

The Ageing Baby-Boomers and the Labour Market in Finland

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This paper reviews some basic features concerning the future employment situation of the ageing post-war baby-boomers in Finland. There is a combination of three reasons for some extra emphasis on the study of this part of the Finnish population. First, we are dealing with large numbers, which in itself puts more pressure on pension systems and social security. Second, the general improvement in educational level has not affected the baby-boomers as much as younger age groups, leaving their working skills at a significantly lower level than that of younger labour market entrants. Third, there is time pressure since the first baby-boomers, born in 1945, soon reach the age of 55 which turns out to be the critical turning-point-age with regard to employment on Finnish labour markets.

The report was originally written to point out some of the factors that are of significance when developing pension schemes. Since the facts reviewed may serve more general purposes, a slightly updated and revised version has been made available in English. All calculations were originally made in late 1998.

The theme itself has regained new actuality since the programme of Mr. Lipponen's new government formulated two long term targets closely related to the employment of ageing workers. These are the postponing of exit from the labour market with another 2-3 years, and increasing the employment ratio to 70 pct. from today's 64 pct. Similar targets are set in other European countries too, and the improvement of ageing workers situation is on the 1999 agenda at the EU level.

Accordingly, another pension reform package will be launched in Finland next year affecting incentives to early retirement and outlining new policies to improve the employability of ageing workers.

The relevant age groups are defined in the first and second chapters. In the third chapter we calculate the magnitudes of cohorts leaving working life from these age groups, under different assumptions about the labour market. In the fourth and fifth chapters we further study the educational level and the labour market position of ageing people.

The crucial age group seems to be that of 55-64. In view of the facts, estimates and predictions presented in this paper, it would seem that the difficult employment position for ageing people will continue for at least another

10-15 years, due to the large age groups of the post-war baby-boom and their relatively low educational level.

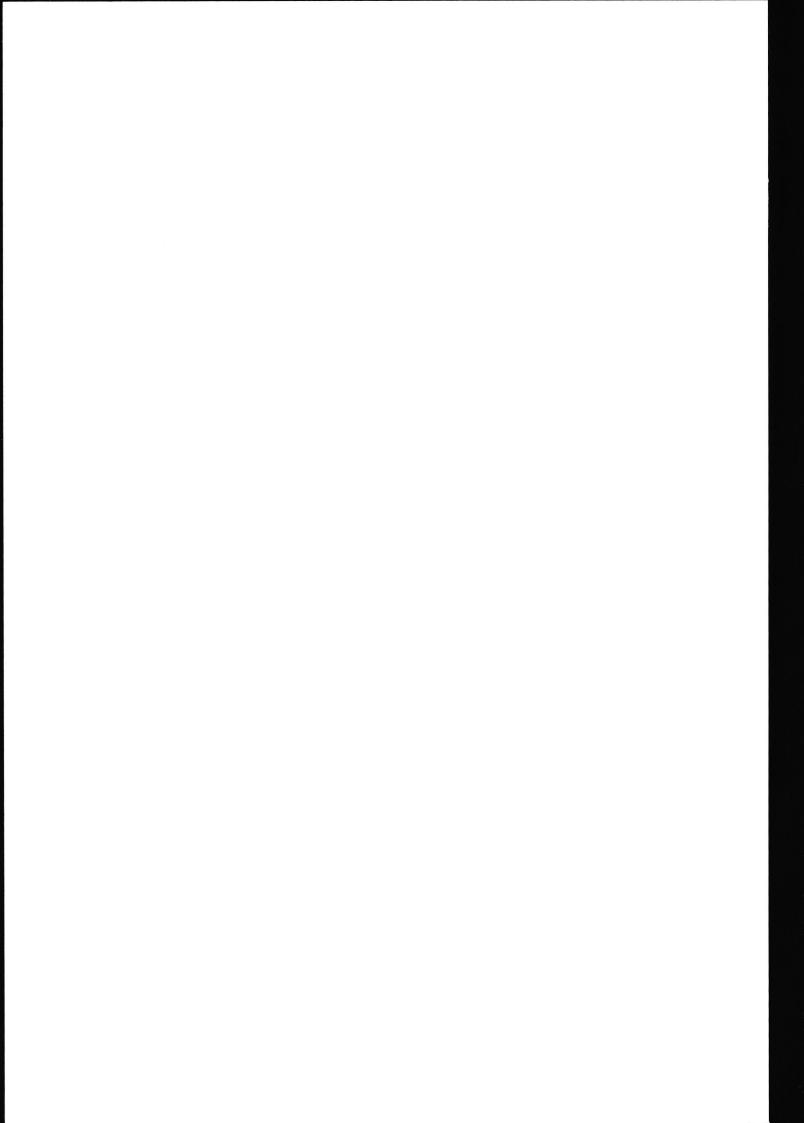
Apart from the writer, also Raija Gould, Timo Korpela, Jukka Lampi, Janne Salonen and Reijo Vanne, all experts of the Central Pension Security Institute, have participated in compiling the information for this paper. Their help has speeded up the timetable and/or improved the quality of this paper.

