). At the turn of the 1990s, unemployment was at a record low (3 %). There were labour shortages, especially in the public sector. Unlike in many Continental European countries, there was practically no long-term unemployment. Besides an exceptionally good employment situation, this was due to the 1987 Employment Act, which guaranteed fixed-term subsidised employment to all those who had been unemployed for at least a year.

The long period of economic expansion ended at the turn of the decade with the onset of an exceptionally deep recession. By the beginning of 1993, total production had declined by 14 per cent from 1990. The unemployment rate rose from one of the lowest in Europe to one of the highest in the industrial world. In 1994, the unemployment rate was a record 18.4 per cent of the workforce. The first sector to suffer from unemployment was the open sector of the national economy, i.e the manufacturing industries, but as the recession worsened, the slump in employment hit the domestic market hardest. Growing unemployment had a direct impact on the balance of public finances: considerable cuts were made in public expenditure and social security, in particular (see Heikkilä and Uusitalo 1997), and a long sustained increase in jobs in the public sector took a downward turn. What was unusual was that unemployment affected all sectors of the population, even white-collar workers and those working in the public sector. (Kiander and Vartia 1998, 112–114.)

It is difficult to say precisely when this historic recession ended. In terms of total output, economic recovery began at the end of 1993. In the industrial sector, recovery had begun a year earlier, following devaluation and floating of the Finnish markka. In the domestic market sector, however, recovery was unusually slow. One particular feature of the Finnish recession was an exceptionally strong rate of productivity growth, which began in the midst of the worst recession (Sauramo 1999). The strength of this growth can be exemplified by the fact that the volume of GDP had regained its pre-recession level by 1995, while the labour force was still 15 % smaller than before the recession (Pohjola 1996). The public sector found it hard to adjust to the new situation. Gross public-sector debt continued to increase until 1996. Unemployment has declined slowly since 1995.

Until the economic slowdown of 2001 GDP growth in Finland was strikingly fast for seven successive years, with annual growth rates varying between 4 and 6 per cent. Especially the export industry enjoyed record growth of output

and productivity. Even after these seven plentiful years, unemployment remains Finland's biggest economic problem. The number of registered unemployed persons (Ministry of Labour) remains, at the end of 2001, nearly 300 000 and the official unemployment rate according to the labour force surveys is about 9 %.

## **Early exit policy in Finland**

The Finnish way of economic and social governance has been called a 'competitiveness model' (Andersson, Kosonen and Vartiainen 1993). Like the other Nordic countries, Finland is a small open economy which is highly dependent on developments in the export sector. As a long-term strategy of connecting economic and social development, the Finnish version of 'social corporatism' has to a greater extent than that of its Scandinavian neighbours emphasized competitiveness, restructuring and 'economic necessities' in situations where the objectives of economic growth, employment and income transfer conflict. Aims of competitiveness and structural change have been advanced through broad-based interest mediation where all the relevant interest-groups are represented (Kosonen 1998). A special feature of the early exit and other income security arrangements in Finland has been that the benefit systems have been to a great extent negotiated between labour market and other interest organisations, even though they have been implemented as statutory public schemes. Such corporatist agreements have widely been suspected of leading to excessive benefit utilization and free-riding problems. In Finland, utilization of early exit benefits has been controlled through measures such as the experience rating applied to the financing of the benefits.

**Table 1.** Disability, unemployment and early retirement pensions in Finland.

| Pension type   | Pension system <sup>a</sup> | Lower age limit | Year       | Award criteria  |
|--|-----------------------------|-----------------|------------|---|
| <i>Disability pensions</i>   |                             |                 |            |   |
| Ordinary disability pension  | NP, EP                      | 16              |            | Reduced capacity for work   |
| Individual early retirement pension  | NP, EPPriv                  | 55              | 1986       | Lower severity of illness, long career                              |
|  |                             | 56 -> 58        | 1995 -> 97 |   |
|  | EPPubl                      | 55              | 1989       |   |
|  |                             | 56 -> 58        | 1995 -> 97 |   |
| <i>Unemployment pension</i>  | NP, EP                      | 60              | 1971       | Long-term unemployment  |
|  |                             | 58              | 1978       |   |
|  |                             | 55              | 1980 – 86  |   |
|  |                             | 56 -> 60        | 1986 -> 90 |   |
| <i>Old age pensions</i>  |                             |                 |            |   |
| Early old age pension  | NP, EPPriv                  | 60              | 1986       | Permanently reduced benefit   |
|  | EPPubl                      | 58              | 1989       |   |
| Ordinary old age pension   | EPPubl                      | 63              |            | Normal pensionable age is 63 (gradually raised for younger cohorts) |
| Part-time pension  | EPPriv                      | 60              | 1987       | Limits on working hours and earnings                                |
|  |                             | 58              | 1994       |   |
|  | EPPubl                      | 58              | 1989       |   |
|  | EP                          | 56              | 1999 – 02  |   |
| Notes: <sup>a</sup> NP = national pension insurance<br>EP = employment pension insurance in general<br>EPPriv = private-sector employment pension insurance<br>EPPubl = public-sector employment pension insurance |                             |                 |            |   |

Over the past 30 years, a variety of early exit options have been available in Finland. The pension security<sup>1</sup> of the aging population has covered a number of different age-related social risks and needs (Table 1). Unemployment security schemes also have included special provisions concerning aging workers. In the following I shall conceptualize these various early exit options into three main pathways: the disability pathway, the old age pension and gradual retirement pathway, and the unemployment pathway (see Guillemard 1989; Kohli and Rein 1991). My main emphasis is on the unemployment pathway (Figure 2). I shall also describe the development of the benefit systems, by reference both to the benefits available to workers and the cost of benefit utilization to employers.

*'Disability pathway'* The disability pathway in Finland consists of two early retirement options: traditional disability pension and individual early retirement pension. Both pensions are granted on the basis of reduced working capacity due to disease or impairment. The criteria for granting ordinary disability pensions remained unchanged from the early 1970s to the mid-1990s: the pension is usually paid to persons who have received sickness allowance for one year. The individual early retirement pension system for people over 55 who have had a long career in the labour market was introduced at the end of the 1980s (for the private sector in 1986 and for the public sector in 1989). In general, individual early retirement pension is granted to a worker without a transitional period on sickness allowance. In 1995-1997, the minimum age for the pension was gradually raised to 58 years. It will be increased further to 60 years in 2004.

*'Old-age pension and gradual retirement pathway'* The normal pensionable age in Finland is 65 years. In the public sector, the statutory age of retirement is 63-65, depending on the year of birth and the length of work history. In some occupations there are also specific age limits. A pension reform in the late 1980s aimed at more flexible pension benefits, and introduced two new types

