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EMPLOYMENT
POLICIES IN TWO
AGEING SOCIETIES:
JAPAN AND FINLAND
COMPARED

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This paper is a joint effort of two researchers from the Japan Institute for Labour Policy and Training and the Finnish Ministry of Employment and the Economy. The project was already planned in 2005 and launched in 2006.

We would like to thank the Government Institute for Economic Research and the Japan Institute for Labour Policy and Training for launching a former comparative project between Japan and Finland in 2005. This paper is based on many ideas that had already been developed during that research. We would also like to thank the persons who gave interviews for this study, and Roope Uusitalo, Research Director, as well as the principal economist Kari Hämäläinen from the Government Institute for Economic Research, for their comments. Paul A. Dillingham kindly checked the language.

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Abstract: This study compares employment policies between two rapidly ageing societies: Japan and Finland. This paper concentrates on analysing the elderly people who leave the labour market early and the young people entering the labour market. Based on analysis of the statistics and literature and interviews with experts, Japan is clearly ahead in ageing itself, but Finland is somewhat ahead in the preparation for ageing. In Japan the main labour reserves are women, the aged and young people, whereas in Finland the unemployed, those outside the labour market, the aged and men are the main reserves. Both countries have carried through pension reforms and created incentives for the aged to continue working. The sustainability of the Finnish pension reform seems good. In Japan the focus is on the employers in influencing the aged to continue employment, whereas in Finland the focus is on the employees. Both countries have good practices in integrating young people into the labour market, despite the problems faced. Employment of the elderly is remarkably high in Japan, and development has been positive in Finland, too. In Finland female employment is high compared with that of Japan.

Keywords: Ageing, employment policies, Japan, Finland

Tiivistelmä: Tutkimuksessa vertaillaan kahden nopean ikääntymisen kohtaavan maan, Japanin ja Suomen työllisyyspolitiikkaa. Tutkimuksessa keskitytään työmarkkinoilta pian poistuvien ikääntyneiden ja sinne tulevien nuorten tarkasteluun. Tilasto- ja kirjallisuusanalyysin sekä asiantuntijahaastattelujen perusteella voidaan sanoa, että Japani on selvästi edellä itse ikääntymisessä, mutta Suomi jossain määrin edellä ikääntymiseen varautumisessa. Japanissa keskeiset työvoimareservit ovat naiset, ikääntyneet ja nuoret, Suomessa taas työttömät ja työmarkkinoiden ulkopuoliset. ikääntyneet ja miehet. Kummassakin maassa on tehty eläkeuudistuksia ja kannustetaan ikääntyneitä jatkamaan työssä. Suomen eläkeuudistuksen kestävyys vaikuttaa hyvältä. Japanissa ikääntyneiden työssä jatkamisen polttopisteessä on työnantajiin vaikuttaminen, Suomessa työntekijöihin. Kummassakin maassa on hyviä käytäntöjä nuorten työmarkkinoille integroimisessa, vaikka ongelmia kohdataankin. Ikääntyneiden työllisyys on hyvin korkealla tasolla Japanissa, Suomessa taas kehitys on ollut myönteistä. Suomessa naisten työllisyys on korkea Japaniin nähden.

Asiasanat: Ikääntyminen, työllisyyspolitiikka, Japani, Suomi

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Contents

1 Introduction to and motivation for the study	1
2 Structural change in the age composition of the population and labour market challenges	3
2.1 Economic Developments in brief	3
2.2 Population and Labour Force Participation	4
3 State of employment policies in the first years of the 21st century	14
3.1 Japanese employment policies	14
3.2 Finnish employment policies	21
3.3 Comparative perspectives	29
4 Ageing and Employment Policies: similarities and differences	41
References	45
Appendix	48

1 Introduction to and motivation for the study

Why compare policies between a great nation of 127 million people and a small country of 5 million? Japan and Finland both face the issue of ageing population more rapidly than most other nations: Japan is the world leader and Finland at the top of the European list. Life expectancy in Japan is already one of the highest in the world. Finland cannot find a benchmark in facing the rapidly ageing population of Europe.

Besides the common challenge both countries are facing, there are some other important similarities. Japan and Finland are countries of high living standards and advanced technologies. Both countries have some industrial branches with world-leading market power, but both countries are becoming more and more service societies.

There are also important and deep differences between these societies. Japanese traditions in employment patterns are very different from Finnish ones. One of the best-known Japanese labour market characteristics has been the life-long employment system, whereas the Finnish labour market has been based on more mobility. This situation, however, is also changing in Japan.

The ageing population causes deep changes in both societies and this kind of situation is basically new for both. Considering the role of employment policies, two major groups of people can be identified: the aged and young people. The ageing of societies is not usually a problem as such, but problems are caused by different sizes of various age cohorts, as some people have to take greater responsibility for the welfare and care of larger numbers of people than their predecessors used to take. Longer life expectancy and longer lives of individuals, which has already happened, can be considered to be an exceptional achievement in a modern society. Better nutrition, health care and a safer and, for most people, physically less demanding working life have brought about these developments. As people live longer, they also study longer, which raises the issue of economic sustainability and puts pressure on individuals to remain working longer.

From a stricter labour market point of view, comparing the cohorts that will soon leave the labour market for retirement with those entering the labour market is important. These people are often not substitutes at the individual or job level, but this kind of numerical comparison is important from the labour market balance point of view. If there exists a clear imbalance in the medium term, there is a vital question to answer: where can employers find the workforce?

Both Japan and Finland have had an earlier, even restrictive immigration policy. As a member of the European Union, Finland basically shares the free movement of labour with other 26 EU member states. The regulation concerning other coun-

tries is more restrictive. The population and workforce issue will put heavy pressure on both countries to compete for foreign labour. This may be a good addition, but probably does not solve the issue. For Japan, the labour resources of the other Asian countries are the most relevant ones.

This study tries to compare Japanese and Finnish employment policies that focus on the ageing population and workforce issue. First, a comparison of the population, labour market participation and labour market balance will present pictures and prospects of the main quantitative issues. This discussion is deepened by analysis of the literature.

Then we compare employment policies in both countries from a relatively broad point of view. Descriptive analysis of the main employment policy developments is provided in order to understand the situation better. Some high-level experts and policy-makers from both countries are interviewed to delve deeper behind the figures in the ageing population framework and to really assess the impact of the policy measures, which have been already implemented in practice.

The analysis will be concluded by a discussion which may help policy-makers to share ideas and learn from other countries. This is, however, a very demanding thing to do. It is much easier to transfer technologies between countries than to transfer policy ideas.

The analysis is a joint effort by two researchers from the Japan Institute for Labour Policy and Training (JILPT) and the Finnish Ministry of Employment and the Economy (MEE).

2 Structural change in the age composition of the population and labour market challenges³

2.1 Economic Developments in brief

Japan is the second biggest economy in the world, as it produced 11.9 per cent of the OECD GDP in 2000. Finland represented only 0.5 per cent of the OECD GDP in the same year. The economic growth rate in 1994–2004 was 1.1 per cent on average in Japan and 3.8 per cent in Finland. However, in 2002 the Japanese economy faced a slight negative GDP growth rate of -0.3 per cent, but returned to the growth of 2.7 per cent in 2003. This growth continued in 2004 (2.3 per cent) and 2005 (1.9 per cent) and further on at the rate of 2.2 per cent in 2006. The development for 2007 was positive as well⁴. The Finnish GDP growth rate was 3.5 per cent in 2004 and 3.0 per cent in 2005^{5,6}, and the growth rate in 2006 reached 5.5 per cent. It was also rapid for 2007. The real income level per capita in Japan and Finland is almost the same.

Average employment in Japan decreased by 0.2 per cent in the period 1994–2004. The Japanese economy has experienced a kind of slow deflation since 2001. Before that, some demand-fostering measures like permanent tax cuts were carried through and the economy started to recover from a long period of slow growth, but this turned out to be short-lived. In 2002, unemployment reached a record high level of 5.4 per cent, but it decreased to 4.7 per cent in 2004 and 4.4 per cent in 2005. The rate for 2006 was 4.1 per cent. In January – April 2007 the unemployment rate was 3.8 per cent in Japan. The average business sector labour costs have increased only very moderately from 1991 to 2001, only 0.3 per cent annually.⁷ The main industries are manufacturing, construction, trade, real estate, services and communication. In particular, Japan exports cars, electronic devices and computers. The USA has been its most important single trade partner, and the Asian countries come next, but even in 2004 China was Japan's number one trade partner with a 20 per cent share of the total trade. Raw materials are the main imported goods, as the domestic resources for raw materials are relatively limited. Japan has a large surplus in the balance of trade.

³ The structure of this part of the study mainly follows Räisänen (2005) with updated data and some additional parts

⁴ OECD Economic Surveys. Japan (2006, 26), OECD Employment Outlook (2007, 19)

⁵ OECD Employment Outlook (2006, 17)

⁶ OECD Economic Surveys. Finland (2006, 20)

⁷ Labor Situation in Japan and Analysis 2004/2005 (2004, 2-4); OECD Employment Outlook (2004, 19-23)

Finnish employment growth reached a level of 1.6 per cent on average in the period 1994–2004⁸. The Finnish economy experienced an extreme recession at the beginning of the 1990s, which was the deepest ever in any western economy since the Second World War, but the recovery was also rapid. Considering the most recent developments, the public sector surplus is strong, economic growth rapid and inflation low, but development in the labour market was first relatively sluggish, and then improved in 2006, especially. Unemployment is still at a high level, 7.7 per cent in 2006, but decreased further to 6.9 per cent in 2007. In the manufacturing industries, the electronics industry has experienced an expansion, whereas the other major branches in manufacturing are the wood, paper and pulp industries and metal industries with more stable, longer-term development. The exports of the Finnish metal industry including the electronics industry (e.g. mobile phones) increased rapidly in the 1990s to reach almost a half of the total exports but have stagnated somewhat in recent years.⁹

2.2 Population and Labour Force Participation

Japan had a population of 127.7 million people in 2004, whereas the corresponding figure for Finland was 5.2 million. The difference in the magnitude of the age cohorts in a society is an important factor in the labour market when one also takes the welfare of the whole population into account. If various cohorts are clearly of different magnitudes, this can cause difficult problems in terms of recruiting new employees to replace those reaching pensionable age. It is also problematic in the educational system, if the next cohorts reaching a certain educational level are clearly different in size from their predecessors. In order to continue, depending on the system of financing health services and pensions for the aged population, it causes problems if the working age population is more limited in number.

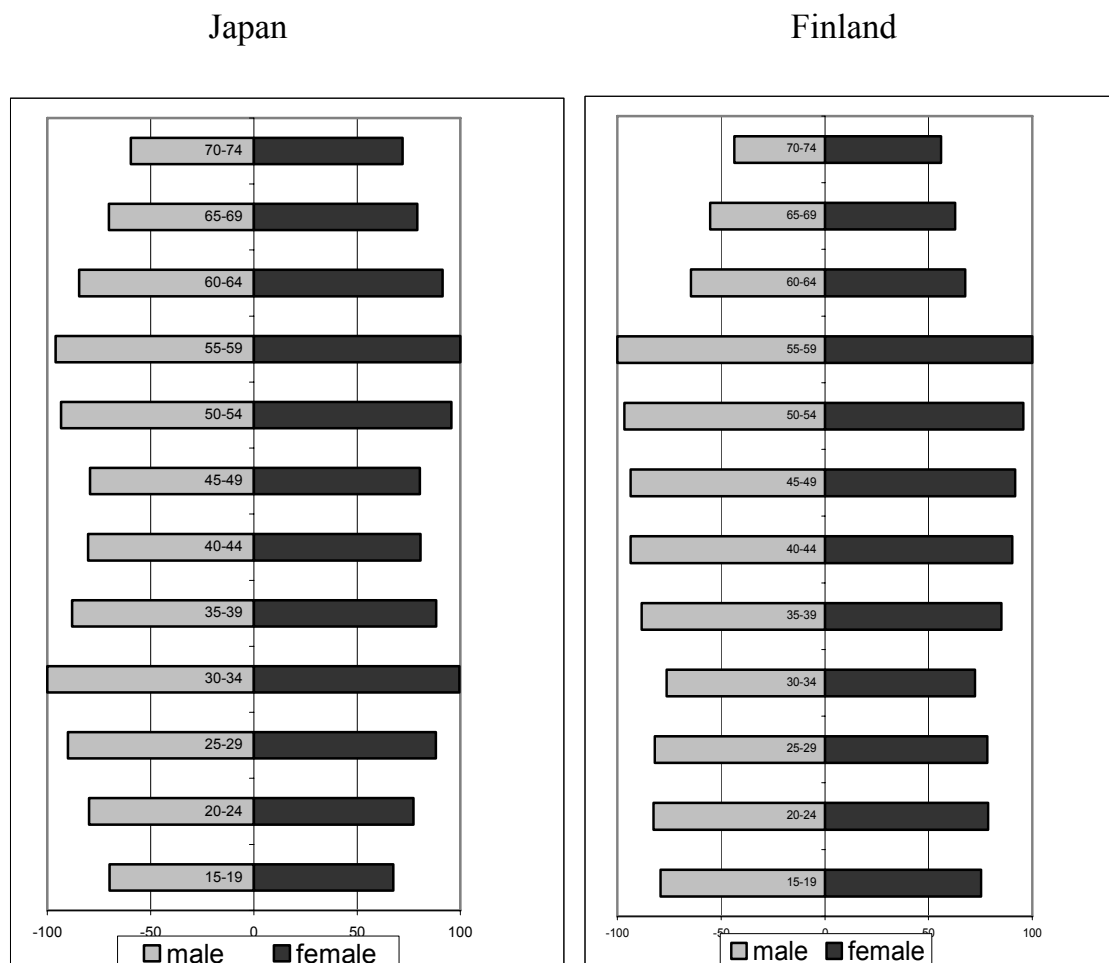
Both Japan and Finland have large post-war baby boom cohorts which were 50–54 years of age in 2004. These female cohorts are the largest in both societies. However, from a careful reading of the figures presented in the following pages, Japan faces even more difficult problems in the labour market, as the next cohorts following the baby boomers are clearly more limited in number in relation to the Finnish situation. In the coming years, Japan will be able to adapt to population changes with large cohorts born in 1969–1978, which were 25–34 years of age in 2004. These male cohorts are the largest in Japan. After the baby-boom cohorts the following ones are gradually smaller in number until those people under the age of 44 in the year 2004. In Finland the working age population is also starting to decline, as the largest cohorts are reaching the age when, in practice, they leave the labour market. In Finland the cohorts born after the mid-

⁸ OECD Employment Outlook (2007, 21)

⁹ Finnish Economy. Structural indicators (2004, 2006)

1970s are more even in magnitude, but adaptation to the changing situation is faced in the medium term. For both countries, the main outcome is clear: the young cohorts are smaller in magnitude than the post-war baby-boomers. For Finland, the development is relatively trendwise, but for Japan, there are two drops from the number of previous cohorts. In the longer term, the Japanese population will decline by some 26 million people between 2000 and 2050¹⁰.