Furthermore, I would like to thank Helka Hytti (the Social Insurance Institution Kela), Pekka Myrskylä (Statistics Finland), Olli Poropudas (Ministry of Education) for providing valuable help with the material.

For possible remaining errors the writer takes full responsibility.

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1 THE POPULATION SITUATION: WHO BELONG TO THE LARGE AGE GROUPS OF THE POST-WAR BABY-BOOM?

The interesting age groups and their size are presented in the table below, big cohorts are indicated with bold face.

Table 1.1. The population in five-year age groups (5-year cohorts) 1,000 persons

**************************************	1988	1993	1998	2003	2008	2013	2018
40-44	413	417	391	380	368	310	332
45-49	295	409	412	387	377	365	308
50-54	270	289	401	405	381	371	360
55-59	260	262	281	391	396	373	364
60-64	250	247	251	271	378	384	363

The table shows that the people now aged between 55 and 59 will not cause any additional pressure on the social security schemes. These people, born during the war 1939-43, form very small age groups. Some sort of exception is the age group of 1941, a year of mid-war peace in Finland, since this age group is slightly larger than the others.

The first large age group was born in 1945, and included initially 95,758 persons. Nowadays about 77,000 of them are still alive and living in Finland.

After this followed the actual large age groups of the post-war baby-boom, those born in 1946-49, when more than 100,000 children were born annually. The largest one was the 1947 cohort, which amounted to 108,168. Of the children born that year, 88,000 are still alive and living in Finland. Thus, in the table above, these annual cohorts are mainly within the age bracket 50-54. Interestingly enough, the following five-year cohort is larger, which is partly due to the small cohort of 1944 and partly due to higher death rates and emigration in the older cohort. If counting the number of children born, the size scale would be the reverse.

The choice of years for predictive purposes, is explained simply by the figures being grouped on both sides of the current year when calulations were made (ie. 1998) in five-year periods. Thus, when moving diagonally downwards to the right or upwards to the left in the Table 1.1, we always see the situation for the one and the same five-year cohort. When moving horizontally we see the changes affecting/having affected a certain age group in that actual year.

The first large five-year cohort will achieve the ages of 55-59, crucial from the point of view of employment, by the year 2003, and the next one will follow five years later. This means that there are challenging years ahead for the pension and social security schemes.

The graphs below show the same dramatic change in the population structure as the figures in the tables. Figure 1.1 shows that the large and fairly large age groups are represented by five cohorts in all, i.e. those people who are now aged between 30 and 54.

Of these people, those aged between 30 and 39 are fairly well-educated, and their number is also somewhat smaller than for the three preceding five-year groups. Thus, this would indicate that the main emphasis should be on those now aged between 40 and 54. This, of course, presupposes that a person's age in itself is not an obstacle to employment, but rather the lack of knowledge and skills it correlates with. Otherwise there will be problems for an even longer period of time.