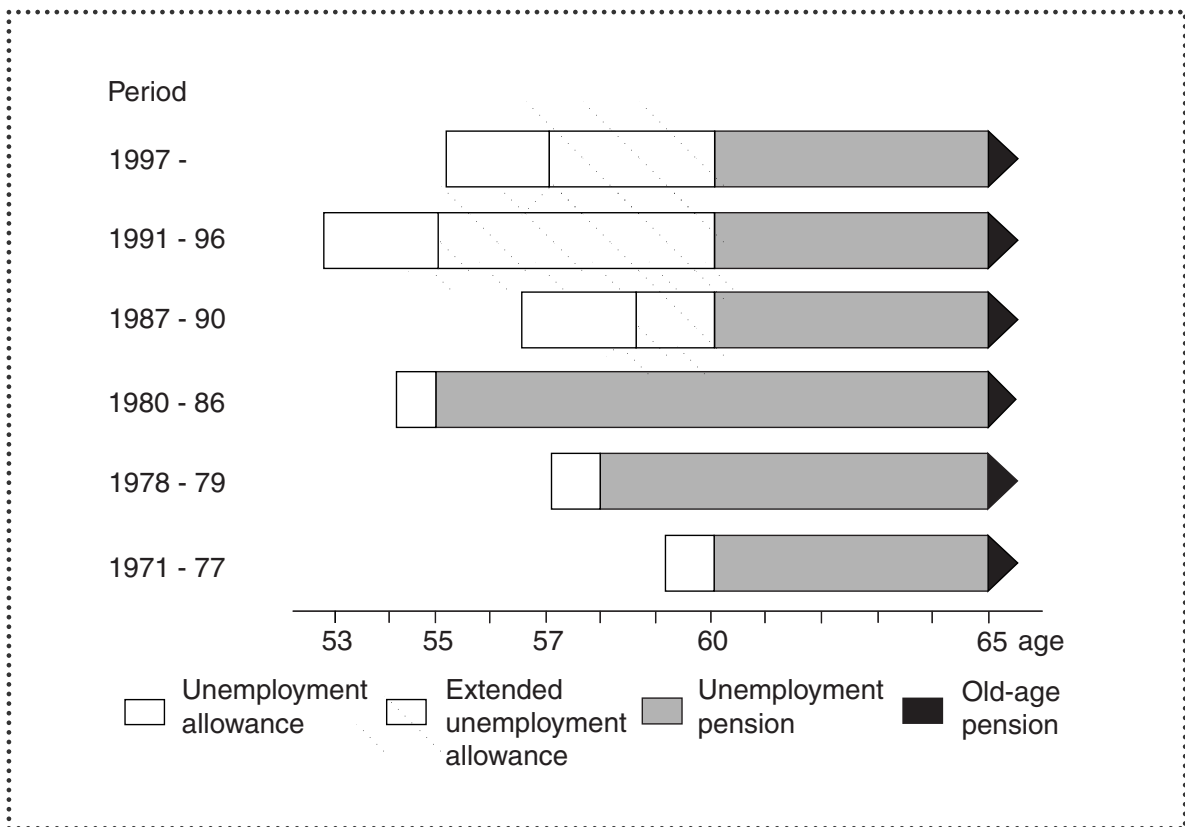
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1 Finnish pension security consists of two main systems, each of which is defined as statutory basic public provision in terms of the European social protection classification (Eurostat 1996). The national pensions system guarantees a universal right to pension for the entire population in case of old age or disability, and for aging people in case of long-term unemployment. The employment pension system provides corresponding types of pension on the basis of pre-retirement earnings. There are a number of statutory employment pension systems in Finland, for both private and public sectors. The aim with the statutory pensions is to provide the recipient with an income equivalent to 60-66 per cent of the wages or salary on which the pension is based, with no upper limit as to the actual amount of the pension. Because of the scope and the relatively high level of statutory compensation paid, pensions based on labour market agreements or private pension insurance play a relatively minor role in Finland.

of old-age pension options into the Finnish pension systems: an actuarially reduced early retirement pension and a part-time pension. In the private sector, the minimum age for early old-age pension is 60 years and in the public sector 58 years. Part-time pension for workers in the private sector has been available to 60-year-olds since 1987 and in the public sector to 58-year-olds since 1989. The minimum ages have been lowered since then. From 1998 to 2002 the age limit is as low as 56 years

*Unemployment pathway* In the early 1970s, long-term unemployed persons over the age of 60 years became entitled to unemployment pension after earnings-related unemployment allowance had been paid for 200 working days (about 9 months). This pension system was not introduced more widely until after the recession of the 1970s, when the minimum age for the pension was lowered by special legislation first to 58 years, in 1978, and then to 55 years, in 1980. During 1986-1990, however, the minimum age was gradually raised back to 60. Simultaneously, ageing workers were given the right to extended unemployment benefit. During an economic upswing in the late 1980s, the maximum period of unemployment allowance for ageing workers was 900 working days, 400 of which were on extended benefit. Few individuals actually reached this maximum limit, since, under a new Employment Act introduced in 1987, the long-term unemployed over a specified age were guaranteed access to subsidized employment usually as soon as unemployment had lasted a full year.

During the recession of the 1990s, the obligation of authorities to provide subsidized employment was lifted. In 1991, ageing workers were given the right to receive earnings-related unemployment allowance until they became eligible for unemployment pension, provided that they had turned 55 after the unemployment allowance should have been discontinued. The stipulated maximum duration of unemployment allowance for other age groups is 500 working days (about 23 months). In practice this meant that earnings-related unemployment security could be paid from the age of 53 until the official age of old-age retirement. In 1997, the minimum age limit for this combination of unemployment allowance and unemployment pension was raised by two years. (Figure 2.)



**Figure 2.** Exit from the labour market to an old-age pension through the unemployment pathway: Maximum eligibility periods for unemployment allowance and unemployment pension, 1971-.

*From the employers' point of view* a distinctive feature of Finnish earnings-related employment pension benefits is the system of experience rating used in the financing of benefits. The insurance payments incurred by the employer for unemployment and disability pensions have been tied to the staff size of the firm and the actual risks existing in the company. In the following, we shall describe experience rating in the context of the pension system for private-sector employees (TEL) during the study period. This system covers all private-sector employees insured with an insurance company implementing the TEL system (comprising over a million wage and salary earners at the end of 2000). A minor part of the insured employees in the TEL system as well as employees insured under the temporary employees' pensions scheme (LEL) are not covered by the experience rating regulation. In earnings-related employment pension systems catering to public-sector employees, experience



rating rules differ from those applied in the private sector and were not introduced until the second half of the 1990s.

During the study periods, pension liabilities for private sector employers were different in disability and unemployment pension systems. In the 1990s, the maximum share of employer liability for unemployment pensions was fifty percent. In the 1980s, employers did not incur any direct costs from the utilization of unemployment pensions as they were paid entirely out of the common pay-as-you-go funds. In the disability pension system, large companies were throughout the study period responsible for all benefit expenditures up to the statutory age of retirement. In 2000 the financing of disability and unemployment pensions was standardized. The employer now pays the same amount of actual liabilities for both types of pension depending on staff size, zero per cent in companies with staff of fewer than 50 employees and 80 per cent in companies with more than 800 employees. However, the unemployment pathway is still more appealing financially to the employer because the unemployment benefits which precede unemployment pension are not experience rated.

On the whole, the total effects of experience rating have benefited larger employers. Firstly, due to selective mechanisms in the labour market and better occupational health coverage, the disability risk of workers is smaller in big companies. Thus, large employers in effect pay a smaller share of the disability pension costs than they would if the costs were shared equally without experience rating. Secondly, it has been pointed out that the divergent employer cost of the unemployment and disability pathways has encouraged big firms to more readily dismiss older workers at an age where the disability risk of workers increases. This tendency was particularly noticeable during the economic depression (Hakola and Uusitalo 2001). By pre-emptively dismissing older workers, the larger companies have been able to escape the potential disability pension liabilities for these older workers.

Factors contributing to Finland's choice of particular early retirement policies include the favourable age distribution of the population, the high education level of the younger cohorts compared to those leaving the workforce, and the high prevalence of full-time employment among both women and men. Due to these factors, the total employment rate in the working-age population has – except during the worst of the early-1990s recession – remained relatively high compared to other nations, despite the high exit rates of the elderly work force (Hytti 1998, 143–147; Kosonen 2000; European Commission 1999b, 37). At the turn of the millennium, the challenges of demographic aging are receiving increasing attention in the employment and social policies of the Finnish Government. Several action programmes have been launched to support the continued employment of the older workforce (see Sihto 1999). There are also