Figure 1 a and b. Population profiles, working age population by 5-year cohorts in relation to the largest cohort (=100) in 2004 (a, left Japan, b, right Finland)



Sources: Statistics Japan; Statistics Finland

Taking the labour force participation of the population into consideration, Japan has only very limited labour resources in the prime age male population, which is practically fully integrated into the labour market. Finland has more resources in this respect, taking the Japanese participation as a benchmark, especially with the

¹⁰ Labor Situation in Japan and Analysis: General Overview 2006/2007, 15

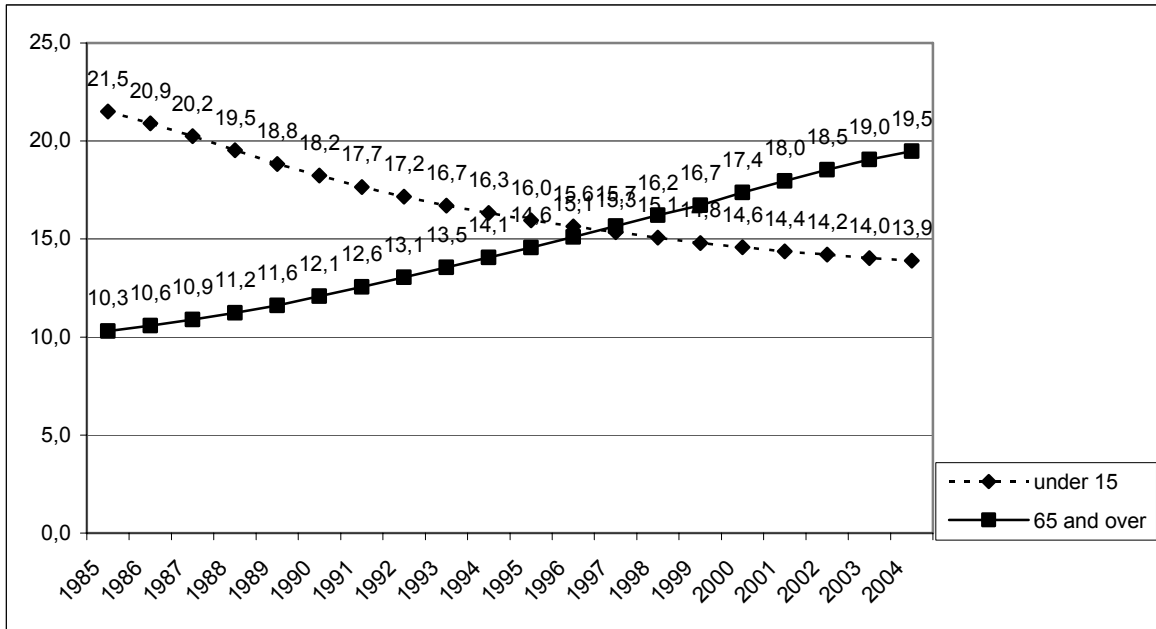
older prime age and aged working age population. The Japanese domestic labour resources are clearly found in the female population compared with the Finnish participation model. In comparison to Japan, Finland has much to do with improving the participation of the elderly population, which is really impressive in Japan. However, this kind of comparison is quite theoretical, as the real decisions on labour supply are often made in households consisting of both spouses together, and here, especially, the welfare regime and its effects on the female population are relevant as is the behaviour of exits from the labour market. The total labour force equalled 66.4 million people in Japan and 2.6 million in Finland in 2004.¹¹

Next, we give an overview of the population shares of the cohorts leaving the labour market soon or having already left it (65 years of age and over) and the cohorts entering the labour market in the coming years. We discover that the population share of old people in Japan has already exceeded that of young people in 1997, but in Finland the situation is still the opposite and the lines will not cross each other for a few years. The development in Japan is more dramatic compared with Finland's.

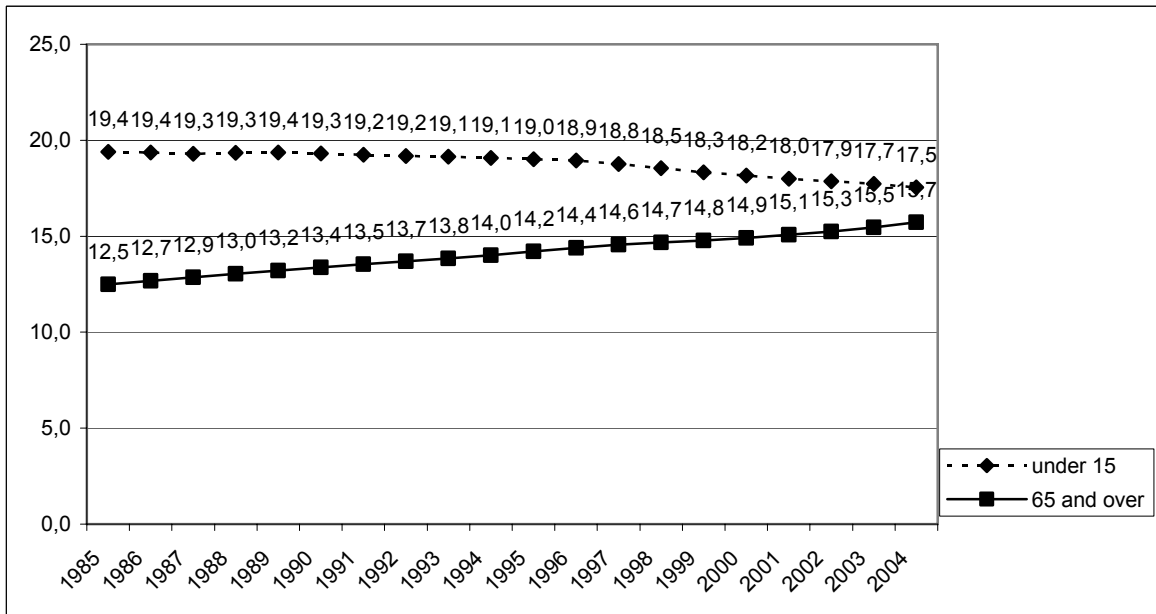
¹¹ OECD. Ageing and Employment Policies. Finland (2004)

Figure 2 a and b. Changes in the percentage shares of population under 15 years and over 65 years of age between 1985 and 2004, Japan (a, over) and Finland (b, under)

Japan



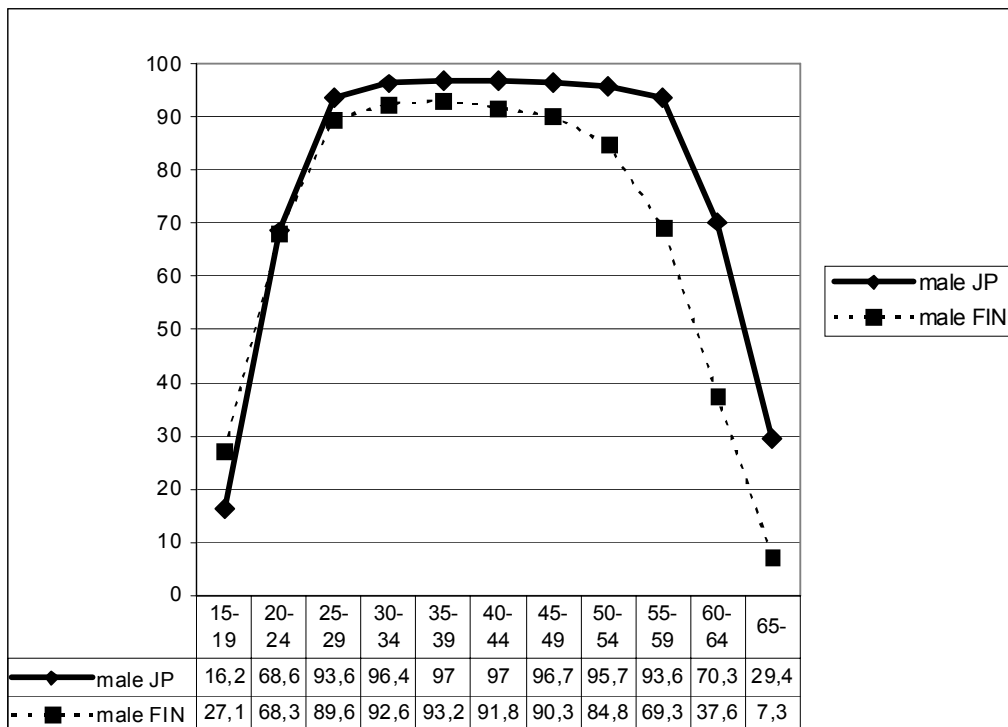
Finland



Source: OECD Labour Force Statistics 1984-2004 (2005)

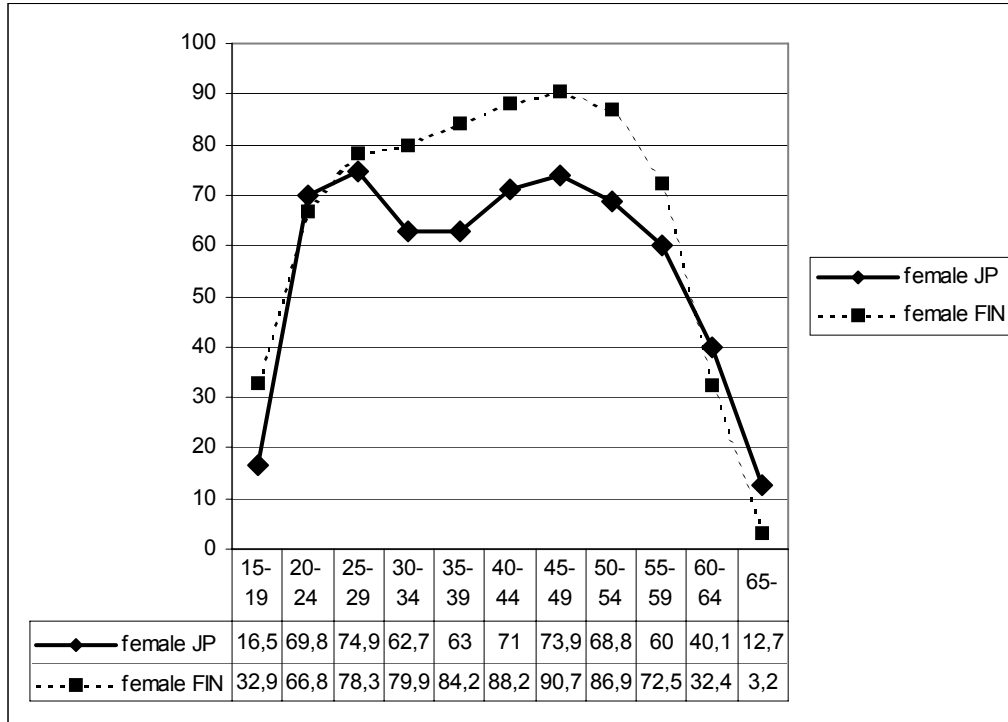
The labour force participation rates for younger males are relatively even for both countries, but for middle-aged and older males the Japanese participation model remains about the same for the cohort of 55–59 year-old males and drops for older males. The Finnish male participation model is much worse, as the participation is already starting to drop for the cohorts aged 45–49 and for 55–59 year-old males; the difference between Japan and Finland is over 20 percentage points.

Figure 3. Participation rates for male population 15 years and over in Japan and Finland in 2005, per cent of the relevant population



Source: Japanese Working Life Profile 2006/2007, Finnish Labour Review 2/2007, statistical annex

Figure 4. Participation rates for female population 15 years and over in Japan and Finland in 2005, per cent of the relevant population. (Source: Japanese Working Life Profile 2006/2007, Finnish Labour Review 2/2007, statistical annex).



The female labour force participation rates are mostly in favour of Finland. Finnish females aged 30–59 are clearly more in the labour market than their Japanese sisters. Elderly Japanese women have higher rates than Finns do, but the difference is not very large. There has been a very impressive longer-term increase in the participation of Japanese women in the last 30 years. In Finland, a peak of over 90 per cent participation has been reached for 45–49 year-old females.

Table 1. Labour market balance 1990-2004, selected years

	JP 1990	JP 1995	JP 2000	JP 2004	FIN 1990	FIN 1995	FIN 2000	FIN 2004
labour supply								
working- age population (15-64 years), millions	85.90	87.17	86.22	85.08	3.36	3.41	3.46	3.49
labour force (15-64), millions	63.84	66.66	67.66	66.42	2.57	2.47	2.58	2.58
participation rate ¹² (15-64), %	70.1	71.5	72.5	72.2	76.5	72.3	74.3	73.8
participation rates for (15-24), %								
males	43.4	48.0	47.4	44.0	58.1	43.0	50.4	47.4
females	44.8	47.2	46.6	44.3	56.9	39.5	51.1	48.7
participation rate (55-64), %								
males	83.3	84.8	84.1	82.5	47.1	44.6	48.1	55.7
females	47.2	48.5	49.7	50.1	40.8	41.9	45.2	54.3
labour demand								
employed, millions	62.49	64.57	64.46	63.29	2.49	2.09	2.33	2.36
part-time employment, % of employment	19.2	20.1	22.6	25.5	7.6	8.7	10.4	11.3
balance								
employment rate (15-64), %	72.7	74.1	74.8	74.4	74.3	61.3	67.2	67.5
unemployment rate, %	2.1	3.2	4.7	4.7	3.2	15.4	9.8	8.8

Source: OECD Labour Force Statistics 1984-2004 (2005)

The Japanese working-age population has already started to decline, whereas the opposite trend is still going on in Finland. The participation rates for young people are somewhat higher for Finland, both for males and females in 2004. The Japanese participation pattern for young people seems to have been more stable across years than the Finnish one, as Finland has experienced heavy economic and labour market changes in the past. For the elderly labour force, participation rates for both Japanese men and women are higher in the age groups between 55 and 64 years than the respective Finnish ones, with the exception of females in 2004. For the aged females in both countries, the participation rates have a rising tendency. There is also a very clear difference in male-female participation rates in this age group between countries: the male rate in Japan is over 30 percentage points higher than the female rate, but in Finland there was practically no difference in 2004. So the outcome for the elderly population is quite peculiar: the

¹² Participation rates based on the first two rows of this table would produce much higher rates than presented here.

Finnish 55–64 year-old females participate slightly more than their Japanese sisters, but Japanese males have extremely high participation pattern in the 55–64 year-old population compared to the relatively poor performance of Finnish males. Part-time employment is more common in Japan and this working-time pattern is heavily concentrated in the female employees. The employment rate in Japan is higher and the unemployment rate much lower than in Finland. However, the shortage of labour will put pressure on lower unemployment and climbing employment rates for both countries in the years to come.

Table 2. Part-time work, fixed-term contracts and temporary work agency workers in Japan and Finland, % of the employed

Year	JP 1. part-time work, % ¹³	FIN 1. part-time work, % ¹⁴	JP 2. fixed-term contracts, % ¹⁵	FIN 2. fixed-term contracts, %	JP 3. temporary work agency workers, %	FIN 3. temporary work agency workers, %
1998	21.2	11.4	n.a.	17.4	1.4	n.a.
1999	21.8	12.1	n.a.	16.8	1.7	1.4
2000	20.0	12.3	(13.1)	16.3	2.2	1.7
2001	22.9	12.2	n.a.	16.4	2.7	1.7
2002	23.2	12.8	15.5	16.0	n.a.	2.0
2003	23.0	13.0	n.a.	16.3	2.0	2.0

Sources: Labour situation in Japan and Analysis 2004/2005, 18; Year Book of Labour Statistics (2003); General Survey on Diversified Types of Employment (1999 and 2003 editions) Employment in Europe 2004 (2004, 261); Ministry of Labour (2004, 2); Finnish Labour Review 4/2004, The Special Survey of the Labour Force Survey (2000), The Employment Status Survey (2002).

In Japan it is very common for females to take part-time jobs, e.g. in 1999 it was five times as common as for males¹⁶, whereas in Finland the part-time rate for females was only double that for males¹⁷. Despite the differences in the definition for part-time work, it is much more common in Japan compared with Finland. This is very much caused by the full-time work often taken by Finnish women.

Temporary work agencies have approximately the same relevance in both countries with the share of employment varying between 1 and 2 per cent of the em-

¹³ Part-time workers in Japan are those working less than 35 hours a week.