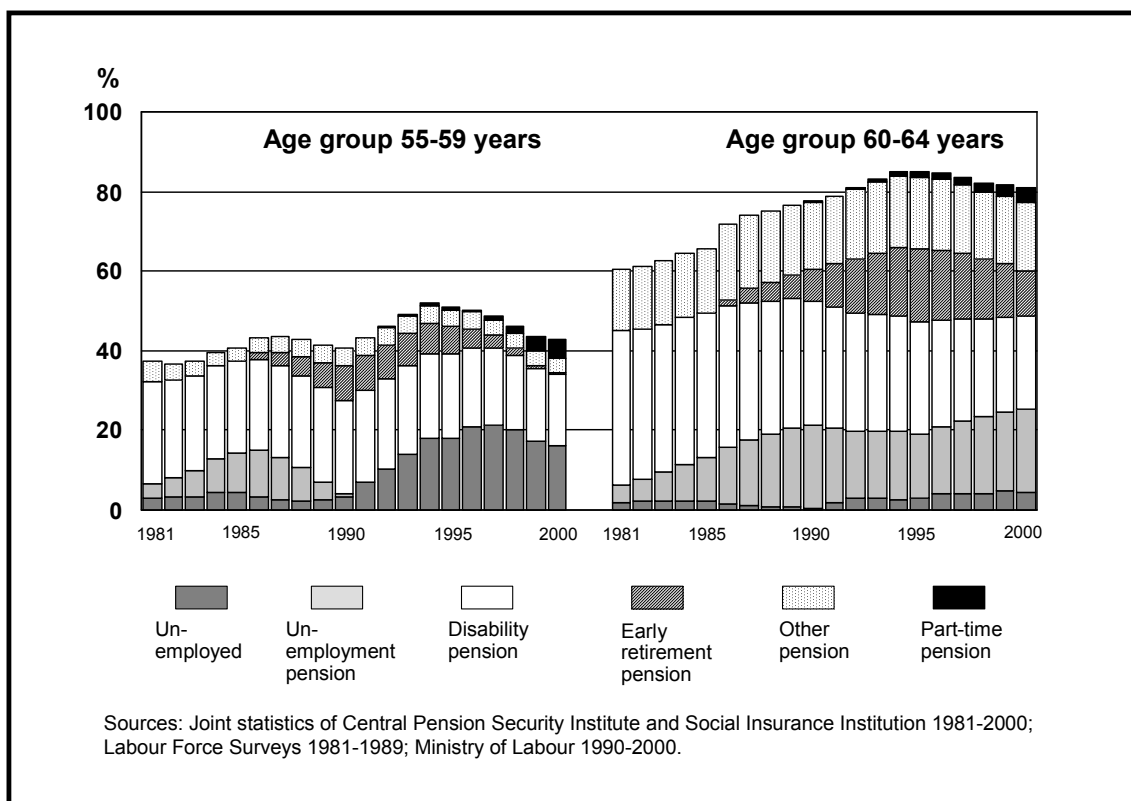
efforts to restructure social security to provide more incentives for employment. Specifically, there have been calls for amendments in the pension and unemployment benefit legislations to provide motivation for continued employment rather than early retirement.

After lengthy negotiations and pressure from the Finnish Government, the labour market partners at the end of 2001 concluded an agreement in principle providing for an overhaul of the early retirement legislation. Under the agreement, the current unemployment pathway will remain open for the large age cohorts born after the Second World War. New unemployment pensions awards will not be made starting from 2005. However, the older unemployed will gain access to an extended benefit which continues until they reach old-age pension age. Employers will be liable for a share of the cost arising from the extended unemployment benefits in the same manner as they currently are for unemployment pensions. Incentives for continued employment will be added to the old-age pension scheme by introducing a flexible retirement age and by significantly accelerating the pension accrual rate after age 63.

## **Statistical overview**

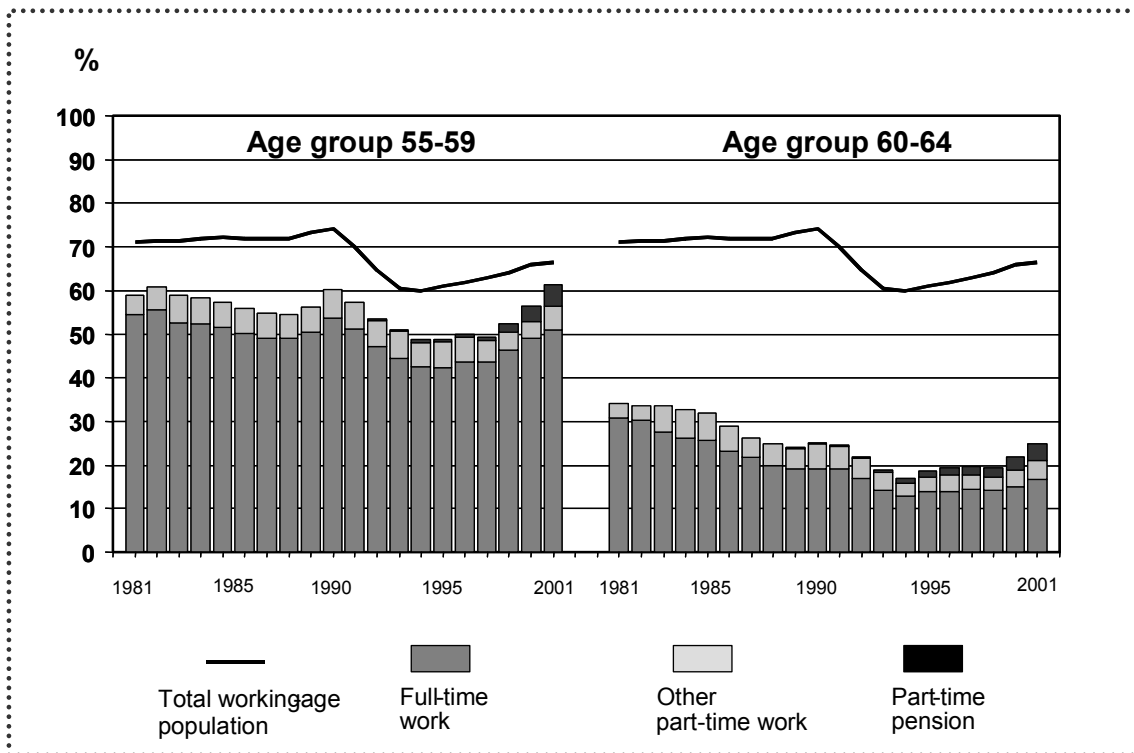
In Finland as in many other industrialized countries early exit from the labour market started at the end 1960s through the disability pathway. Within a decade, from the late 1960s to the mid-1970s, the number of people on disability pension doubled, coinciding with relatively strong economic growth, heavy migration, growing urbanization and a rapid decrease in rural occupations (Hytti 1993; 1995). Another major trend in early exit from the labour market began at the start of the 1980s, when early retirement was offered as a recipe for coping with structural unemployment after a recession in the late 1970s. In the 1980s, as Figure 3 shows, public pension schemes were almost the only form of exit from the labour market for ageing workers. Because unemployment pension could be obtained as soon as the nine month period of unemployment allowance ended, the number of ageing unemployed people remained small. The total share of the unemployed and unemployment pensioners among the 55 to 59-year-olds was at its highest point (15 per cent) in 1986, after which the pathway was gradually closed for this age group. In the age group 60 to 64 the total share of the unemployed and the unemployment pensioners grew until the end of the decade (from 6 to 21 per cent).

In the early 1990s, unemployment benefits gradually replaced pensions as the main form of income security to 55 to 59-year-olds. From 1988 to 1997, the percentage of those 55 to 59-year-olds who received pension declined from about 40 to 27, while the share of persons registered as unemployed among the 55 to 59-year-olds rose from 3 per cent to 21 per cent. In the late 1990s the share of pension recipients in this age group grew again due to the temporary lowering of the minimum age of part-time pension. At the turn of the century 22 percent of the age group received full-time pension, 5 percent received part-time pension and 16 percent were unemployed. In the 60 to 64 year-old population the total share of persons who are either unemployed or in receipt of a pension has remained high – mainly because the unemployed cohorts who were made redundant during the economic depression have grown older. In 2000 the population share of retired or unemployed persons was 81 percent with unemployed persons accounting for 5 percentage points and recipients of unemployment pension for 21 percentage points. (Figure 3.)



**Figure 3.** Unemployed persons and pension recipients in two age groups between 55 and 64 years as a % of each age group, 1981-2000.

The labour market situation of the elderly work force started to improve after 1997 – two years after the first signs of recovery in total employment. This improvement is seen more clearly in the employment figures of the ageing work force than in their unemployment rates. In the period 1998-2001 the employment rate of the 55 to 59-year-olds grew from 49 per cent to 64 per cent and that of the 60 to 64 year-olds grew from 19 to 26 per cent. (Figure 4.)



**Figure 4.** Older workers employed under various working hours arrangements as a share of the total age group population, compared to the employment rate in the total working-age population, 1981-2001.

In the early exit literature it is customary to investigate the behaviour of men and women separately. As can be seen from Figure 1, in the 1990s there have been no clear gender differences in the employment rates of the 55 to 64-year-old population in Finland. In the 1980s the labour force participation rates of women in these age groups were growing and converging with those of men. However, there were only minor differences in the usage of the unemployment pathway between men and women in the study period (for take-up rates by gender, period and industry see Hytti 1998, 186–191).

## **FRAME OF REFERENCE: THE CONNECTION BETWEEN EARLY EXIT AND STRUCTURAL CHANGE**

Many Continental studies on early exit from the labour market stress the importance of structural change (Standing 1986; Jacobs et al. 1991; Casey and Laczko 1992; Trommel and de Vroom 1994; Ebbinghaus 2000; Heritier and Schmidt 2000; Knuth and Kalima 2001). Ageing workers' exit from the labour market is considered to be one solution to the problems caused by economic crises, growing global competition, changes in technology and the need for more flexible labour. Companies have used pension and other income systems to downsize, to employ new and better qualified staff, and to introduce more flexible uses of labour.

As an economic concept, structural change in the economy refers to diversification of the production structure by transferring resources from areas of low productivity to those of high productivity (Vartia and Ylä-Anttila 1996, 67). Consequently, a comparison between 'declining' and 'expanding' industries may not be the most essential viewpoint in analysing the connection between structural change and early exit from the labour market. Rather, we can assume that the rate of early exit is connected with external and internal pressures on enterprises and work organizations, which may manifest themselves as a need either to reduce staff or to update the staff's professional qualifications. As a statistical concept, structural change is difficult to define. At bottom, it refers not only to the decline and fall of existing companies as they make way for new and growing enterprises, but also to the repositioning of existing companies and their components within the standard classification of trades and industries. Business services, for instance, have been defined as a separate industry as companies have increasingly outsourced their personnel, maintenance, transportation and warehousing functions. New technologies have also influenced the position of companies within the standard industrial classification (e.g. Heritier and Schmidt).

The conclusions presented in this study regarding the connection between early exit and structural change are based on comparisons between different periods of time. The periods differ in regard to economic trends and the existing social security legislation. By comparing the intensity with which the unemployment pathway and other early retirement pensions have been used in different business sectors, we attempt to clarify the background factors that

have affected early exit trends. The analysis is based on a macro level approach. The objectives of macro-level comparative studies (see Ragin 1987) differ from those of micro-level studies. In the former, the focus is on the historical process of early exit, while the latter type of studies attempt to determine which factors influence the behaviour of individuals and enterprises under particular institutional, economic and social conditions.

**Table 2.** European labour market structure according to Ferrera et al. (2000).

|                       | Exposed Sector            | Sheltered Sector                                      |
|-----------------------|---------------------------|---|
| High Skill Employment | Expanding (small numbers) | Public sector stagnant<br>expanding in private sector |
| Low Skill Employment  | Declining                 | Opportunities?  |

Table 2 presents a common frame of reference for structural change that will be used in the analyses of different periods of time in this study. The labour market model presented by Ferrera et al. (2000) describes the structure of the European labour markets and the pressures for change existing within them. Labour markets are defined by the distribution of industries according to their exposure to international competition and the balance in the demand for high-skilled and low-skilled labour. The openness of various sectors to international competition has increased gradually as a result of increasing global trade, European integration and economic globalization. Sectors traditionally exposed to competition have in various countries included the export industries and those domestic industries which face competition from imports. Globalization and the emergence of a single European market have exposed a number of previously sheltered sectors to international competition. These include manufacturing for domestic markets, agriculture and various increasingly global services, for example telecommunications, insurance and finance, business services and cross-border transportation. At the turn of the 21st century, the sheltered sectors consist primarily of the public sector and public services, local services catering to households, the retail trade, and to a large extent the hotel and restaurant industry.

Using the labour market model devised by Ferrera et al. (2000) we can analyse early exit and the use of the unemployment pathway as a component of labour market dynamics. Increased competition due to greater economic openness challenges high-technology and high-labour-cost countries to become even more productive and innovative. In the open sectors, this increases the demand for highly skilled employees, while drastically reducing the demand for less-skilled labour. According to Ferrera et al. (2000), to the extent that there exists potential for increasing the demand for less-skilled workers, it is found primarily in the sheltered services sector, particularly in private-sector services. The potential for more public-sector service employment is however constrained by the application of strict budgetary policies, another phenomenon which is related to economic integration and tougher international competition.

As a prime example of the link between structural change and early exit we can note the deregulation of the telecommunications sector in various European countries in the 1990s. At the EU level, this resulted in the loss of over 200,000 regular positions at telecommunications operators, which was only partly offset by employment opportunities at new companies offering lesser employment security. However, despite the decrease in telecommunications employment, potential for growth in other sectors was created. Early retirement pensions were in most countries an important mechanism for softening the societal impact of employment decline in telecommunications. The high utilization of retirement options was also partly attributable to the status of telecommunications workers as public-sector employees and their high rate of unionization. (Heritier and Schmidt 2000)

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## DATA AND METHODS

The data used in this article were compiled by Statistics Finland originally for three separate studies (Hytti 1993; Hytti 1998; Hytti 2001). The analyses concerning the periods 1983-87 and 1989-90 were based on the so-called EKSJ material which combines census data with cause of death and pension records at the level of individuals. The EKSJ materials used in this study consist of two files, covering the census (the year-ends 1980 and 1985 respectively) and the death and pension records of the subsequent five-year periods. For the periods 1991-94 and 1996-98 the analyses are based on a combination of census data (the year-ends 1990 and 1995) with the labour statistics registers. The annual labour statistics registries cover the whole population of Finland and are derived from different public registries, including those containing data on public pensions.

The use of the unemployment pathway in the population aged 55-59 is represented by different indicators in different periods of time. This is due both to the nature of the data and the research techniques used. However, all of the indicators share the idea of defining a population at risk to a given phenomenon and then observing this population to analyse the incidence or intensity of the phenomenon in a specific period of time.

The analyses for the periods 1983-1997 and 1989-1990 were based on yearly incidences of disability and unemployment pensions. For each person included in the data, an individual follow-up time was calculated to represent the time he or she belonged to the specific age group and was exposed to the risk of retiring on a pension. The incidence is obtained by dividing the number of new pension recipients by the follow-up years of the specific population group under consideration.

The early exit indicators used for the period of recession in the 1990s are based on a panel design comparison between two time points. For the years from 1991 to 1994 two different transition rates between year-ends 1990 and 1994 were calculated: transition from work to unemployment and transition from work to retirement (disability pension or old age pensions with occupation-specific retirement age under 60). Various studies have indicated that the older unemployed were during the recession almost entirely unable to find employment in the open labour market, and that even after the recession few have found employment (Aho and Österman 1999; Romppanen 2000). Therefore, the transition from work to unemployment can be considered to



fore, the transition from work to unemployment can be considered to measure the use of the unemployment pathway during the period in question quite well.