¹⁴ Part-time workers in Finland are those who consider themselves as part-timers. In practice, part-time workers cover people also working more than 30 hours a week on average.

¹⁵ The share of fixed-term contracts for Japan is based on the Special Survey of the Labour Force Survey (2000), which was carried out in 1992, 1997 and 2000 and the Employment Status Survey (2002), which was carried out in 1992, 1997 and 2002. In 1992 and 1997 the estimates based on the Employment Status Survey were 0.8 and 0.7 percentage points higher than those based on the other survey, so the figures for 2000 and 2002 are not strictly comparable and the figure for 2000 is presented in parentheses. The definition is based on all temporary employment not exceeding the duration of one year.

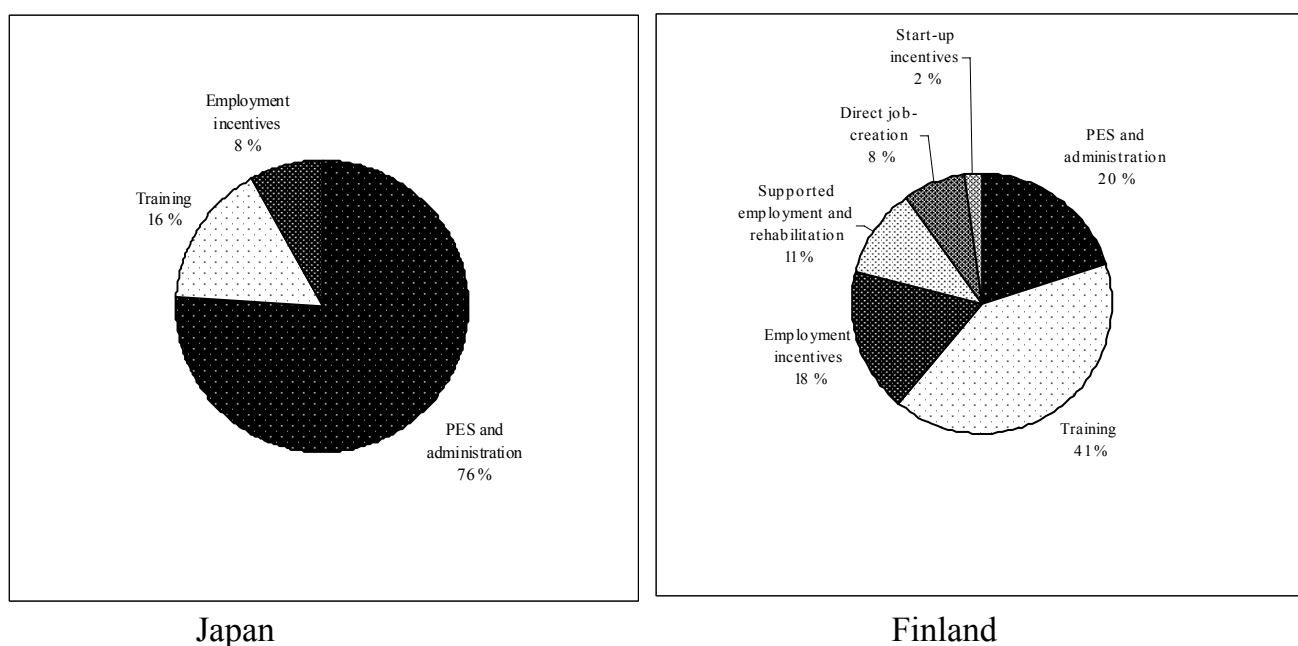
¹⁶ Labor Situation in Japan and Analysis 2004/2005, 20

¹⁷ Employment in Europe (2004, 261).

ployed population. A slightly increasing trend has occurred during the last few years.

In Finland the main form of atypical kinds of work is the application of fixed-term contracts. There has been only a very slight variation in the intensity, which was between 16 and 17 per cent of the employed between the years 1999 and 2003¹⁸. In Japan the corresponding figures are available only for a couple of years, but the majority of “non-regular” workers are part-timers with fixed-term contracts, also having a relatively large share of employment¹⁹. The main forms of atypical kinds of work are different between the countries with Japanese employers and employees applying more part-time work and the Finnish ones more fixed-term job contracts. These fixed-term contracts are very common, for example in the Finnish public sector, such as universities, health care and social services. In Japan it is the trade and service sectors that apply non-regular types of jobs most often.

Figure 5 a and b. Distribution of active labour market policy programmes in Japan (a, left) and Finland (b, right) in 2005 (2005-06 for Japan) as a percentage of GDP (Source: OECD 2007, 271, 273)



¹⁸ Employment in Europe (2004, 261).

¹⁹ The Employment Status Survey and the Special Survey of the Labour Force Survey, see also Labor Situation in Japan and Analysis 2004/2005, 20; General Survey on Diversified Types of Employment (1999 and 2003)

The Japanese labour market policy relies heavily on the PES as three-quarters of the spending is allocated in this way. The Finnish active labour market policy spending is a training and employment subsidy oriented by nature. The Japanese labour market policy is based on information services, job-broking and vocational counselling, which are lighter measures than those usually applied in Finland. The other active measures in Japan are only of minor importance. The total GDP share allocated to the labour market policy equalled 0.68 per cent for Japan and 2.79 per cent for Finland in 2005. The resources allocated to the PES and administration are on relatively the same level in both countries, 0.18 per cent for Finland and 0.19 per cent for Japan.

Japan spends 0.44 per cent of the GDP on passive measures, whereas the corresponding figure for Finland was 1.90 per cent in 2005. The Finnish unemployment benefit system is more generous and has a higher coverage than the Japanese one and the almost double incidence of unemployment in Finland causes the rest of the difference.

3 State of employment policies in the first years of the 21st century

This part of the paper discusses the current employment policy tendencies in Japan and Finland and focuses on the recent years. Of special interest are issues on labour market policy measures for young people and elderly workers as well as relevant pension reforms. The discussion starts with an in-depth description of both countries, followed separately by a comparative part that applies the interviews with experts that was made for this study.

3.1 Japanese employment policies²⁰

Measures for Elderly Workers

The rapid ageing of Japan's population is a recent phenomenon, as yet unobserved anywhere else in the world. From 2000 to 2010, it is expected that the number of young people who are 15 to 29 years old will decrease by more than 6 million, and the number of elderly people over 60 years old will increase more than 8.5 million. In terms of total population, approximately one person in three will be over 60 years of age, while in the labour force that ratio will be approximately one person in six (2015). Also in 2007, the baby boom generation was entering its sixtieth decade. One additional problem is a widening regional divergence in employment, which has led to more decentralised employment policies (see Ito 2008, 88–91).

To maintain socio-economic vitality under these circumstances, it will be necessary for as many elderly people as possible to take an active part in supporting society and the economy. To realize this in the future, one will need to create a society in which motivated and able persons can continue to work, regardless of age. Asao (2007) emphasises the gradual retirement process of the Japan Baby Boom Generation (*Dankai No Sedai*), for example first making a transition from a regular employee to a contract worker and then working with shorter hours.

Recognizing the above situation, the government revised the Elderly Persons Employment Security Act in 2004, to ensure employment opportunities until 65 years of age, and to promote re-employment for the middle-aged and older working population, among other measures.

²⁰ This part of the study is mainly based on Labor Situation in Japan and Analysis: General Overview 2006/2007 (2006). For a more in-depth presentation on the long-term developments of Japanese working life, see Koshiro (2000).

The revised Elderly Persons Employment Security Act aims to ensure stable employment opportunities for elderly persons by obliging employers to ensure employment opportunities until 65 through one of the following: raising the retirement age, introducing a structure for continued employment, or abolishing the retirement age²¹. In addition, the law aims to enhance measures to promote re-employment for middle-aged and older workers (45 to 65), and enhance measures to ensure temporary or short-term employment opportunities for retirees and other persons.

Of the revised regulations of the Law, one concerning the promotion of re-employment for middle-aged and older workers went into force from December 1, 2004, and another one concerning the securing of employment opportunities for older persons up to the age of 65 was set to go into effect from April 1, 2006.

In accordance with the passage of the revised Act, from the fiscal year 2005 onwards, the following measures for promoting employment in the elderly population have been prioritised.

Securing Employment for Persons Up to the Age of 65

In order to anticipate the smooth enactment of the Act, employers were provided with aid and guidance by the public employment security offices (PESO), which are engaged in awareness-raising activities.

From the Fiscal Year 2005, in order to promote employment for persons up to the age of 65, the Project for the Employment of Older Persons up to the Age of 65 has been implemented, which offered advice and guidance through business owners' associations concerning revisions to wage and personnel systems and the promotion of continuous employment structures.

In addition, subsidies were provided to promote the adoption of continuous employment practices, aimed at employers who have raised their retirement age, and introduced a system of continuous employment.

Promoting the re-employment of Middle-aged and Older Workers

In order to promote the re-employment of middle-aged and older workers, guidance and awareness-raising activities were provided, mainly at the public employment security offices, concerning career consultations for middle-aged and

²¹ The alternative "abolishing retirement age" is mostly present in small-sized companies, which do not often recruit new workers, but where the elderly workers continue working. The alternative "introducing a structure for continued employment" is a strategy most often present in large and medium-sized companies, which often tend to replace elderly, high-cost workers by young, lower-cost workers and select only some elderly workers to continue working. See the appendix for a detailed econometric estimation of the company-level structure for the elderly to continue at work.

older workers, job introduction and searching for candidates, and relaxing age restrictions for candidates.

In addition to guidance being provided to business owners, they were also provided with consultation services and assistance for the establishment of re-employment support measures, and subsidies were provided for those who had already put such measures in place.

Regarding the re-employment of middle-aged workers, such as the heads of households, for whom re-employment is particularly urgent, re-employment support has been implemented in the form of the active promotion of trial employment with the aim that workers will be able to make the transition from trial employment to regular employment.

Promoting Diverse Work and Social Participation for the Elderly

In order to respond to diverse employment and job needs for people in advanced years Silver Human Resources Centres have been promoted, which provide local community-based work for elderly persons who desire to do temporary or short-term or other light jobs after their retirement. In addition, Silver Human Resources Centre members implement various childcare support projects, including caring for infants and taking children to and from childcare facilities. Furthermore, in co-operation with business owners' associations and Public Employment Security Offices, at the Federation of Silver Human Resource Centres, Senior Work Programmes are carried out which sponsor skills training, group interviews etc. in an integrated manner. (As of the end of March 2005, there was a total of 1,820 Silver Human Resource Centres with approximately 770,000 members.)

Development of recruitment opportunities and job interview sessions designed to meet the diverse needs of the elderly are carried out in tandem with activities to inform business owners of the advantages of employing elderly workers. Such steps are implemented particularly in areas where there are large numbers of retired workers as parts of the overall activities for the establishment of a society where people can work even after 65 years of age.

Moreover, in the event that three or more persons over the age of 45 jointly launch a business, support is given to those middle-aged and elderly entrepreneurs who are using their experience to employ middle-aged and other persons, and establish and operate a continuous employment policy, by subsidizing a part of the cost of the business launch.

Effect of the Revised Elderly Persons Employment Security Act

As has already been said, the government revised the Elderly Persons Employment Security Act to oblige employers to ensure stable employment opportunities for elderly persons up to the age of 65. Following the implementation of the revised Act, the Tokyo Labour Bureau made inquiries about how employers responded to it in June 2006.

Figure 7 shows the result of the inquiries. Six thousand five hundred and twenty enterprises, which formed part of the 7,660-sample size, responded to a questionnaire on how they reacted to the revised Act. The response to ‘Introducing a structure for continued employment’ occupied a large part (91.5%). One can find that many employers continued the employment strategy for elderly persons against the revised Act. (See also the appendix for multinomial logit estimations “Modelling company level structure for the elderly to continue working in Japan”.)

Next, in the case of introducing a structure for continued employment, at what age do employers restrict the upper age of continued employment? Figure 8 reports it. Most employers answer that the upper age of continued employment is ‘65 years old’, which occupied 63% of all responses. Following the revised Act to ensure employment opportunities until the age of 65, around two thirds of enterprises put the upper age of continued employment at 65. Although ‘63 years old’ (16%) and ‘62 years old’ (10%) follow 65 years old, these enterprises will have to raise the upper age to 65 to keep pace with raising the starting age of pension payments until 2013.

And then, are all employees who desire to work until the upper age of continued employment able to do so? Only a third of enterprises answered ‘All of desired employees’. The other two-thirds replied: ‘Not all of desired employees’. We can find that enterprises do not necessarily let all their elderly workers who would like to work until the upper age do so.

Figure 6. *Employers' Reaction to the Revised Act*

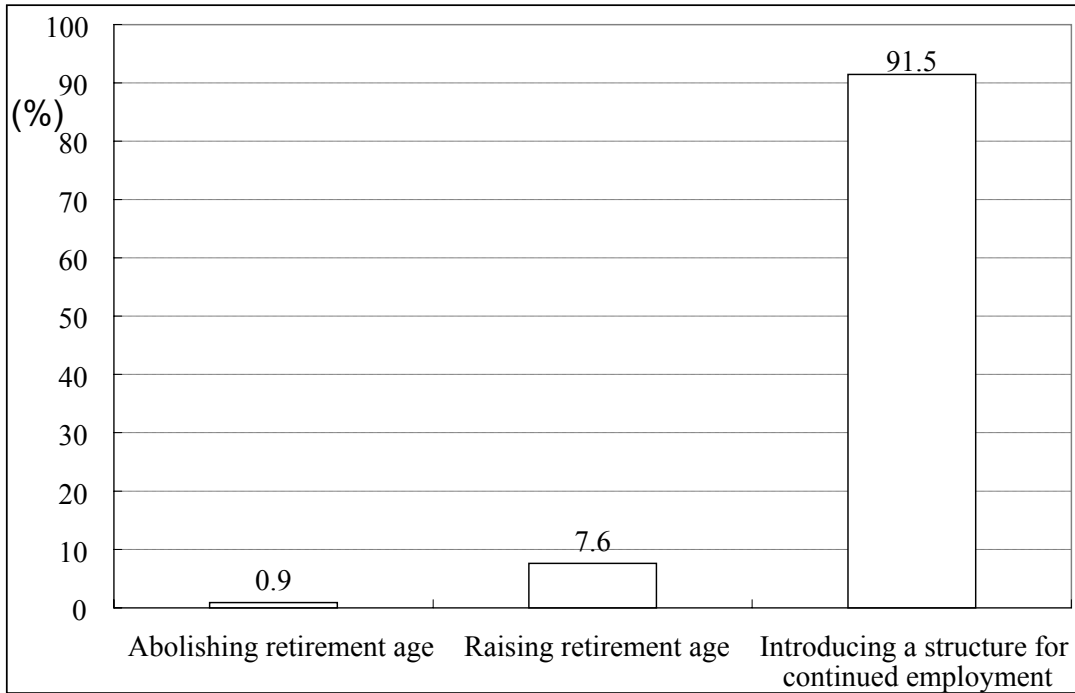
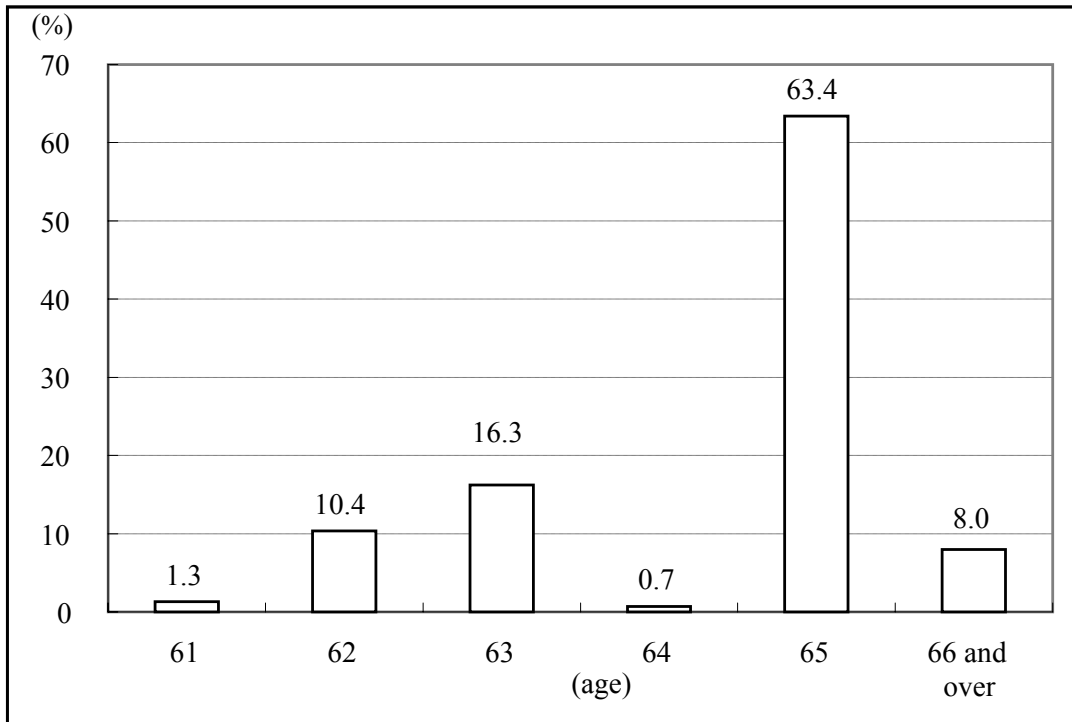