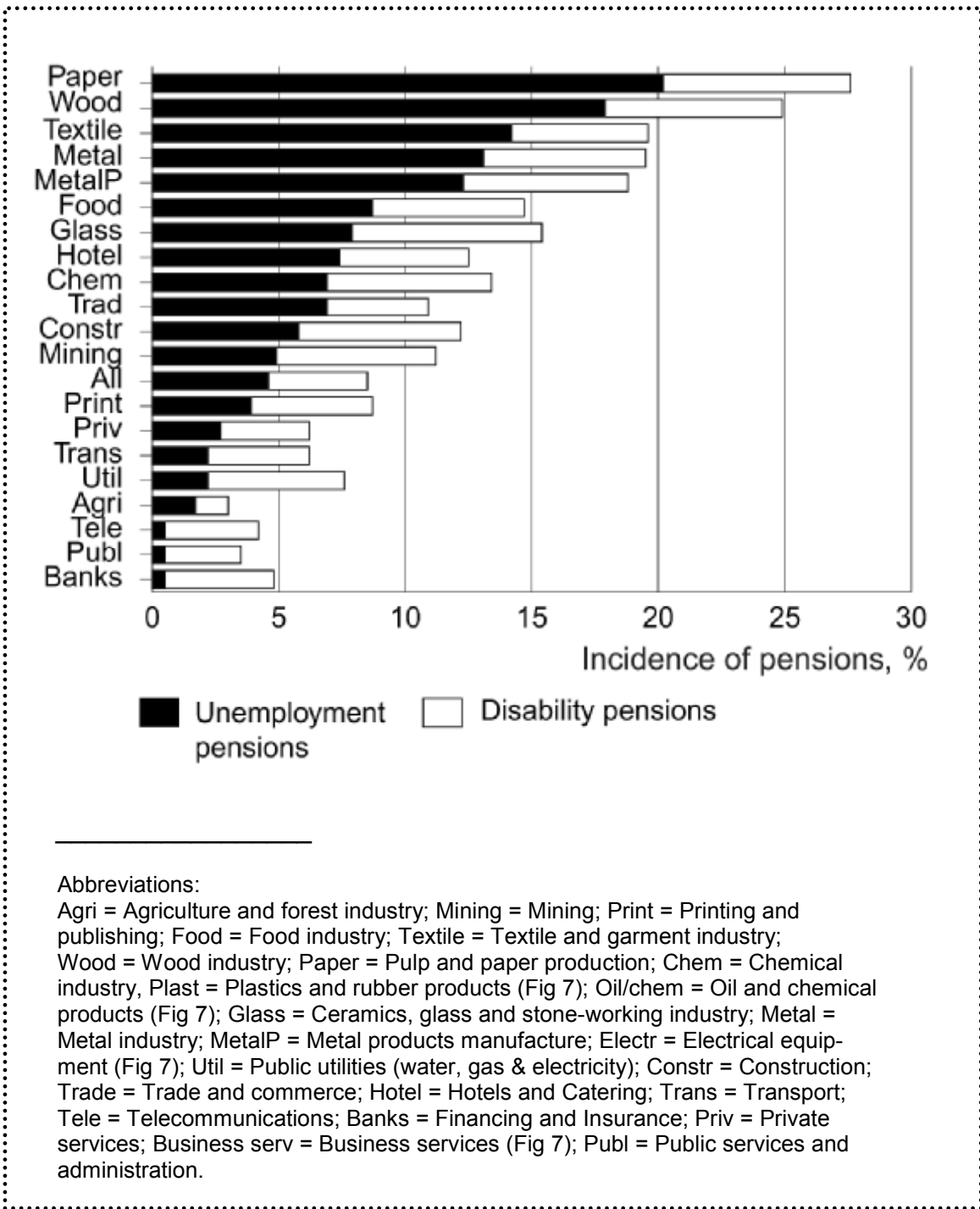
In investigating the use of the unemployment pathway and early retirement pensions in the years of strong economic recovery from 1996 to 1998, I focused on employees in the relevant age groups at the end of 1995. Statistical follow-ups were conducted separately, focusing individually on those employed and those unemployed at census time. Persons in subsidized employment were included with the unemployed. The goal was to examine, as far as possible in isolation from each other, those persons who had become unemployed during the recession and those who had managed to retain their job through the recession. These groups were followed at intervals of one calendar month for three years both forward and backward in time. The number of months spent unemployed in the periods 1993-1995 and 1996-1998 was calculated for both "risk populations". This indicator of the usage of the unemployment pathway is affected simultaneously by the incidence of new spells of unemployment, the length of unemployment periods, and the recurrence of unemployment. The number of months spent on a disability pension or occupational old-age pension was calculated for the period 1996-1998.

## **EARLY EXIT BY INDUSTRY AND SECTOR IN FOUR DIFFERENT PERIODS**

### **Years of steady economic growth 1983-1987**

In the economic policy discourse of the 1980s, the division between open and closed sectors has been used frequently in Finland (Heinonen et al. 1997). According to the Economic Planning Centre (Taloudellinen suunnittelukeskus 1990, 131–134), those Finnish industries which were entirely open to international competition were the wood-processing industry and the metal and engineering industry. The textile, clothing, shoe and leather industries also faced tough international competition in the 1980s, but were partly protected by bilateral trade with the Soviet Union. The ceramics, glass and stone industries along with the food, chemical and printing industries – as well as the whole service sector were protected against international competition, in part or in full.

The comparison of industries in figure 5 shows that in the 1980s, the utilization of early retirement pensions in a given industry was primarily dependent on how open it was to international competition. The differences in the incidence of retirement between different industries are largely explained by unemployment pensions. Unemployment pensions were utilized most actively in the export industries. In the wood-processing industry, the incidence of unemployment pensions was nearly six times as high as in banks and the financial sector, in which it was lowest. In the metal industry, the utilization of the unemployment pathway was almost at the same level as in the wood processing industry. In branches of manufacturing which were either fully or partly protected against foreign competition and in other branches of the domestic market, the incidence of unemployment pensions was lower than in the export sector but clearly above the average of all employees in the age group concerned.



**Figure 5.** Employees aged 55-59: Incidence (%) of pensions in different industries 1983-1987.

While interpreting these findings, we should bear in mind that the unemployment pension pathway was in the 1980s used almost entirely in the private sector. It is therefore quite significant that the incidence of unemployment pensions in private services, banks and financing was about as low as in the public sector. Through public enterprises, the public sector covered a considerable share of the telecommunication and transport as well as public utilities. In all these sectors, the incidence of retirement and unemployment pensions specifically was quite low. The low incidence of retirement in private personal services is consistent with the findings of several international studies, which show that early exit schemes have been primarily utilized by major companies wishing to reorganize and restructure their workforce (Guillemard and Gunsteren 1991; Hutchens 1994; Knuth and Kalima 2001). The low rate of early exit in banks and the financial sector in the 1980s shows that the fact that ageing workers are able to keep their jobs is not necessarily a sure sign of a healthy company: in the early 1990s, Finnish banks entered a deep crisis which shook the entire economy.

## **Economic overheating in 1989-1990**

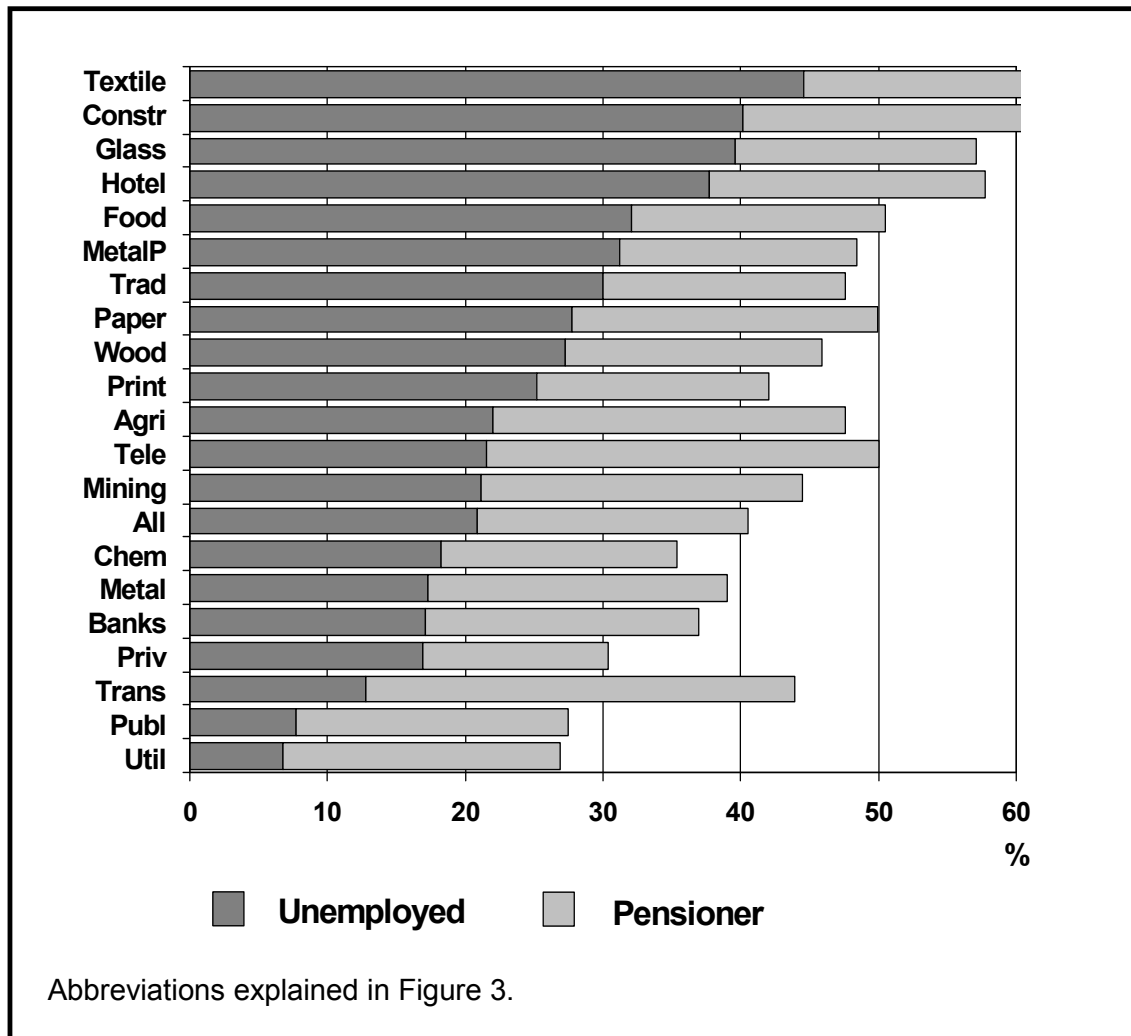
The end of the 1980s was a time of economic overheating and, to a certain extent, of labour shortages. One of the alleged reasons for the shortage of labour was the excessive expansion of the public sector, which was criticized for inefficient use of labour and slack organization of work. Just when growth in the public sector seemed to be reaching its culmination, individual early retirement pension and the two other flexible pensions (part-time pension and early old age pension) were implemented in the State and municipal employees' pension systems, three years after their implementation in the private sector. Public-sector pension systems covered public enterprises as well. From the beginning of the decade, public enterprises were reorganized and opened to competition (postal service, telecommunications, Finnish State Railways and Forest and Park Service at the beginning of the 1990s, municipal electricity, water and gas boards later on).