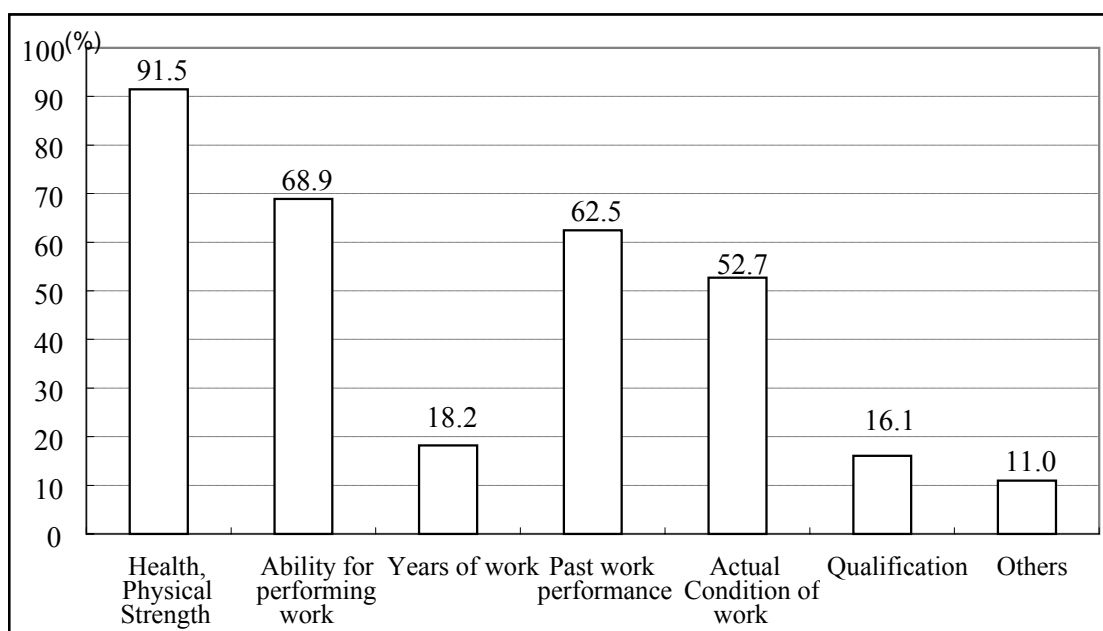
Figure 7. *Upper Age of Continued Employment*



Though two-thirds of enterprises which adopted the alternative of introducing a structure for continued employment answered: ‘Not all of desired employees’, we may ask what criteria enterprises adopt as to whether or not employees who would like to continue to work until the upper age could do so.

Figure 9 indicates results of the criteria for continued employment imposed on employees who would like to continue to work. The most frequent reply is ‘Health, Physical Strength’ (92%). One may find that many companies think that health or physical strength is the most important factor among the conditions of whether or not employees are selected to continue to work. The following are ‘Ability to perform work’ (69%), ‘Past work performance’ (63%) and ‘Actual condition of work (e.g. whether or not one has absence without leave)’ (53%).

Figure 8. *Standards for Continued Employment (M.A)*



Employment Measures for Young People²²

Against the backdrop of changes such as in the perception of young people as regards work, as well as the changing personnel needs of corporations, the current employment environment surrounding young people stands in a severe condition. While the unemployment rate is rising at the high rate of 8.7% (in 2005), at the same time the numbers continue to rise as compared with the period before for job-hopping part-time workers – “freeters” – who do not work as full-time employees but are engaged instead in employment models such as part-time

²² A more detailed description of Youth Employment measures is presented in the appendix.

work, and for people not in education, employment or training (NEET), numbering, respectively, 2.01 million and 640,000 (in 2005). In addition to the obvious influence that the continued existence of this situation will have by causing a hindrance for young people themselves in accumulating occupational skills, it will also have major repercussions for the economy and social security of Japan in the future. Due to this, there is a need to swiftly understand measures to meet the situation.

Youth Independence and Challenge Plan

Taking into account the present scenario of a rise in the number of freeters and young people who are not employed or are between jobs, the Youth Independence and Challenge Plan was formulated in June 2003, at the Strategy Council to Foster a Spirit of Independence and Challenge in Youth that comprises all the ministers concerned. The objective of this was to stimulate the desire for working amongst young people, while also at the same time to reverse the trend in the rise in the number of unemployed young people by promoting the occupational independence of all motivated young people.

The Action Plan for Youth Independence and Challenge was formulated in December 2004 in order to raise the effectiveness and efficiency of this plan. Based on this, the government has been collaborating closely with the Cabinet Office and relevant ministries and is in the process of promoting comprehensive measures to raise young people's motivation to work as well as their capabilities.

Specifically, the government is involved firstly in commissioning the organizing of seminars for employment and introducing work opportunities through collaborative efforts with the Public Employment Security Offices at the One-Stop Services Centres for Youth (usually referred to as Job Cafés) that are set up through the proactive initiatives undertaken by the various local governments.

Secondly, in order to support the job attainments of unemployed young people, starting especially with those with inadequate work experience, expertise or knowledge, such as freeters or school/university graduates with no employment, the government is involved in trying to lessen the gap between the standards of abilities that are demanded by companies and the present conditions of young people by means of short-term trial employment. While ascertaining their aptitudes and the question as to whether the work can be followed through or not, implementing the Trial Employment Project for Youth attempts to encourage a shift to regular employment after the completion of the trial employment.

Thirdly, there is implementation of the Japanese-style dual system of education that links on-the-job experiential training and classroom education.

Fourthly, there is implementation of “*Wakamono Jiritsu Juku*” (School of Independence for Young People) that targets NEET and other young people to evoke and improve their confidence and motivation to work through a training camp involving vocational training and work experience.

Fifthly, regarding the employment problem of young people, the government is promoting a National Campaign to Increase Young People’s Human Capabilities, where the economic world, labour circles, the world of education, the mass media, local communities and the government come together to endeavour, with the purpose of raising the interest of all the various segments of society regarding the problem, to infuse young people with a sense of significance regarding work and to improve their capabilities and motivation to work.

In addition to this, taking into account the fact that the number of freeters was increasing by approximately 100,000 every year, in May 2005 the government set a target to shift 200,000 freeters each year into regular employment, and has developed the Plan to Find Permanent Employment for 200,000 Freeters with the purpose of improving all the employment support measures to their maximum effectiveness. In the fiscal year of 2006, the target figure of the plan for shifting freeters into regular employment was raised from 200,000 to 250,000, based on the revised version of the Action Plan for Youth Independence and Challenge (Strategy Council to Foster a Spirit of Independence and Challenge in Youth, January 2006). Together with taking steps to enhance and strengthen employment support, the government will co-ordinate closely with municipal authorities, health and welfare agencies and educational institutions, such as NEET, in order to raise young people’s capabilities and motivation to work, and will continue to take measures such as setting up Community Youth Support Stations to support the occupational independence of young people, such as NEET.

3.2 Finnish employment policies

Economic policy and taxation

Finnish employment policies are based on the fairly solid co-ordination of economic policies and more strictly targeted labour market policy measures. In recent years, fiscal policies have remained relatively stable, while changes in labour taxation and social security are more often based on employment policy considerations as well. Concerning the more targeted policy measures, the Finnish Public Employment Service is relatively well resourced with several active labour market programmes available. A variety of employment services are provided on an open access basis, whereas others are more selective, as the active programmes are. Most programmes are not targeted at some special groups of people, as selectivity is applied within these broad programme frameworks.

Labour taxation has been eased since the recession years of the 1990s. The overall tax to GDP ratio was still one of the highest in Finland among the EU25 countries in 2004 (almost 45 per cent). However, the tax wedge on earned income was not much higher than the EU average in 2005²³. Social security reforms since 1996 have also had relevance from the employment policy perspective, especially in creating better work incentives and in easing employers' contributions in the most depressed regions of the country. Evidence of the employment effects of taxation is scarce and at least partially inconsistent. For example, the incentive reforms of the 1990s seem to have fostered labour supply²⁴, but the regional employer tax exemption experiment did not prove to have produced any employment effects²⁵. A major pension reform came into force from the beginning of 2005 and provided a flexible pensionable age for all employees between the ages of 62 and 67, supported by high economic incentives if they remained longer in employment. In addition, the changing population structure has been taken into account in this reform by the creation of a lifetime coefficient to ensure the sustainability of this partially funding pension system. The fundamental idea is to support people to stay longer at work as the population ages and labour resources become scarcer.

Labour market policy and unemployment

The Finnish labour market policy relies quite heavily on labour market training measures as a stock of over one per cent of the labour force participate in training measures. The employment subsidies and direct-job-creation were the other major programme categories. Private sector subsidies form a major part of the employment subsidies, but municipal jobs also apply subsidies from the state as well. Trainee work in various forms is also a relatively important active labour market policy programme category. A total stock of 3.2 per cent of the 2006 labour force participated in active LMP measures and, as many of the programmes are of relatively short duration, the total flow figures participating in these programmes during one year are much higher. The main ideas in the Finnish LMP programmes are to foster the better functioning of the labour market and to help some groups of job-seekers to cope better in the labour market. These groups include the long-term unemployed, young people, immigrants and people with disabilities. However, all job-seekers can apply for these programmes and participate within the limits of the available resources. In training measures, for example, not all participants are unemployed. Serving the employers that recruit the applicants has become more and more important, as the labour market is becoming tighter.

²³ Finnish Economy, Structural Indicators (2006)

²⁴ Laine - Uusitalo (2001)

²⁵ Korkeamäki - Uusitalo (2006)

Figure 9. Breakdown of labour market policy measures in 2006 by type, stock as a percentage of the total labour force (Source: Finnish Labour Review 2/2007, statistical annex)

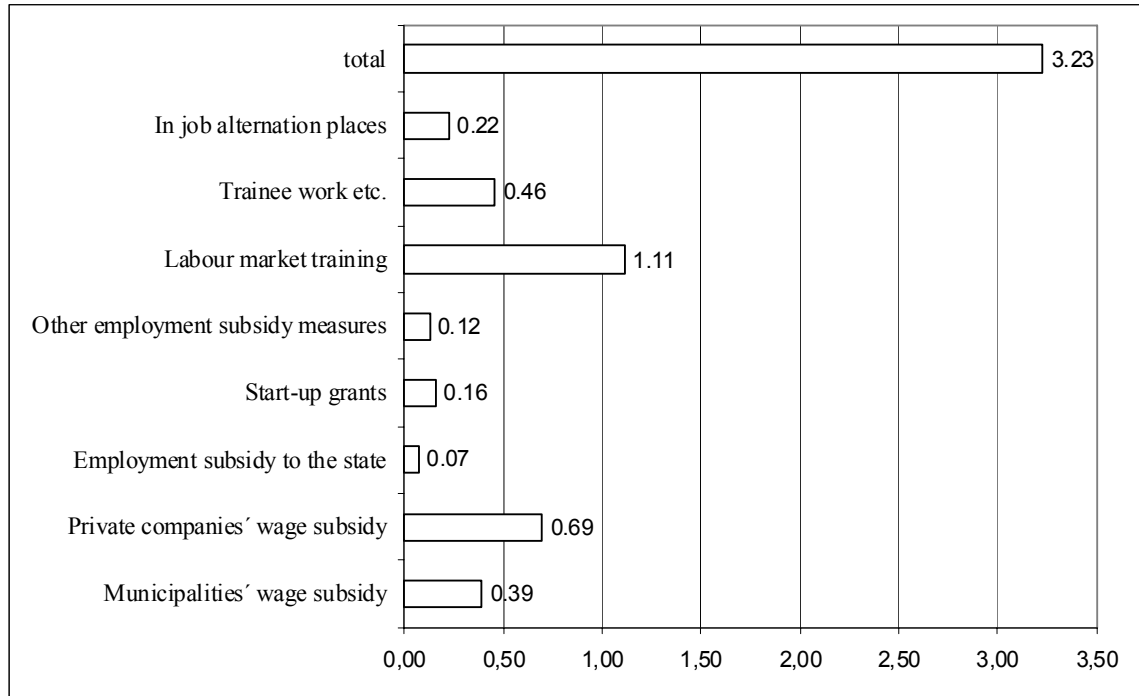
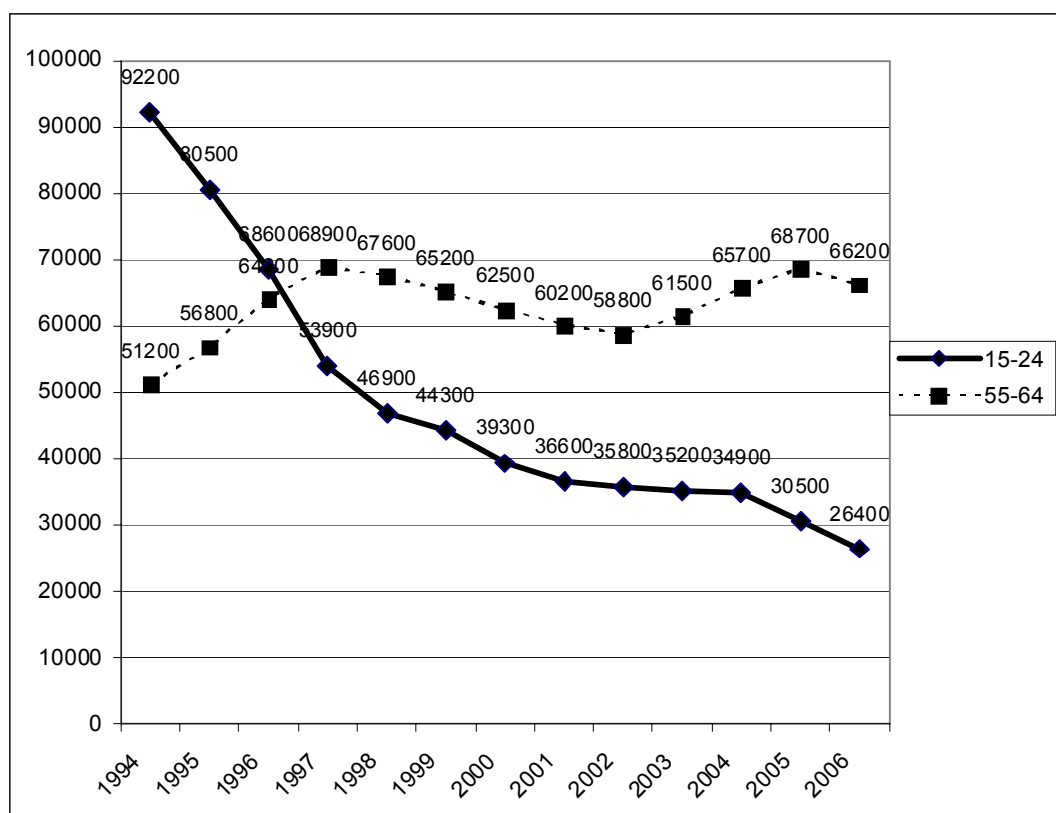