In 1989-1990, disability benefits were the main pathway from the labour market for the 55 to 59 -year-olds, while long-term unemployment among older workers was effectively reduced by the availability of subsidized employment. During this period, the differences in the incidence of early exit in various branches were much smaller than in the mid-1980s. First of all, the incidence

of retirement had declined considerably in the open sector and, to some extent, in the domestic-market sector. Within public services and in government jobs, introduction of individual early retirement pension in 1989 doubled the incidence of early retirement, bringing the rate up to the average for all industries. Nevertheless, the incidence of early retirement among workers in public services was still somewhat lower than in most industries in the private sector. In public enterprises, the incidence of early retirement due to health-related reasons increased more than elsewhere in the public sector (Hytti 1998, 115–120).

### **Economic recession 1991-1994**

During the recession of the 1990s, unemployment again became the main channel for early exit from the labour market. The comparison of different sectors of industry in Figure 6 shows that the exit rates for ageing workers were highest in those industries which were hardest hit by the recession. The top rates were seen in industries with a domestic market orientation. The number of unemployed and newly retired workers was highest in the textile and clothing industry, in construction, in the hotel and restaurant trade, and in the stone, clay and glass industries. In all of the above industries, more than 55 per cent of those who at the end of 1990 had been employed and between 51 and 55 years of age were four years later either unemployed or retired (mainly the former). The share of those no longer in the labour market was above 50 per cent also in the food industry, in commerce, in the wood processing industry, in agriculture and forestry, and in telecommunications.



**Figure 6.** Percentages of unemployed or retired workers, by industry: the 1994 situation of those 55–59-year-olds aged 51-55 and employed at the end of 1990.

There were significant differences between individual sectors of industry in terms of which channel – unemployment or disability – was the primary pathway for ageing workers to exit the labour market. Figure 6 shows that unemployment was the primary exit pathway in the domestically oriented sector and in labour-intensive manufacturing sectors. Disability and other early retirement pensions served as the primary early exit pathway in industries where a large proportion of jobs were in the public sector (telecommunications, transportation, public services and utilities). These results are in line with the

findings of other studies (Huovinen and Piekkola 2001; Hakola and Uusitalo 2001) which indicate that in private-sector enterprises the application of experience rating to the financing of pensions has had influence on the employers' choice between different early exit benefits. In the public-sector, the preferred avenue of exit for ageing workers has been the disability pathway, resulting in less hardship to the workers and avoiding the need to resort to dismissals.

Other early exit studies (Aho and Österman 1999; Huovinen and Piekkola 2001) have shown that the utilization of the unemployment pathway in Finland has been selective in relation to ageing workers' level of educational attainment. The difference in the unemployment risk faced by workers with a basic level of education and that of better-educated workers was particularly large towards the end of the recession. The studies make clear that a high level of educational attainment was particularly good protection during the depths of the recession, despite the fact that at first, even highly-educated workers were being dismissed at unprecedented rates. According to Böckerman (2000), the impact of the structural change caused by the recession was felt most keenly by ageing and less-educated workers.

### **The situation at the end of the recession and the post-recession years 1996-1998**

Table 3 shows the labour market situation of older employees after the recession. The table presents the unemployment rates of different age groups according to the 1995 census, and follows the labour market situation of older workers starting from the end of 1995 three years back and three years forward in time. The follow-up is conducted separately for employed and unemployed individuals. Persons in subsidized employment are included with the unemployed.

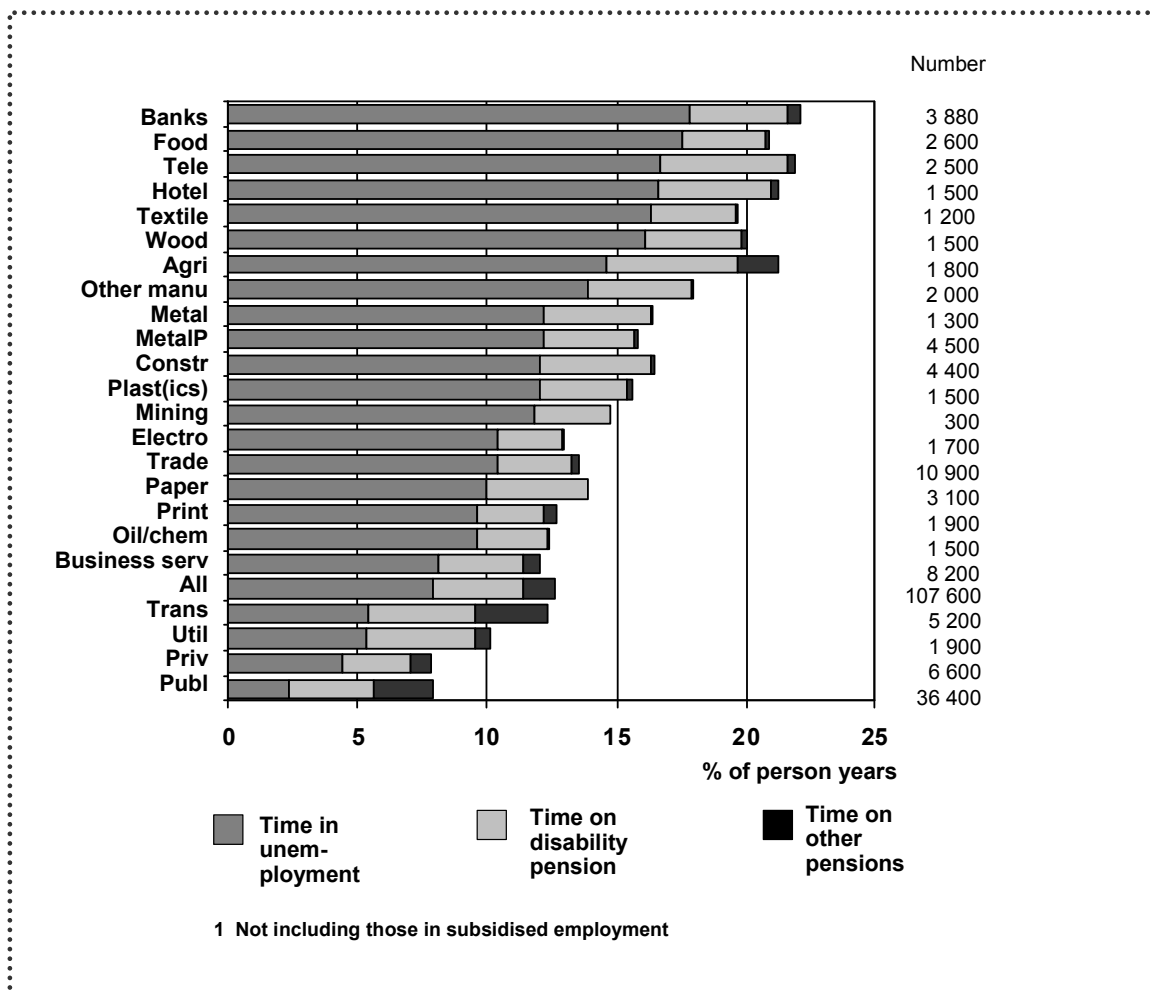
**Table 3.** Age distribution of the labour force aged 45–58 at the end of 1995: Share of unemployed workers and the time spent unemployed as a share of follow-up time 1996–1998, analysed separately for unemployed and employed workers <sup>a</sup>.

| AGE   | Number of employees 1995 | Unemployed % | Unemployment as a share of follow-up time (%) |          |              |          |
|-------|--------------------------|--------------|---|----------|--------------|----------|
|       |                          |              | In 1993–1995                                  |          | In 1996–1998 |          |
|       |                          |              | Unemployed                                    | Employed | Unemployed   | Employed |
| 45–49 | 302300                   | 13           | 59  | 3        | 54           | 3        |
| 50–52 | 134000                   | 14           | 61  | 3        | 58           | 4        |
| 53–54 | 74100                    | 17           | 54  | 2        | 78           | 8        |
| 55    | 29600                    | 23           | 57  | 2        | 87           | 8        |
| 56    | 31800                    | 27           | 62  | 1        | 85           | 8        |
| 57    | 27900                    | 30           | 66  | 2        | 90           | 8        |
| 58    | 23200                    | 35           | 68  | 1        | 83           | 6        |

Notes: <sup>a</sup> Those in subsidised employment are included with the unemployed.  
<sup>b</sup> Follow-up is conducted only until the age of 60.