Figure 10. Young and elderly unemployed people in Finland in 1994–2006
(Source: Ministry of Labour Statistics)



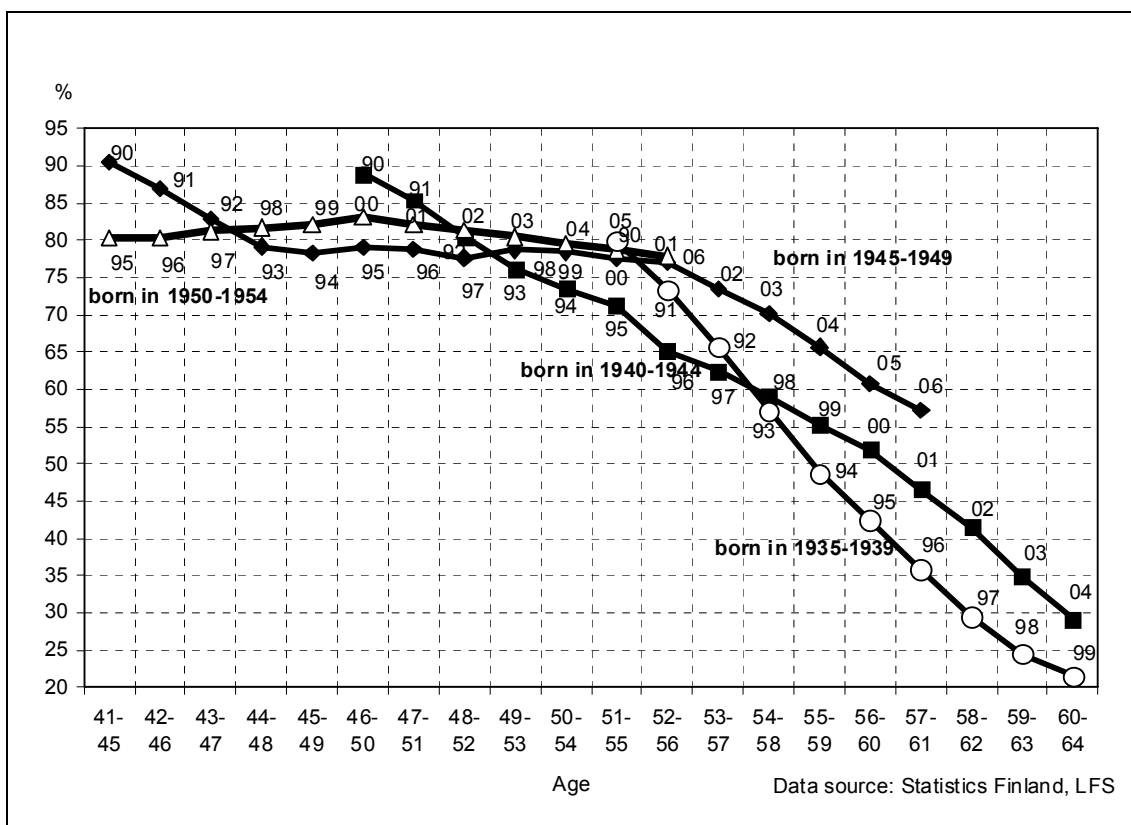
The development in unemployment between the young and elderly people is very different in character. Not much positive development has happened regarding the number of elderly unemployed people for many years, but the labour market situation of young people has already been remarkably improving for several years. As the employment rate of the elderly has also greatly improved in Finland, this underlines the differentiation of the labour market for the elderly: those who are employed work longer than before, and those who are unemployed are not likely to find jobs. The positive development among the young people has taken place mostly because of the improved general labour market situation and young people's better qualifications. The regular education system and various labour market policy measures like labour market training, practical training, subsidised employment and apprenticeship-training measures have contributed to the decrease in the unemployment of young people. With a high demand for skilled young people in the Finnish economy, there are simultaneous labour market problems, especially for school drop-outs.

Recruitment of new labour has been at a relatively high level during the last few years. In 2006 a total of 488,000 job vacancies were reported to the Finnish Public Employment Service. The market share of the PES in the external recruitment

of all Finnish companies was 67 per cent, which indicates that the total annual volume of recruitment would have been some 616,000 job vacancies. In relation to the labour force, this figure represents over 23 per cent. This sounds a very high share, but one must keep in mind that some of the jobs are only temporary and short-term, so this does not indicate that almost a quarter of the labour force will be replaced either because of outflow from the labour force or because of turnover. Anyway, the PES has a relatively high share of all recruitment in Finland, but not as many vacancies are really filled by PES job-seekers. This is caused by the common practice of Finnish employers to use several recruitment channels, more than two simultaneously per vacancy.²⁶

Employment of the elderly

Figure 11. Comparison between the employment rates of baby boom 5-year cohorts (those born in 1945–1949) and the two preceding cohorts (those born in 1940–1944 and 1935–1939) and the following cohort (those born in 1950–1954) at the same age (by Ilkka Nio, Ministry of Employment and the Economy)



²⁶ Hämäläinen (2007), Ministry of Labour statistics

As the figure above demonstrates, the younger 5-year cohorts are more employed than the preceding cohorts were at the same age. For example, if we take the 5-year cohort born in 1935–1939, those people had an employment rate of 36 per cent in 1996, but for the next cohort (born in 1940–44) the figure was 46 per cent in 2001 and for the next cohort (born 1945–1949) 57 per cent in 2006. It seems to be a systematic trend that younger cohorts stay longer in work than people used to do earlier at the same age. This also gives an estimation that the employment rates for the elderly population will increase in the coming years. This is also one of the main labour supply reserves for Finland in the medium term. The main reasons for this development are probably the changes in working life, the capability, educational attainments and health of the elderly population. The policy changes may also have an effect on this development, e.g. the incentive structure in the unemployment benefit system for the elderly unemployed has been changed, early retirement systems have become stricter to enter in general and the old-age pension system has been reformed. For the elderly unemployed, it has been possible in Finland to receive earnings-related unemployment benefits without the regular maximum duration of 500 benefit days. The age limit to enter this so-called “unemployment tunnel” finally leading to the unemployment pension has been raised twice, first from the minimum age of 53 years to 55 years in 1997 and, again, up to 57 years in 2005. These reforms decreased the risk of unemployment for aged people, which has been remarkably higher from the beginning of the minimum age to enter the unemployment tunnel system. For younger employees, this system has ceased to exist. Haataja (2007, 21–5) has modelled elderly people’s probability to stay in employment for the years 2003–2004. The probability to stay at work decreases rapidly at the age of 56–57 in comparison to those aged 50–51. Aged persons having had a high level of education and living in urban areas were more likely than others to stay at work. A special low-wage earners’ subsidy system came into force in January 2006. An employer is not obliged to pay certain taxes if it employs a person at least 54 years of age with a salary of between 900 and 2,000 euros a month.

Preparation for ageing has already been an important issue within Finnish society for many years. Several official documents, government committees and working groups in various ministries with the contribution of relevant research have addressed ageing issues from many sides²⁷. This work has also reached certain important milestones. Awareness of the changing population structure is at a high level in society. The Finnish national pension system has been reformed in a quite radical way: an individual employee can choose when to leave working life for a pension within the limits of 62 and 67 years of age. Basically, one can get a full pension at the age of 63 and the benefit is lower if one leaves earlier and vice versa. The incentive to continue working is also economically relatively high

²⁷ See, for example, Ilmarinen (2006), Parjanne (2004), Rantala – Romppanen (2004) and ”Preparation for the change in age structure” in Finnish in *Ikärakenteen muutokseen varautuminen* (2006).

regarding the future pension one receives. The way of thinking behind this reform is to foster longer working careers.

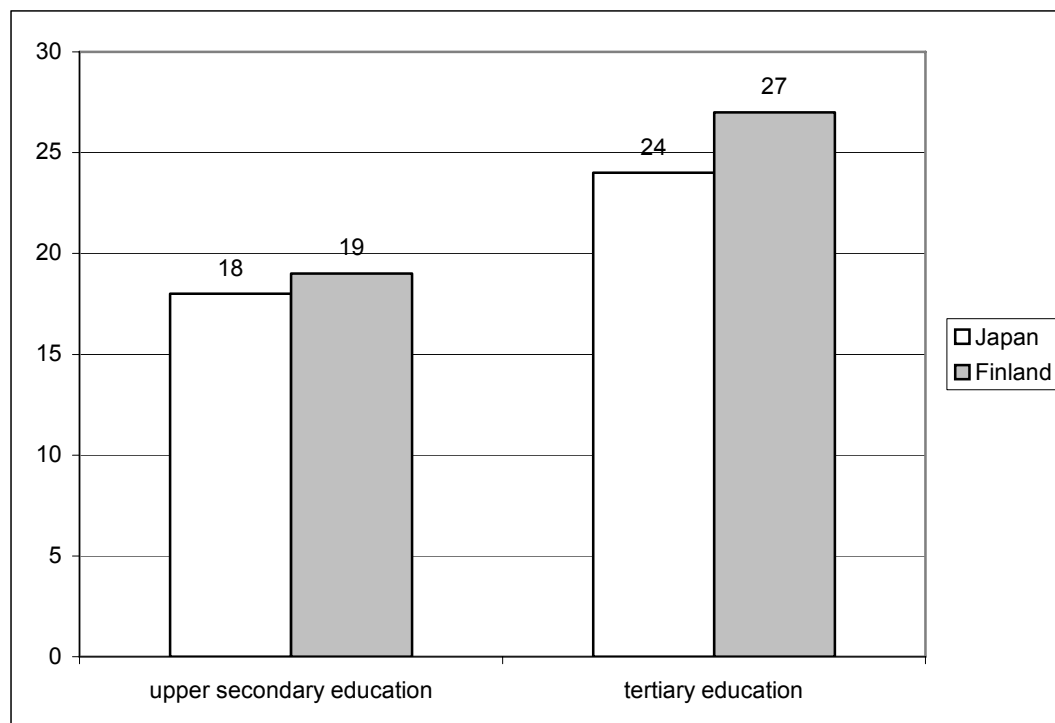
The Finnish Centre for Pensions has developed a formula for calculating the probability for the expected effective retirement age, which is independent of the age structure of the population²⁸. The expected effective retirement age was 59.5 years of age in 2006 calculated for age 25 and 61.5 years calculated for age 50. In the last 10 years, these figures have risen by 0.5 years for the age of 25 and 0.9 years for the age of 50. The development has been very positive and this is expected to continue, which is also demonstrated by the cohort figure above.

Entry into the labour market

As the participation rates for young people decreased rapidly in the recession years of the 1990s, the recovery also created new job opportunities for young people. Since the recession from 1994 to 2006, the participation rate for the 15–64 year-old population has increased by 2.8 percentage points (74.7% in 2006) and for the age group of 15–19, the increase was 5.5 percentage points; for 20–24 it even reached 8.1 percentage points and for 25–29 3.1 percentage points (Finnish Labour Review 2/2007, statistical annex). So young people participate more in working life as labour demand has improved. In any case, young people are more flexible in their participation patterns than other age cohorts in relation to the labour market situation. There also exist trade-offs between education and work, even if in tertiary education some six out of ten students also have a job (which is often part-time). Lowered labour taxation in relation to the relatively stable benefit levels have also created better economic incentives to work and these kinds of measures are usually effective for young people who can really make a choice between work and education or the optimal mix of those two.

²⁸ The effective retirement age in the Finnish earnings-related pension scheme (2007, 29)

Figure 12. Typical graduation ages in upper secondary and tertiary education in Japan and Finland (Source: OECD 2005, Finnish Economy; Structural Indicators (2006)).



The entry into the labour market is at the other end of the lifespan, but is relevant to the issue of ageing. In Finland, graduation usually takes place at an older age than in other countries. However, the whole difference between the graduation ages of secondary and tertiary levels is not spent on tertiary education, but on other education or in gap years when at work or applying for a certain study place one desires. The typical gross time in which to take a tertiary degree is, however, eight years in Finland and six years in Japan. Some years ago, the typical graduation age for Japanese tertiary-level students was as low as 22 (Finnish economy; Structural indicators 2005 (in Finnish)).

Taking the whole of the Finnish labour market situation into account, it is clear that development for the elderly population is very positive in terms of remaining longer at work. On the other hand, the degree-taking age for young people is extremely high in Finland. As more young people than before now take the tertiary degree, the educational attainment of the population and labour force is increasing, but this development also sets limits for earlier entry into the labour market. This puts further pressure on continuing working longer at an older age.

3.3 Comparative perspectives

The interview method

In order to get behind the figures more deeply and to understand the policies, similarities and differences between the two countries better, we interviewed four high-level experts for this study. The persons interviewed in Finland were high-ranking civil servants from the two relevant ministries, the Ministry of Social Affairs and Health and the Ministry of Labour²⁹. In Japan the interviewees were high-ranking researchers from a government research institute, the Japan Institute for Labour Policy and Training, but both were dispatched from the Ministry of Health, Labour and Welfare at the time of the interview. In terms of expertise, the interviewees could describe the situation in their country well. However, in terms of background, the Finnish interviews were better representatives in relation to government policies and its intentions than the Japanese interviewees. All the interviews were carried out in autumn 2006. The Japanese experts were interviewed by a Japanese researcher and the Finnish ones by a Finnish researcher; both researchers used exactly the same questions (see the appendix). In Finland the interviewees were given the questions in English, but the interviews were conducted in Finnish. In Japan the interviews were done in Japanese. There may be a lack of accuracy caused by translations.

Next, we will report the outcome of the interviews theme by theme, giving first a brief comparative summary of the theme and then more detailed comments provided by the interviewees.

Main effects of ageing population

The persons interviewed in both countries mentioned the increasing pension burden and the decreasing magnitude of the labour force. However, the problems were considered more serious in Japan, which is also consistent with the developments based on the statistical review. The Finnish interviews dealt with the ageing population issues from many aspects, which also implies that these issues have been thoroughly addressed in Finnish discussions and policy-making.

The Finnish interviews emphasised the effects of ageing throughout the whole of society. It has broad economic, social, cultural and political effects. There are effects on the dependency ratio, cost effects on social and health care and pensions. The working age population should be employed as much as possible and the real number of years in the labour force should be increased. Ageing has effects on several factors like citizens' consumption patterns: they will be trans-

²⁹ A new Ministry of Employment and the Economy was founded on 1st January 2008, combining the former Ministry of Labour and Ministry of Trade and Industry and, in addition to these, one division from the Ministry of the Interior.

formed towards the more elderly people where the purchasing power exists, it was mentioned. There will also be effects on the environment, different forms of housing, mobility and the supply of services. When difficulties regarding the ways in which to take care of the elderly population are faced, remarkable innovations will be found.