Table 3 indicates, first, that unemployment was as the recession ended strongly concentrated in those age groups where unemployed persons were entitled to extended unemployment relief followed by an unemployment pension. At the same time, Table 3 illustrates the deep division – due to the recession – between those who had managed to retain their job during the recession and those who had lost theirs. Those either unemployed or in subsidized employment at the end of 1995 had been unemployed an average of 54 to 68 percent (depending on the age group) of the first follow-up period 1993-1995, and subsequently remained unemployed – again depending on the age group – for 54 to 90 percent of the second follow-up period 1996-1998. Employees aged 45-58 who were employed at the end of 1995 had experienced practically no unemployment in the previous three years. Also in the second follow-up period 1996-1998, the time spent unemployed was in all age groups less than 10 percent of the total period.





**Figure 7.** Follow-up of persons who were employed and 53-56 years old at the end of 1995: percentage of person years spent unemployed or on disability or other pension, by branch, 1996-1998.

Figure 7 examines the utilization of the unemployment pathway by those who retained their job during the recession between 1996 and 1998 in various industries and sectors. It focuses on employees who were aged between 53 and 56 years at year-end 1995. They were selected because they were potential users of the unemployment pathway throughout the period studied. Besides unemployment, the analysis focuses also on the time spent on disability pensions and occupational pensions based on age. Pension duration is analysed to discover whether a low utilization rate of the unemployment pension pathway might be counterbalanced by a higher than average utilization rate of disability and old-age pensions.

The use of the unemployment pathway after the recession greatly resembles the pattern seen in the 1980s: the degree to which a particular industry is exposed to international competition seems to be the main factor explaining the use of the pathway. Accordingly, the industries which in the late 1990s were hardest hit by internationalization are now at top of the list. They include insurance and finance, the food industry and telecommunications. It should be noted that in the 1980s the insurance/finance and telecommunications industries had some of the lowest unemployment pathway utilization rates. These two industries have experienced an exceptionally rapid globalization, reorganization and technological transition. The fact that the unemployment pathway was widely used in the food industry is explained by the exposure of that industry to international competition after Finland joined the European Union. This is presumably also the reason for the high utilization rate in agriculture and forestry. The Forest and Park-Service, a public-sector organization, was a particular target of restructuring. Among the sheltered industries the hotel and restaurant industry was the only one where the unemployment pathway utilization rate was high.

The industries where the unemployment pathway was used the least all operated in sectors sheltered from international competition. Unemployment benefits were least commonly used in public-sector administration and services, private personal services and energy production as well as in transportation, much of which is public-sector activity. In public-sector services and in the partly public-sector transportation the low utilization rate of the unemployment pathway was to some extent offset by occupation-specific old-age pensions (Figure 7).

## **CONCLUSIONS: WHAT CAN WE LEARN FROM THE FINNISH EXPERIENCES?**

In Finland, the unemployment pension and extended unemployment relief for the elderly work force have been used both to accelerate structural change in response to increasing international competition and to mitigate the consequences of a recession. During the economic growth of the 1980s, the Finnish early exit policy particularly favoured structural change in the leading export industries. At the turn of the 1990s effectivization and reorganization of the public sector enterprises was made easier through early retirement systems. In the deep economic recession of the 1990s, the rate of exit from labour force by ageing workers was highest in the branches with a primarily domestic focus, which were hardest hit by the recession. In the late 1990s the degree to which a particular industry was exposed to pressures of rapid globalization or to competition caused by Finland's joining the European Union seemed to explain a great deal of early exit behaviour through the unemployment pathway.

Utilization of the unemployment pathway for purposes of restructuring the open sector industries can be seen as part and parcel of the long term strategy of the Finnish welfare state aiming at competitiveness and socio-economic development through broad-based interest-mediation practices. Those displaced by structural change are not left to fend for themselves in the open markets but are afforded, in the shape of income security benefits, at least some share of the economic well-being resulting from structural change and increased productivity. It is an empirical question to what extent the development thus far has been favourable or harmful to businesses and the national economy as a whole. The reorganizations which on one hand have taken jobs away from older workers have at the same time raised the competitiveness of Finnish companies and national economy. That said, this process may have also created new inefficiencies in the form of the underutilization of manpower resources and higher public-sector spending (cf. Kolberg and Esping-Andersen 1992).

Looking at the early exit process from the viewpoint of societal regulation – rather than as a matter of individual choice – gives us quite an optimistic starting point to evaluate the future participation rates of the elderly population in Finland. As a general conclusion from the Finnish experience, it appears that demand side factors have played a leading role in the early exit process.

Early exit schemes have been one of the main vehicles of labour supply management. Given the dominance of this demand-driven model, we may assume that the process can continue to be adapted to meet new demands emerging in the labour market.

Finland has already now achieved a turnaround in the labour force participation of older population, and the positive development can be expected to continue, for two reasons. First, it is likely that the demand for the older workers in the labour market will grow as a direct result of the declining relative labour force share of young workers. In other words, employers will become better motivated to retain and/or hire older workers, given the scarcity of younger workers. Second, the moderate reform agreed by the labour market partners in 2001 – which seeks to reduce the utilization of the unemployment pathway and other early retirement pensions by means of forward-looking, positive solutions rather than strict cuts in benefits – will make older workers more inclined to continue working longer. The reform starts from the premise that the unemployment pathway will continue to be needed in Finland to alleviate the effects of structural change, while recognizing that the criteria for making use of early retirement benefits will need to be tightened for both employers and employees. From this perspective, regulation of the supply of labour by means of the unemployment pathway can be seen as an example of the workability of the European social model as implemented in Finland. The need for solidarity will not disappear, but reconciling the systems of social provision with economic realities will also require a continuous adjustment of the provision systems to changes in their societal context.

## REFERENCES

**Aho, S.** and **Österman, P.** (1999). Ikääntyvien työssäkäynti, työttömyys ja varhainen eläkkeelle siirtyminen 1987-1996. (Employment, unemployment and early retirement trends among ageing workers in 1987-1996.) Julkaisuja 1999: 7. Helsinki: Sosiaali- ja terveystieteiden ministeriö.

**Andersson, J.O., Kosonen, P.** and **Vartiainen, J.** (1993). The Finnish model of economic and social policy: from emulation to crash. Meddelanden från ekonomisk-statsvetenskapliga fakulteten vid Åbo Akademi Ser. A:401. Åbo: Åbo Akademin tryckeri.

**Auer, P.** (2000). Employment revival in Europe: Labour market success in Austria, Denmark, Ireland and the Netherlands. Geneva: International Labour Office.

**Blöndal, S.** and **Scarpetta, S.** (1998). The retirement decision in OECD countries. Economic Department, Working papers No. 202. Paris: Organization for Economic Cooperation and Development.

**Böckerman, P.** (2000). Elinkeinorakenteen muutos – näkökulma 1990-luvun murrokseen. (Transformation of the economic structure – a perspective on the upheaval of the 1990s.) Discussion papers No: 168. Helsinki: Labour Institute for Economic Research.

**Casey, B.** and **Laczko, F.** (1992). Older worker employment: change and continuity in the 1980s. In: N. Gilbert, R. Burrows and A. Pollert (eds) *Fordism and flexibility*. Basingstoke: Macmillan, pp. 137–153.

**Ebbinghaus, B.** (2000). Any way out of 'exit from work'? Reversing the entrenched pathways of early retirement. In: F. W. Scharpf and V. A. Schmidt (eds) *Welfare and work in the open economy. Diverse responses to common challenges*. VOL II, pp. 511–553. New York: Oxford University Press.