The baby boom cohorts born after the war are still of working age. At the beginning of 2000 the cohorts between 55 and 59 did increase because of this, but from now on the working age population will increase only among those over 60. The government's longer-term target to increase the employment rate to 75 per cent is impossible and the situation is totally different from the late 1980s when that level was almost reached, one interviewee stated. As the labour force participation of those aged 30–55 is most common, downsizing of this group will mean a great decrease in the number of employed people. The employment rates of those aged 60 to 64 are the lowest. Even the number of working-age people will increase in this group; employment will automatically go up only slightly. So the number of people aged 55 to 59 will decrease and the number of those aged 60 to 64 will increase, which means that the population with the lowest employment rates will increase. The working-age population will decrease after 2010, and labour resources will diminish even before that. This will make the shortage of labour more common and it will be more difficult to get foreign investments in future, as there will be problems with the availability of labour.

The average change may cause a false impression, as there are great regional differences in Finland, which may be much deeper, e.g. the increase in the costs of social and health care services. People live longer; the number of old people will rise, as will the heterogeneity of the elderly population. The question is not only about the aged people, but there will be changes in all age groups. The number of working-age population will decrease and the financial basis will be in danger. The birth rate is low and the number of children and young people will decrease. This means that the relative sizes between the various age groups will change; there will be a transformation from a three-generation society to a five-generation society. This change will be both a challenge and an opportunity; the aged will retain their capability to act for a long time.

The Japanese experts emphasised the pension burden and the labour force development behind this. They even used expressions like the collapse of the pension finances. That is caused by the increase in the number of elderly people who receive pension benefits and, by contrast, the decrease in the number of those who pay contributions to it.

In Japan, the share of aged people is growing faster than in other countries. According to a forecast concerning the labour force, the share of old people more than 65 years old in the total population will be 30 per cent in 2025 (its share was 20 per cent in 2005), and then 40 per cent in 2052. The labour force will decrease

further from now on, and it will be a tough problem for Japan to deal with the increasing pension burden, one interviewee comments.

Preparation for the effects of ageing

The general impression of the preparation issue is that Finland is relatively well prepared in comparison to Japan. However, there is still much to be done in both countries. One interesting point is that affecting attitudes was considered to be highly effective regarding the way people act in Finland. The future of the pension system is considered a central part of preparation in Japan. In addition, employment of aged people is an issue for Japan even at the high level already reached.

In Finland a pension committee in 1989 declared that one should stay longer in working life. However, there appeared no preparation for ageing. That issue came from the Age Committee in 1995–96 when it was first believed that Finland could not afford the policy of early retirement, but people would have to remain working longer in order to respond to the challenge of ageing. The means applied were gentle ones; the committee proposed to found a National Programme for Ageing Issues and also the main ideas for this work. Besides some legislative issues, the means were usually gentle ones like trying to have an impact on those attitudes and values that were found to be effective. The committee pointed out the problems, and the issues appeared on the agenda. In 2005 a major pension reform was carried out. It is considered to be very effective. As the change in Finland is so rapid, it is easier to make difficult decisions than in the rest of Europe, where development is slower.

Preparation for the changing age structure is better in Finland than in most other countries, one interviewee said. A variety of changes and plans have been made, e.g. public debt has been decreased, the pension system has been reformed, the funding of future pensions has been increased and there is a target to increase the rate of return on pension fund investments. Besides these, innovation policy is favoured, a higher employment rate is a target, and skills and competitiveness are fostered. However, the preparation so far has not been enough. The outcome of the changing age structure is not fully understood yet, as the change will come “in a gliding way”. More and more co-operation in the preparation of decision-making and implementation is required between different administrative sectors and, also at regional and local levels, preparation has to be done on a coordinated and long-term basis. Various uncertainties also have to be taken into account, a Finnish interviewee said.

In Japan a central part of the preparation is finding ways in which to deal with the collapse of pension finances. It will be necessary either to decrease the pension benefits or increase the pension contributions.

Secondly, promoting the employment of old people is needed in Japan. Aged people should be more often those who pay pension contributions and support the pension system. To do so, one should ensure that good jobs that exceed an agreed quality level could be given to old people with volition and high ability, and make use of them.

Thirdly, aged volunteers should be used more. Now, in Japan, many volunteers do unpaid work and their work is restricted to regional welfare work. Giving them incentives (by paying them actual expenses or some money) could promote their employment.

Best and worst elements of the preparations

There were no unanimously best and worst elements of the preparations in both countries according to the persons interviewed. In Finland the impact on the attitudes and taking the change seriously, as well as far-reaching reforms, were considered good elements of the preparations. In Japan the best element of the preparations was the promotion of employment of elderly people by legislative measures. The worst element in Finland could be that ageing is not always seen as a permanent change. In Japan the sustainability of the pension, medical insurance and elderly care finances are probably the worst element of the preparations.

Having an impact on the attitudes, gentle kinds of measures have been effective. The background is that Finland has had decades of a successful policy of early retirement and wasting the resources of the elderly. The same issue was dealt with at different levels like the government, the Age Committee, various ministries, the labour administration and workplaces. There were campaigns for the employers, and some entertainers made songs about it and so on. This was the basis, but it was not enough, of course. Attitudes will be important in the future, but that is not really enough. A change in attitudes was a precondition for the major pension reform. The worst element is the situation of the unemployed, where very little has been done.

It was also mentioned that the best element of the preparations is that the challenge of demographic change has been taken seriously in Finland. The challenges are well recognised and far-reaching reforms have been done. The Finnish Government's broad report on future issues for Parliament is unique by international standards with a great deal of effort behind it on ageing issues, too. The worst element is that not all people see this as a permanent change in the population structure, but rather a temporary phenomenon. The preparations have been considered quite often solely from an economic point of view; other effects have been given less consideration. Opportunities have not been assessed adequately.

In Japan, the best element of the preparations is a policy towards the promotion of employment of elderly people. For example, the mandatory retirement age of

60 years of age came into law in 1994. Later, companies were obliged to employ elderly people till they are 65 years of age, and the mandatory retirement age was raised, being connected with raising the starting age of pension benefit payment.

The worst element of the preparations includes pensions, medical insurance and elderly care insurance. The problems are the collapse of the finances. It was also considered that the worst element of the preparations is the policies towards the human resource development of elderly people and towards developing an ability evaluation system for them.

Where foreign impacts come from

There turned out to be a considerable difference between the countries in learning from others: the Finnish experts mentioned several relevant foreign influences in many policy areas, but the Japanese experts considered that there had been no foreign influences, as the Japanese situation is so different from other countries. Here we also face a kind of cultural difference.

One Finnish expert mentioned that the ILO has been working on this issue for a long time and so had the EU even before Finland did anything. General starting points concerning the ability to work, the ability to act and appreciation of the elderly have been found from these sources. Since then no other countries have influenced Finland. Finland has acted on its own. The encouragement of the EU is important. It was thought that Sweden had had an impact at least in the field of pension policy. The Danish employment policy model with rights and obligations is attractive. France and Italy have been examples of how we should not deal with pension policy issues, one Finnish interviewee said.

Japan is fast becoming an ageing society and the rate of elderly people who are more than 65 years old out of the total population is much higher than in other countries. This was mentioned as grounds for not having foreign impacts.

Broad employment policy targets in the medium term

An important medium-term target for Finland is to improve the situation of the elderly unemployed. The financing system of the incapacity pension also needs reforming. For Japan, the pension reform and the promotion of employment of the elderly are the most important targets mentioned in the interviews.

In Finland the aged unemployed have difficulties in entering working life and, if they do, they do not stay working for long. The employer has a real threat to be obliged to cover the costs of incapacity pension. Large employers have more economic responsibility, but even if small employers have a collective responsibility for these pension costs, they fear it more. It is a crucial point to make inca-

capacity pensions the collective responsibility of all employers. In addition, the activation rate of elderly people is low.

People with lower educational backgrounds and low productivity face problems; their unemployment problem has not been solved. Some people experiencing structural unemployment have lost their capability to enter the labour market, so they have problems in integrating into society, which makes it also a public economy problem.

For Japan, the pension reform is the most important target. Another is the promotion of employment of elderly people more than 60 years old.

Most effective measures

In Finland, one expert suggested reforming the incapacity pension system and some educational measures already applied; they were mentioned as the most effective measures. In Japan, the experts mentioned the same kind of “gentle measures” that were discussed earlier with the Finnish experts, like consciousness reform for large employers to introduce flexible working time patterns.

In Finland the most effective measure is to make the (incapacity) pension the collective responsibility of the employers. Not even major measures like increases in employment subsidies will help if this is not done.

For the most difficult cases there is rehabilitative work. Apprenticeship training is a good measure. School dropouts should be avoided. Closer co-operation between the Ministries of Education and Labour (currently the Ministry of Employment and the Economy) is important.

In Japan, furthermore, large firms will have to introduce flexibility of working time to promote the employment of elderly people and set up facilities to support elderly workers’ job efficiency.

In addition, promoting the employment of elderly workers is important. At the moment, the policy for elderly people is not targeted at those of 65 years old and over. Public job placement has to be targeted at those aged 65 and over. And then, by reforming the pension system, incentives for elderly people to have jobs should be promoted.

Shortage of labour

The main impression regarding this issue is that a shortage of labour is something that both countries are preparing for, but it has not been faced squarely yet.

In Finland, more attention has been paid to this issue. The Ministry of Labour was in charge of a cross-administrative project called "Preparation for the labour market changes caused by the large cohorts". This project made several proposals and many of them were added to the Ministry of Labour's strategy and through it further on to the Finnish government's programme. Since then the issue has been dealt with, especially at the Prime Minister's Office. When Finland faces a shortage of labour, the labour potential of the unemployed will have to be better utilized. This is going in a very positive direction. The government employment policy programme worked out the employment service centres (for the hard-to-employ), and the reforms of the flat-rate unemployment benefit. There is positive development in the activation rate, which has also been emphasized in a tripartite working group jointly with obligations to participate in the measures.

It would be preferable to talk about a decreasing labour force instead of a labour shortage. As the number of working-age people goes down, the labour resources will have to be better utilised. The aim is to raise the employment rate by an earlier entry to the labour market and a later exit to a pension. Better health and workability with fewer sick leaves from work is important. The number of working hours per employee should be increased, so there should be no favouring of part-time work, for example. Fostering labour productivity is an issue.

In Japan, more and more elderly workers, women and young workers will have to be used to deal with a shortage of labour because the ageing society is developing, and actually various policy measures have been taken for this purpose. There has not been a labour shortage since the "bubble economy" in the late 1980s.

Future role of immigration

Neither of the countries considered that the role of immigration would solve the future labour shortage. Finnish experts found immigration to have a positive, but inadequate, role. Japan prohibits the immigration of manual workers and this turns the focus towards inactivated labour resources.

Immigration has a positive role in Finland, but according to estimations it is not enough. Immigration can relieve problems caused by ageing, but it cannot solve them totally. The population is ageing in most other countries as well. If more immigration is an aim, rapid solutions are needed. It is also of vital importance to deal with the integration of the immigrants into society. In Finland it is often considered that suitable immigrant labour can be found, but this may not be the case.

At the moment, manual workers are prohibited in principle from coming to Japan. As can be seen from the experience of European countries, the social inte-

gration of immigrants costs a lot. Japan has to use a non-activated labour force such as elderly workers, women and young workers instead of foreign labour.

Prudent consideration is needed with the immigration problem. Japan prohibits the entry of manual workers. The labour shortage has to be addressed by raising the standards of technical skills and using a non-activated labour force.

Main policy goals for the aged and young people

The Finnish experts gave quite a thorough description of the issues based on the labour market that were related to the elderly and young people, and also a broader point of view of the longer lives and family policy issues. The only response from the Japanese experts was that it was important not to create labour demand towards specified age groups. This comment also refers to the situation where there is no trade-off between elderly and young workers.

In Finland, for the elderly, the unemployment pension system and the additional benefit days preceding it have been an honourable decision in order to avoid poverty and exclusion from the social security systems. When there is more scarcity of labour we should remember that the aged unemployed are unemployed job seekers with their rights and obligations. They should actively be trying to enter working life.

For young people, the discussion has been distorted: the aim is to increase the employment rate even if the rates for young people are already too high. More efficient studying is positive, but resources should be given for this purpose. Instead of increasing the employment rate, it is essential that young people keep studying and stay out of working life. In the future, the employers will try to attract young people to work direct from their training.

For the aged the question is not only about longer lives, but improving the quality of life at the same time: active ageing, a longer, better and richer life. In an ageing society the individual's health and ability to act for the whole lifespan is emphasised from both the point of view of the individual's quality of life and the sustainability of the public economy. It is even possible to receive a pension for 30–40 years. There will be global market opportunities for "old people's products".

As regards young people, the birth rate should increase. The public sector can develop family benefits to help the formation of families and nurture children's development. Better integration of work and family life is important. As there will be fewer children and young people, every child born must be taken good care of in terms of entering education and staying there to avoid dropping out of school and labour market exclusion.

The practical use of elderly workers is not connected with the removal of young workers or vice versa. It is important not to create labour demand towards specified age groups, a Japanese expert stated.

Pension reforms and their adequacy

Both Japan and Finland have implemented pension reforms in recent years. Both also apply a system where the age when one first receives a pension has an effect on the benefit level. There is also agreement among the experts interviewed that the pension reforms have promoted the employment of the elderly. If working careers are not long enough, the Finnish reforms are inadequate. The replies of the Japanese experts with comments on previous issues can also be interpreted to mean that the reforms are not yet adequate, but this is not so clearly expressed here.

In Finland the major pension reform with the flexible pensionable age is a fine solution. The effects could even turn out to be greater than the *ex ante* estimation of the Central Pension Authority shows. The employment rate of those over 60 rose significantly. This is not adequate in the sense that more anticipatory preparation is necessary for trying to get pensioners at least partially back to work, like one week per month or so.

The pension reforms with a flexible pensionable age, economic incentives to continue working longer, the calculation of the pension based on lifetime earnings, a lifetime coefficient and an early start in pension funding are important. The public authorities cannot do much more. The Commission and Council of the European Union have estimated the economic sustainability of the Finnish pension system to be good. However, further reforms are needed, especially if working careers do not become remarkably longer. Exiting too early to early retirement should be further decreased. There should be more flexibility in going on a pension like part-time solutions, and redefining and reorganising tasks.

In the Japanese context, there are two points about the pension reforms: first, raising the starting age of benefit payment, and, second, decreasing the amount of benefit. The starting age of benefit for the Old-age Basic Pension is 65 years old, in principle. However, one may opt to receive one's pension at whatever age after 60. The pension amount varies, depending on the time when one claims and receives one's pension. One's pension is reduced when one opts to receive benefits before 65 and increases when one opts to receive benefits after 65 compared with one's pension that is receivable at the age of 65. Before the pension reform in 2004, the relation between the amount of pension and age was complicated and graduated, and that system discouraged the employment of elderly people. The employment of elderly people was promoted by means of the 2004 pension reform.

Labour market integration of young people

Here we found a very common way of dealing with young people's employment problems, education and training, from both countries. In Finland there were worries about dropouts from education; in Japan a policy intervention was also carried out to provide young people without a regular job (freeters) the chance to get one.

In Finland the curricula of the Polytechnics should be improved, and vocational guidance should help transfers from education to working life. The major problem is that such a large share of young people continues to have had only primary education. This prevents them from fully integrating into working life. Guidance and various supportive educational measures are needed. Apprenticeship training is something that supports better integration of young people, the Finnish experts said.