European Commission (1999a). Towards a Europe for all ages. COM (99): 221.

European Commission (1999b). Employment in Europe 1999. Employment and Social affairs. Luxembourg: European Communities.

Eurostat (1996). ESSPROS manual 1996. Luxembourg: Office for Official Publications of the European Communities.

**Ferrera, M., Hemerijck, A. and Rhodes, M.** (2000). The future of Social Europe: Recasting work and welfare in the new economy. Report for the Portuguese Presidency of the European Union.

<http://wiscinfo.doit.wise.edu/eucenter/conferences/Work2001/Backroud/FutureofSocialEurope.pdf> 30.5.2000.

**Guillemard, A-M.** (1989). The trend towards early labour force withdrawal and the reorganisation of the life course: a cross-national analysis. In: P. Johnson, C. Conrad and D. Thomson (eds) Workers versus pensioners: intergenerational justice in an ageing world, pp. 164–180. Manchester: Manchester University Press.

**Guillemard, A-M. and van Gunsteren, H.** (1991). Pathways and their prospects: a comparative interpretation of the meaning of early exit. In: M. Kohli, M. Rein, A-M. Guillemard and H. van Gunsteren (eds) Time for retirement. Comparative studies of early exit from the labor force, pp. 362–387. Cambridge, N.Y.: Cambridge University Press.

**Hakola, T. and Uusitalo, R.** (2001). Let's make a deal – the impact of social security provisions and firm liabilities on early retirement. Discussion papers No: 260. Helsinki: VATT Government Institute for Economic Research.

**Heikkilä, M. and Uusitalo, H.,** eds (1997). The cost of cuts. Studies on cutbacks in social security and their effects in Finland of the 1990s. Saarijärvi: Gummerus.

**Heinonen, V., Mykkänen, J. and Pantzar M.** Suljettu sektori avoimen sektorin kakulla - valtiovarainministereiden budjettiesitelmät 1974-1994. (The closed sector eating the cake of the open sector - the budget lectures given by the Ministers of Finance 1974-1994.) Janus 1997; 5: 26–47.

**Heritier, A.** and **Schmidt S** (2000). After liberalization: Public interest services and employment in the utilities. In: F.W. Scharpf and V. A. Schmidt (eds) *Welfare and work in the open economy. Diverse responses to common challenges.* VOL II, pp. 554–596. New York: Oxford University Press.

**Huovinen, P.** and **Piekkola, H.** (2001). Unemployment and early retirement of the aged workers in Finland. Discussion papers No. 750. Helsinki: ETLA. The Research Institute of the Finnish Economy.

**Hutchens, R.** (1994). The United States: employer policies for discouraging work by older people. In: F. Naschold, B de Vroom (eds) *Regulating employment and welfare. Company and national policies of labour force participation at the end of worklife in industrial countries,* pp. 395–432. Berlin: de Gruyter

**Hytti, H.** (1993). Työkyvyttömyyseläkkeelle siirtymisen yhteiskunnalliset taustatekijät. (Social and societal determinants of disability pension incidence, in Finnish with English summary.) *Julkaisuja M: 87.* Helsinki: Kansaneläkelaitos.

**Hytti, H.** (1995). Determinants of disability pension incidence. In: *Yearbook of population research in Finland 1994-1995,* pp. 54–69. Vammala: The Population Research Institute.

**Hytti, H.** (1998). Varhainen eläkkeelle siirtyminen - Suomen malli. (Early retirement □ the Finnish model, in Finnish with English summary). *Sosiaali- ja terveysturvan tutkimuksia 32.* Helsinki: Kansaneläkelaitos.

**Hytti, H.** (2001). Väestö ikääntyy – tarvitsevatko ikääntyvät työttömät erityisturvaa (Population is ageing – are special benefits needed for the aged unemployed workers? In: E. Tuominen (ed.) *Muuttuva työ ja eläketurva. Tutkimuksia 2001:1,* pp. 280–329. Helsinki: Eläketurvakeskus.

**Jacobs, K., Kohli, M.** and **Rein, M.** (1991). Testing the industry-mix hypothesis of early exit. In: M. Kohli, M. Rein, A-M. Guillemard and H. van Gunsteren (eds) *Time for retirement. Comparative studies of early exit from the labor force,* pp. 67– 96. Cambridge, N.Y.: Cambridge University Press.

**Kiander, J.** and **Vartia, P.** (1998). Suuri lama. (The great depression). *Suomen 1990-luvun kriisi ja talouspoliittinen keskustelu. Series B: 143.* Helsinki: ETLA Elinkeinoelämän Tutkimuslaitos.

**Knuth, M.** and **Kalima, T.** (2001). Unemployment as a transition to retirement in Germany. An analysis using the IAB employee sample. Paper presented in The 5<sup>th</sup> Conference of the European Sociological Association. Helsinki, August 28 – September 1, 2001.

**Kohli, M.** and **Rein, M.** (1991). The changing balance of work and retirement. In: M. Kohli, M. Rein, A-M. Guillemand and H. van Gunsteren (eds) Time for retirement. Comparative studies of early exit from the labour force, pp. 1–35. Cambridge, N.Y.: Cambridge University Press.

**Kolberg, J.E.** and **Esping-Andersen, G.** (1992). Welfare states and employment regimes. In: J.E. Kolberg (ed.) The study of welfare state regimes, pp. 3–36. Armonk, NY: Sharpe.

**Kosonen, P.:** (1998). Nordic models of economic and social governance: from stability to growing tensions. In: R. O'Donnell and J Larragy (eds) Negotiated economic and social governance and European integration. Social Sciences COST A7, pp. 20–49. Brussels: European Commission.

**Kosonen, P.** (2000). Activation, incentives and workfare in four Nordic countries. In: Comparing social welfare systems in Nordic Europe and France. Copenhagen Conference, France – Nordic Europe. Collection MiRe volume 4, pp. 419–443. Paris: MIRE-DREES.

**Kosonen, P.** (2001). Globalization and the Nordic welfare states. In: R. Stykes, B. Palier and P.M. Prior (eds) Globalization and European welfare states. Challenges and change, pp. 153–172. London/Basingstoke: Palgrave.

MISSOC (2000). Social protection in the EU Member States and the European Economic Area. Situation on 1 January 2000. Employment & social affairs. Luxembourg: Office for Official Publications of the European Communities.

OECD (2000). Reforms for ageing society. Paris: Organisation for Economic Cooperation and Development.

**Pohjola, M.** (1996). Tehoton pääoma. Uusi näkökulma taloutemme ongelmiin. (Inefficient capital: A new perspective on problems faced by the Finnish economy.) Porvoo: WSOY.



**Ragin, C.C.** (1987). The comparative method. Moving beyond qualitative and quantitative strategies. Berkeley, CA: University of California Press.

**Romppanen, A.** (2000). Ikääntymisen vaikutuksista työmarkkinoilla. (The effects of ageing on the labour market.) Julkaisuja 12. Helsinki: Sosiaali- ja terveystieteiden tutkimuskeskus.

**Sauramo, P.** (1999). Onko kasvu työllistänyt? (Has economic growth produced job growth?) *Talous ja yhteiskunta* 1999; 27 (2): 16–20.

**Sihto, M.** (1999). Increasing older persons' employment in Finland: in search of a new strategy. *Journal of Aging & Social Policy* 1999, 10 (3): 65–82.

**Standing, G.** (1986). Labour flexibility and older worker marginalisation: the need for a new strategy. In: *Labour Rev* 1986, 125: 329–348.

Taloudellinen suunnittelukeskus The Economic Planning Centre (1990). Suomi 1990 - 2005. Haasteiden ja varautumisen aikaa. (Finland 1990–2005. A time of challenge and preparation.) Helsinki: Taloudellinen suunnittelukeskus.

**Trommel, W.** and de **Vroom, B.** (1994). The Netherlands: the Loreley-effect of early exit. In: F. Naschold and B. de Vroom B (eds) *Regulating employment and welfare. Company and national policies of labour force participation at the end of worklife in industrial countries*, pp. 51–116. Berlin: de Gruyter.

**Vartia, P.** and **Ylä-Anttila, P.** (1996). *Kansantalous 2021 (The National Economy 2021.)*. ETLA: Series B: 126, SITRA153. Helsinki: Elinkeinoelämän Tutkimuslaitos.