In Japan, the training of young people has been done, but it is not adequate. Young people need to have common sense and knowledge before they get jobs. And to begin with, they need to have training. In particular, the government (including the Cabinet Office, the Ministry of Education, Culture, Sports, Science and Technology, the Ministry of Health, Labour and Welfare, and the Ministry of Economy, Trade and Industry) announced the 'Young People Self-support Challenge Plan' in 2003. The plan aimed at raising the occupational consciousness of young workers, informing young workers of the demand for labour and strengthening job placements for them. In 2005, the government announced a plan which would give freeters (who are young and have no regular jobs) 200,000 regular jobs. And trial employment was announced: the government persuaded some companies to employ freeters on a trial basis and even succeeded. Furthermore, the Japanese-styled dual system started and young people have opportunities to work in a firm, and receive training programmes and lessons in a room for half a year or a year. In addition, job placements specific to freeters in public employment security offices were strengthened.

Freeters are those who do not have occupational abilities and are likely to have a job with a low wage for their lifetime. The government, furthermore, needs to give freeters occupational training and more stable jobs with higher wages.

Sectors severely affected by ageing

In Finland the labour market is relatively balanced between sectors in terms of outflow, growth and estimated recruitment. However, the social and health care services are a difficult sector in terms of availability of skilled labour. The very same sector seems to be a problem in Japan, as well. Besides this, for younger people transferring skills is a challenge in the manufacturing sector in Japan.

The situation in Finland is, in a curious way, balanced; there are problems in each branch without being concentrated in some branches. For example, the IT branch is experiencing heavy growth, but the workforce is young and because of this the outflow of the workforce is low. In the industrial sector and in the construction business job growth is minimal or negative, but the outflow is large. In the service sector and healthcare, labour demand is increasing and the outflow is, on average, level. The demand for new labour and replacing the outflow from working life is relatively even between branches. The elderly care sector is, however, a difficult one. The effects on the functioning of the labour market are severe.

Sustainability of the public economy and strengthening of the growth potential of the economy are the sectors affected. In social and health care services the availability of skilled labour is vital. In regional development the structures and ways of working should be reformed. The development of the information society may exclude old people.

In Japan the sectors severely affected are the medical treatment, welfare and service sectors, because it is forecast that these sectors will need more workers according to more labour demand. It is also said that the manufacturing industry will face severe conditions. Because the baby boomers are starting to retire from the labour market from now on, the transfer of skills from elderly workers to young ones is not functioning well in the manufacturing industry. From the short-term point of view, the problem of skill transference in the manufacturing industry is the most important one.

Labour market aspects of ageing

The issues put forward by the experts here are quite different between countries. As Finland is a large, but sparsely populated, country, simultaneous labour shortage and unemployment is considered a problem. A balance in the age distribution in workplaces was also emphasised. For Japan, supporting the longer working span of elderly people needs shorter working hours, for example in order to avoid rush-hour commuting in metropolitan areas.

In Finland there will be problems, but the positive side of ageing should also be put forward, e.g. the role of the labour input of the elderly. The functioning of the labour market and its problems, and simultaneous labour shortage and unemployment is a difficult problem. Education and skills are more and more important, and updating life-long learning also matters. Taking care of the workability and ability to act of employees of all ages, rehabilitation of older workers and organising work and workloads based on ability are relevant issues. It is important that there is a balance in the age distribution at workplaces: both young and older employees have certain strengths in work. We should develop more positive attitudes towards ageing employees and respect experience. Better co-

ordination of family and working life is also needed, as people may be taking care of their parents and children, besides working.

Because the labour force is decreasing from now on, Japan will need to further promote the employment of elderly people. For that purpose, facilities are needed to support elderly workers in an enterprise, and companies will have to provide a more flexible working system for them (for example, the introduction of shorter working hours, and staggered commuting hours because old people cannot commute in the rush hours in a metropolitan city).

Image of an ageing society in 2020

In Finland a shortage of labour is being faced, but there is also trust in the ability to adapt to changes. As for Japan, it can be seen that the ageing society will progress further and that the personal burden on social security will increase.

The rate of change will fall because the baby boom cohorts will already have retired in 2020. The direction is problematic, as the number of people of working age and the labour force will fall. A shortage of labour is being faced all the time. It is not even possible to imagine what kind of problems will appear. The housing market is owner-occupier-dominated in Finland, but so far there have been no major problems, since labour force mobility has been high and commuting has increased. There is pressure on commuting longer distances and railway traffic should be organised in a new way.

Finns have always been able to adapt to changes in society. This should not only be on a reactive basis, but active adaptation instead. Finland is not at the mercy of demographic change. Active preparation in terms of fostering economic growth and making structural reforms early enough is required to survive the challenges of ageing. The view that the pension system is collapsing is an exaggeration. The most important things in terms of the sustainability of the financing of social security are the increase in the employment rate, citizens' health and ability to act and the efficiency and effectiveness of producing social and health services.

In Japan, of course, the ageing society will progress further than it is progressing now. Individuals' personal burden on social security will grow faster.

4 Ageing and Employment Policies: similarities and differences

This part summarises the main findings of the study, together with discussion on the similarities and differences. As the two societies and their labour markets are very different in many respects, the ways to deal with ageing issues are, despite the common challenges, also different. Similarities are also found in the policies.

One important difference is in the way we discuss ageing issues. In Japan the “Year 2007 problem³⁰” was mentioned, which referred to a situation when the large postwar cohorts born in 1947–49 mainly start leaving the labour market for retirement. In Finland ageing is seen as a long-lasting process and these kinds of turning points are not typical features of Finnish discussions.

Finland has found some clear policy benchmarks in other countries and international organisations for ways in which to deal with these issues. In Japan it is considered that the demographic situation is so different from all other countries that the Japanese try to manage mostly on their own. This difference also reflects cultural differences.

The whole system of working by the elderly population is unique in Japan. As the life-long employment system, applied mostly in large corporations, is changing towards a larger variety of employment patterns, this has also had an effect on the elderly population’s working life. It may be typical of a large company to select only part of the high-salaried elderly workers to continue in their work and try to recruit lower-salaried new graduates or mid-careerists to replace them. Companies do also often have a rehiring system for elderly workers. This means in practice that a person over 60 could continue in the company with a degraded salary and other benefits. As the elderly population is one of the main labour resources available, the employment and salary system applied in large companies pressurizes companies to adapt to this new situation. Some elderly people also continue to work for free, often in the same company as before. The future working life pattern could mean a gradual decrease in working hours after 60 or 65 years of age, but the retirement age could be raised to 70 years³¹.

Japanese employers select those elderly people who can continue working; elderly Finnish employees have a subjective right to continue working until 67 years of age. There are very different ways of thinking behind these alternatives. In Japan the policy focus is more on the employers’ side, in Finland more on the individuals’ side.

³⁰ See e.g. Japanese Working life profile 2006/2007 (2006, 38), Labor situation in Japan and analysis: detailed exposition 2005/2006 (2005, 34)

³¹ Labor Situation in Japan and Analysis: Detailed exposition 2005/2006 (2005, 34-5).

Labour resources in Japan are relatively more limited compared with those in Finland. Only the Finnish female population is more employed than their Japanese sisters, but the situation regarding the employment rate of Finnish males is much worse than that of Japanese males. Ageing is also more advanced in Japan compared with Finland.

Finland has relatively more resources in the unemployed population and also in some groups outside the labour market. The skills of these groups in relation to those required in job vacancies are often inadequate, which makes the quality of these resources partially questionable. Something that will be especially important for Finland in the coming years will be the supply potential of the elderly and how long they will continue in working life. Japan has relatively more labour resources than Finland in the working-age female population, especially among part-time workers, who are already in the labour market. Transferring skills to young people is also a challenge in Japanese companies, especially in the manufacturing branches.

The Japanese interviewees' assessment of the sustainability of the pension system is much more pessimistic than the Finnish interviewees' assessment. The Japanese experts use expressions like "the collapse of the pension system", whereas the Finnish experts rely on the sustainability of the system, even if the fiscal burden is expected to become harder in time.

Young people in both countries have some problems in integrating into the labour market. In Japan groups like the "freeters" and the "neet" are considered the biggest issues. In Finland the labour market integration process for young people is very often solved by educational measures supplemented by labour market policy measures. However, integration seems unsatisfactory in both countries. The age at which young Finns graduate from tertiary education is much higher than the age for young Japanese, which is partly explained by the fact that Finnish students work while studying. In Japan, phenomena like "freeters" and "neet" also include some criticism of the traditional working society.

Table 3. Comparative aspects on ageing issues in Japan and Finland

	Japan	Finland
Rate of ageing society	World leader	At the top of the European list ³²
Main effects expected	Total population already started to decrease after 2004, clearly increased pension burden	Working-age population expected to decrease from 2010, increased pension burden
Way of preparation for ageing	Somehow turning-point oriented preparation, e.g. "Year 2007 problem"	Comprehensive and process-oriented preparation throughout society

³² Finland is first in Europe concerning the rate of ageing, i.e. the rapidity of the change in the age structure, but does not have the most aged population in Europe.

Labour shortage	No real shortage since the Bubble economy of the late 1980s, preparations for shortages	No overall shortage so far, shortages caused by mismatch problems mainly, preparations for shortages
Main labour reserves	Female population, the elderly, young people	The unemployed and those outside the labour market, the elderly, male employment still relatively low
Employment developments for the elderly	Employers obliged to ensure employment opportunities until age 65, re-employment of the retired fostered, some increase in employment rate of the 55-64 year group in the last years (+2.6%-points from 2003-06)	Employment increase of the elderly best in EU in medium to longer term ³³ , retirement age increasing, the employed work longer than before, but elderly unemployment is broad and long-lasting
Pension system changes	Pension reform in 2004, benefits payable from age 65, but company-level practices not yet in line with this, promotes employment of the elderly, focus on affecting the employers	Major reform in 2005, flexible pensionable age between 62-67 years, economic incentives to continue at work, lifetime coefficient developed, earlier funding started, stricter early retirement, promotes employment of the elderly, focus on individual choices
Sustainability of the pension system	Further reforms needed in either benefit levels, contributions or both, employment of the elderly has a great effect, even “collapse” of the system mentioned by experts	Sustainability is good by EU estimations, longer working careers still needed
Young people’s entrance to the labour market	Some 10% of young people without regular jobs (freeters) were offered one, trial employment system created for them, the NEET seen as a problem	Tertiary studies take too many years while young people already partially in the labour market, school drop-outs are a problem, unemployment of young people decreased rapidly
Role of labour market policy	Mainly additional role, information and guidance measures important for young people, PESO has a role in information and also matching for the elderly	Regarding young people, the labour market policy has an active role with educational and training-oriented measures and the employment services; regarding the elderly, the role is more passive
Role of immigration	Very restrictive immigration, manual workers’ immigration prohibited, slow increase in immigration rate (gross inflow 0.2% of labour force in 2002)	Positive, but inadequate role, moderate increase in rate (gross inflow 0.7% of labour force in 2002, 0.8% in 2006)

³³ From 1994 to 2006, the employment rate for the 55-64 –year old population increased by 21 percentage points in Finland (OECD 2007, 249, see also Employment in Europe (2005, 284). Three quarters of this positive development took place rapidly from 1998 on.

The table above summarises the main issues of ageing from a comparative perspective between the two countries. It could also be interpreted that Japan is clearly ahead regarding the phenomenon of ageing itself, but Finland is probably ahead in the comprehensive way of preparations for the effects of ageing. There are many similarities in policy issues like focusing on the entry to and exit from the labour market, fostering longer working careers and reforming the pension systems and preparing for future labour shortages. However, both countries could still learn from the experiences of each other in many policy areas. The really high elderly people's employment rate in Japan is impressive, despite the fact that the latest development in Finland is also impressive. In Japan, there are inefficiencies in the elderly people's employment system as regards wages and productivity. In Finland the traditional way to deal with employment problems of the elderly has been early retirement systems and unemployment, which deal with the same inefficiencies, but longer working careers have come to replace this approach. Both countries face problems in integrating young people into the labour market, where there are good practices in both countries. The Finnish pension reform is very far-reaching and quite radical with a subjective right to choose within a flexible pensionable age. This forces companies to develop elderly workers' productivity further, as well. It seems clear that Japan has to return to the pension reforms in the coming years, which may well be the case for Finland, too. The high female employment rate in Finland is a good benchmark. Both countries also face challenges in their immigration policies.

References

- Asao, Y. (2007): Outlook on the Retirement Process of Dankai No Sedai or the Japanese Baby-boom Generation. Japan Labor Review 4/2007, The Japan Institute for Labour Policy and Training, Tokyo.
- Effective retirement age in the Finnish earnings-related pension scheme (2007): Statistical reports 5/2007, Finnish Centre for Pensions, Helsinki.
- Employment in Europe (2004): European Commission, Luxembourg.
- Employment in Europe (2005): Recent Trends and Prospects. European Commission, Brussels.
- Finnish Economy. Structural Indicators (2004): Government Institute for Economic Research, Helsinki.
- Finnish Economy. Structural Indicators (2005): (In Finnish). Government Institute for Economic Research, Helsinki.
- Finnish Economy. Structural Indicators (2006): Government Institute for Economic Research, Helsinki.
- Finnish Labour Review 4/2004 (2004): Ministry of Labour, Helsinki.
- Finnish Labour Review 2/2007 (2007): Ministry of Labour, Helsinki.
- General Survey on Diversified Types of Employment (1999): Statistics and Information Department, Minister's Secretariat, Ministry of Health, Labour and Welfare, Tokyo.
- General Survey on Diversified Types of Employment (2003): Statistics and Information Department, Minister's Secretariat, Ministry of Health, Labour and Welfare, Tokyo.
- Haataja, A. (2007): Factors predicting the staying on at work of 50–59 year-old employed people. (In Finnish). Reports of the Ministry of Social Affairs and Health, Helsinki.
- Hämäläinen, H. (2007): Recruitment of Labour in Establishments in 2006 (In Finnish). Ministry of Labour,
http://www.mol.fi/mol/fi/99_pdf/fi/06_tyoministerio/06_julkaisut/10_muut/rekrytointi2006.pdf
- Ilmarinen, J. (2006): Long Working Career! Ageing and the Quality of the Working Life in the European Union (In Finnish) Institute for Occupational Health and Ministry for Social Affairs and Health, Helsinki.

- Ito, M. (2008): Measures for Supporting Regional Job Creation in Japan. Japan Labor Review 1/2008, The Japan Institute for Labour Policy and Training, Tokyo.
- Japanese Working Life Profile 2006/2007 – Labor Statistics (2006): The Japan Institute for Labour Policy and Training, Tokyo.
- Korkeamäki, O. – Uusitalo, R. (2006): Employment effects of a payroll-tax cut – evidence from a regional tax exemption experiment. VATT Discussion papers 407, Government Institute for Economic research, Helsinki.
- Koshiro, K. (2000): A Fifty-Year History of Industry and Labor in Postwar Japan. The Japan Institute for Labour, Tokyo.
- Laine, V. – Uusitalo, R. (2001): Labour supply effects of the Finnish work incentives reform (In Finnish). VATT research reports 74, Government Institute for Economic Research, Helsinki.
- Labor Situation in Japan and Analysis 2004/2005 (2004): The Japan Institute for Labour Policy and Training, Tokyo.
- Labor Situation in Japan and Analysis: Detailed Exposition 2005/2006 (2005): The Japan Institute for Labour Policy and Training, Tokyo.
- Labor Situation in Japan and Analysis: General Overview 2006/2007 (2006). The Japan Institute for Labour Policy and Training, Tokyo.
- Ministry of Labour (2004): Report on Temporary Work Agencies and Private Employment Service in Finland in 2003 (In Finnish), by Hämäläinen, H., Ministry of Labour, Implementation Department, Helsinki.
- OECD (2004): Ageing and Employment Policies, Finland, Paris.
- OECD (2004): Employment Outlook, Paris.
- OECD (2005): Labour Force Statistics 1984-2004, Paris.
- OECD Economic Surveys (2006): Japan, Paris.
- OECD Economic Surveys (2006): Finland, Paris.
- OECD (2006): Employment Outlook, Paris.
- OECD (2007): Employment Outlook, Paris.
- Parjanne, M.-L. (2004): Changes in the Age Structure of the Population and Preparations for them in different Ministries (In Finnish), Ministry for Social Affairs and Health, Helsinki.
- Preparation for the change in the age structure (2006): (In Finnish), Prime Minister's Office), Helsinki.

- Räisänen, H. with the contribution of E. Heinonen (2005): Comparative Analysis on the Job-Broking Market in Japan and Finland. The Japan Institute for Labour Policy and Training, Tokyo at:
www.jil.go.jp/profile/documents/Raisanen.pdf; published also VATT Discussion Papers 370, Government Institute for Economic Research, Helsinki.
- Rantala, J. – Romppanen, A. (2004): Staying at the labour market of the elderly (In Finnish), Finnish Centre for Pensions, Helsinki.
- Year Book of Labour Statistics (2003): Statistics and Information Department, Minister's Secretariat, Ministry of Health, Labour and Welfare, Tokyo.

Appendix

Persons interviewed for this study

Interview 1: Labour Market Counsellor, Dr. Matti Sihto, Ministry of Labour, Finland, 25.9.2006

Interview 2: Financial Counsellor, Dr. Marja-Liisa Parjanne, Ministry of Social Affairs and Health, Finland, 4.10.2006

Interview 3: Mr. Kazuo Minami, Manager of Statistical Information Analysis Department in JILPT (dispatched worker from the Ministry of Health, Labour and Welfare), 10.11.2006

Interview 4: Mr. Atsuki Matsubuchi, Senior Researcher of Statistical Information Analysis Department in JILPT (dispatched worker from the Ministry of Health, Labour and Welfare), 18.12.2006

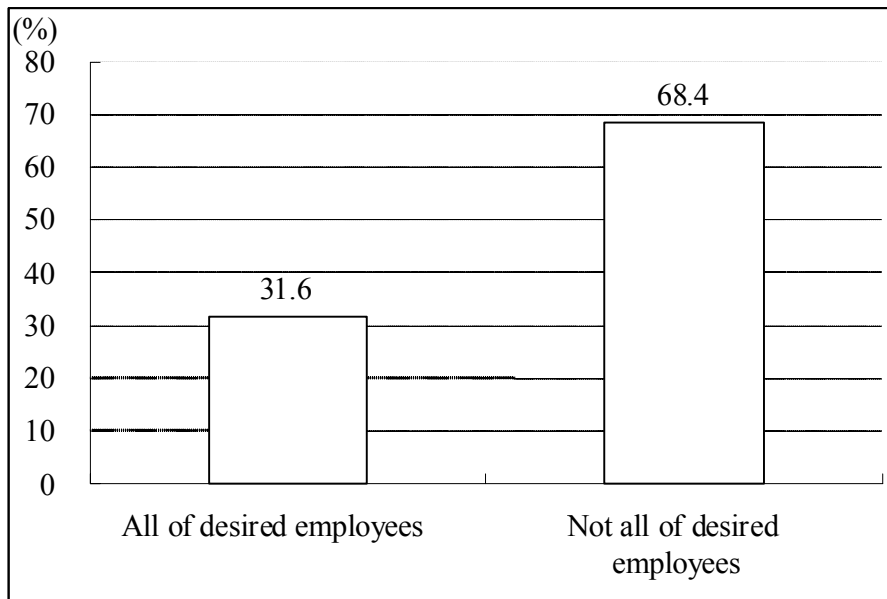
Interviews 1 and 2 carried out by Heikki Raisanen and interviews 3 and 4 by Haruhiko Hori.

Interview questions

1. How would you describe the main effects of ageing in this society?
2. If you consider how this society has prepared for the effects of ageing, how would you consider this matter?
3. What do you consider the best part of preparation and what is probably the worst part of it so far?
4. Policy-makers are better aware of some countries' policy than some others'. Please indicate what your opinion is on which countries have had the deepest impact on the way of dealing with ageing issues in this country and why.
5. If you consider employment policy in a broad perspective including labour market policy measures, social security issues and taxation, what kind of targets do you see as being the most important in the medium term?
6. Do you have an opinion on the most effective measures in reaching the goals?
7. Ageing causes a probable shortage of labour. How has this issue been dealt with?
8. What is your assessment on the future role of immigration in relation to the probable labour shortage?

9. There are two groups of people who are more important than others from the point of view of ageing: the aged people and the young people. How would you describe the main policy goals concerning these groups?
10. Please indicate what the most relevant pension reforms are so far. Do you see them as being adequate?
11. Have there been any reforms concerning the better labour market integration of young people and are they adequate?
12. Are there certain sectors of the economy where the effects of ageing will be more severe than elsewhere?
13. What is your image of this ageing society in 2020?
14. What labour market aspect of ageing would you emphasise?

Figure A1. Continued Employment Possibility until the Upper Age in Japan



Modelling company level structure for the elderly to continue working in Japan

(see paragraph 3.1. “Effect on the revised Elderly Persons Employment Security Act”)

Lastly, we estimate the effect on what kinds of Japanese companies select one of the following three measures: abolishing the retirement age, raising the retire-

ment age and introducing a structure for continued employment. Concretely, a multinomial logit model is applied to estimate the following equation.

$$\log p_j / p_1 = b_j X + v_j \quad \text{for } j=2, 3 \quad (1)$$

Where p indicates probability and 1 shows ‘introducing a structure for continued employment’. In the same way, 2 indicates ‘abolishing the retirement age’ and 3 ‘raising the retirement age’ respectively. X is independent variables vector, b coefficients and v an error term.

X: Blaw (Blaw is a dummy variable indicating whether or not a company introduced a system by which they ensured stable employment opportunities for elderly persons before the revised Elderly Persons Employment Security Act went into effect on April 1, 2006. If a company introduced it, Blaw =1, or Others =0.)

ADJ50 (ADJ50 is a dummy variable indicating whether or not a company adjusts the wage system of employees 55-59 years of age. If a company adjusts it, ADJ50 =1 or Others =0.)

ADJ60 (ADJ60 is a dummy variable indicating whether or not a company adjusts the wage system of employees when they are hired in a system for continued employment since 60 years old. If a company adjusts it, ADJ60 =1 or Others =0.)

EVA (EVA is a dummy variable indicating whether or not a company introduces a wage system that full-time elderly persons’ annual earnings are paid much differently by personal evaluation. If a company introduces it, EVA =1 or Others =0.)

ZAIRO (The pensionable age for the Old-age Basic Pension is 65 years in principle. However, one may opt to receive a pension at any age after 60. The pension amount varies depending on the time when one claims and receives one’s pension. One’s pension is reduced when one opts to receive benefits before 65 and increases when one opts to receive benefits after 65 compared with one’s pension receivable at the age of 65. If a company takes a strategy that it pays wages to elderly employees together with making them receive reduced or increased pension, ZAIRO =1 or Others =0.)

KEIZOKU (When less than 75 per cent of payments at the age of 60 are paid to elderly persons at 60 to 64, subsidies to make them up are paid to them. If a company takes a measure that it pays wages to elderly employees together with making them receive the subsidies, KEIZOKU =1 or Others =0.)

FPENSION (FPENSION is a dummy variable indicating whether or not a company follows a rule that it pays wages to elderly employees together with giving its own pension to them. If a company gives its own pension to them, FPENSION =1 or Others =0.)

FLEX (FLEX is a dummy variable indicating whether or not a company gives some flexible employment forms (e.g. short time employment in a day or short days employment in a week) any other than full-time employment for elderly employment. If a company follows the measure, FLEX =1 or Others =0.)

HIREPLAN (HIREPLAN is a dummy variable indicating whether or not a company has a plan that it would like to employ elderly persons in the middle of a year. If a company would like it, HIREPLAN =1 or Others =0.)

Company size variables (omitted category: small-sized company with 99 and under persons)

Medium-sized company with 100-999 persons

Large-sized company with 1,000 and more persons

Industry variables (omitted category: manufacturing and other industries)

Construction
 Information and Communications
 Transport
 Wholesales and Retail trade
 Finance and Insurance
 Real Estate
 Eating and Drinking places, Accommodation
 Medical, Health care and Welfare
 Education, Learning support
 Services

Table A1 shows the descriptive statistics and table A2 indicates an estimation result by using an equation (1). Model 1 indicates what kind of factors affect one when a company follows a rule of abolishing retirement age or introducing a structure for continued employment.

Table A1. Descriptive statistics

Variable	Average	Standard error
Construction	0.053	0.225
Information and Communications	0.088	0.283
Transport	0.078	0.268
Wholesales and Retail Trade	0.192	0.394
Finance and Insurance	0.031	0.174
Real Estate	0.021	0.143
Eating and Drinking Places	0.019	0.137
Medical, Health care and Welfare	0.058	0.233
Education, Learning support	0.025	0.156
Services	0.214	0.410
Medium-sized company	0.511	0.500
Large-sized company	0.089	0.285
BLAW	0.294	0.456
ADJ50	0.297	0.457
ADJ60	0.758	0.428
EVA	0.315	0.465
ZAIRO	0.276	0.447
KEIZOKU	0.440	0.496
FPENSION	0.093	0.291
FLEX	0.392	0.488
HIREPLAN	0.197	0.397

For all variables, N= 7,660; all variables are dummies

Table A2. Logit estimations for types of continued employment, models 1 and 2.

Model 1 Select abolishing retirement age against introducing a structure for continued employment			
	Coefficient	Wald Statistics	Prob
Constant	-2.276	20.440	0.000
Construction	0.685	0.819	0.365
Information and Communications	0.341	0.265	0.606
Transport	0.020	0.001	0.979
Wholesales and Retail Trade	0.853	2.372	0.124
Finance and Insurance	0.260	0.053	0.819
Real Estate	0.458	0.163	0.686
Eating and Drinking Places	1.085	1.500	0.221
Medical, Health care and Welfare	0.594	0.804	0.370
Education, Learning support	-0.287	0.065	0.799
Services	0.857	2.698	0.100
Medium-sized company	-0.534	3.219	0.073
Large-sized company	0.234	0.208	0.648
BLAW	0.036	0.007	0.934
ADJ50	-2.506	49.229	0.000
ADJ60	0.213	0.454	0.501
FVA	-0.823	2.176	0.140
ZAIRO	-1.416	7.641	0.006
KEIZOKU	0.151	0.040	0.841
FPENSION	0.213	0.551	0.458
FLEX	-0.013	0.001	0.970
HIREPLAN	-2.514	47.294	0.000
Model 2 Select raising retirement age against introducing a structure for continued employment			
	Coefficient	Wald Statistics	Prob
Constant	-0.822	24.427	0.000
Construction	0.270	1.114	0.291
Information and Communications	-0.251	1.248	0.264
Transport	0.519	6.569	0.010
Wholesales and Retail Trade	0.037	0.041	0.839
Finance and Insurance	-0.253	0.486	0.486
Real Estate	0.357	1.145	0.285
Eating and Drinking Places	0.033	0.008	0.930
Medical, Health care and Welfare	0.454	4.471	0.034
Education, Learning support	0.940	11.995	0.001
Services	0.122	0.530	0.467
Medium-sized company	-0.327	9.519	0.002
Large-sized company	-0.590	6.480	0.011
BLAW	-0.225	2.712	0.100
ADJ50	-1.569	195.581	0.000
ADJ60	0.256	5.028	0.025
FVA	-0.312	4.348	0.037
ZAIRO	-0.729	29.830	0.000
KEIZOKU	0.033	0.022	0.882
FPENSION	-0.235	4.638	0.031
FLEX	0.773	46.459	0.000
HIREPLAN	-0.723	47.697	0.000

-2 log likelihood = 2216.555 Chi-square = 816.184

Only 3 factors are statistically significant. That is, ADJ50, ZAIRO and HIREPLAN. Each of the 3 factors takes a minus sign and it indicates that if a company adjusts the wage system of employees 55–59 years of age, such a company is likely to introduce a structure for continued employment. In the same way, if a company takes a strategy that it pays wages to elderly employees together with making them receive reduced or increased pension or it has a plan that it would like to employ elderly persons in the middle of a year, such a company is likely to introduce a structure for continued employment.

Model 2 indicates what kind of factors affect things when a company follows a rule of raising the retirement age or introducing a structure for continued employment. Transport, Education, Learning support, Medium-sized company, ADJ50, ZAIRO, FLEX and HIREPLAN are statistically significant at a level of 1 per cent respectively. Medical, Health care and Welfare, Large-sized company, ADJ60, EVA and FPENSION are statistically significant at a risk level of 5 per cent. As Transport, Medical, Health care and Welfare, ADJ60 and FLEX have plus signs, such a company having the above-mentioned features is likely to raise the retirement age. On the other hand, Medium-sized company, Large-sized company, that is, larger company, ADJ50, EVA, ZAIRO FPENSION and HIREPLAN take minus signs and such a company having these features is likely to introduce a structure for continued employment.

Through results from two models, we could assert that such a company adjusting the wage system of employees in their 55–59 year-olds, taking a strategy that it pays wages to elderly employees together with making them receive reduced or increased pension or having a plan that it would like to employ elderly persons in the middle of a year, is likely to introduce a structure for continued employment.

Major Employment Measures for Young People in FY 2005 in Japan

(1) Providing support for job attainment and workplace commitment amongst new graduates with no employment.

1. Job attainment support for new graduates

A Support for fresh graduates from universities, etc.

* Providing job placement information, career counselling, job referral, job interview session, etc. through the Comprehensive Support Centres for Student Employment and the Student Employment Centres, etc.

B Support for fresh junior high school and high school graduates or graduates who are not employed

* Promoting recruitment development, career counselling, and job referrals in collaboration with schools

* Supporting recruitment development, individual consultations and work commitment through supporters of jobs for young people

2. Enhancing measures to promote workplace commitment

(2) Strengthening job attainment support for freeters, etc.

1. Specialized service information desks to improve confidence and the motivation to work

- * Providing one-stop service centres for young people
- * Setting up career exchange plazas especially for young people

2. Implementing hands-on skill development

- * Promoting regular employment through trial employment projects for young people
- * Promoting a Japanese-style dual system, training by public parties, etc.
- * Establishing intensive courses on the basic employment capacities

3. Promoting the Public Employment Security Offices' operations that support freeters to obtain full-time employment

(3) Promoting employment awareness among young people

1. Support for university students, etc.

- * Conducting seminars, etc. aimed at career counsellors at universities
- * Promoting internship programmes for university students, etc. in collaboration with economic organizations

2. Support for elementary, junior high, and high school students

- * Providing opportunities for job experience through such means as career search programmes and junior internships

3. Development employability strengthening projects (Job Passport Program) through non-compensated work experience, etc.

(4) Setting up one-stop service centres for young people

Delegating employment support activities, etc. through plans made proactively by young people to One-Stop Service Centres for the Youth (usually referred to as Job Cafés), and supporting parallel activities with the Public Employment Security Offices.

(5) Promoting the National Campaign to Increase Young People's Human Capabilities

Raising the interest of all the various segments of society regarding the problem of the employment of young people, in addition to which representatives of relevant people from different arenas such as the world of economy, labour circles, the world of education, the mass media and local communities, etc. come together with the purpose of raising the capabilities of young people and their motivation to work and starting a national campaign to strive for such endeavours as having confidence at a national level as well as educational activities.

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