Table 1.1 also shows that the most interesting, and possibly also the most problematic situation will arise somewhere around 2008-2013, when all the large age groups of the post-war baby-boom are ageing. After that, the situation will stabilise.

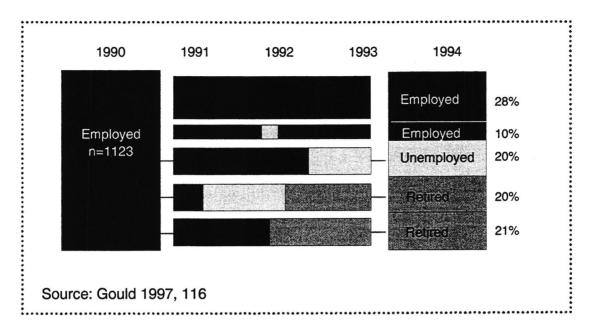
2 THE CRITICAL AGE GROUPS AND THEIR POSITION IN THE LABOUR MARKET

This chapter deals with the labour market position of ageing people on a general level. From the point of view of the pension scheme, the flow of people exiting from working life is a potential "base for recruitment", the size of which determines the number potentially available at the labour market, but also forms a framework for the number of people retiring early. Raising the level of employment is indisputably the best aim for each and every social security scheme separately.

It is worthwhile bringing forth this fact, because, among other things, it seems that the number of new disability pensions among ageing people has decreased radically in the 1990s (see Figure 2.2) One would imagine that we are heading in the right direction and that the problems are soon over, but the whole picture is not that simple.

Those who have exited from working life are a burden for the public finances in any case, i.e. on the "wrong side" of the economic dependency ratio. From the point of view of public finances, nor with respect to the future in general, it is not rewarding to strictly divide the persons outside working life into different groups. It would be a quite different matter, if there were empirical data available that would correspond to the "real incapacity for work". For this we would need figures that didn't include factors depending on the labour market, which is very difficult, both conceptually and statistically.

Early retirement has been surveyed by Raija Gould of the Central Pension Security Institute (see Gould and Takala 1997) and by Helka Hytti of the Social Insurance Institution (KELA) (see Hytti 1998) and others. They have all stated the close connection between the labour market and retirement. The exit from working life is depicted in the following figure by Raija Gould:



Figur 2.1. Outflow from work 1990-94 in a panel of 55-64-old persons, all employed at 1990

Figure 2.1 shows in two different ways the central position of the pension scheme in the exit from working life. In five years 41 % of the working population retired. Furthermore, 20 % have become unemployed, of whom almost all are presumably on the so called unemployment path to retirement.

On the other hand, similar statistical panels show that, in the long run, a rejected application for an earnings-related pension does not prevent exit from working life, since most of those who apply for a pension, and face a rejection, will have moved out of employment within a few years. They are either unemployed, or simply renew their application with more success.

This strengthens the view that the work capacity, work ability, the working conditions and knowledge and skills should be improved, so that the employees wouldn't be so heavily inclined to apply for a pension.

From the point of view of the pension schemes the difficult employment position for ageing people is also problematic in that it makes defining and implementing an unambiguous concept of incapacity for work more difficult.

In this way it also in practice affects people's retirement on a disability pension. A too difficult position in the labour market affects the individual, i.e. the capacity for work, the health and the inclination to retire. Thus, the risk assessment of a "real incapacity for work" is very difficult or impossible, except perhaps in a society with a good employment position also for ageing people. as is possibly the case in Norway. The large differences between the Nordic countries are depicted in Table 2.1.

Table 2.1. Pension recipients in the Nordic countries according to age group 1996

**************************************	DK	FIN	ISL	N	S
16-39	1,9	1,8	4,5	4,6	1,7
40-49	7	5,9	6,8	7,8	6,4
50-54	15,8	12,3	10,7	12,5	10,9
55-59	26,4	29,9 81,1 100	15,7	21,1	19,3
60-64	61		27,4	33,7	37,9
65-66	76,5		39,5	44	100
Source:	NOSOSCO				

The number of new disability pensions has clearly decreased in recent years, which would point to the implementation of a more clear-cut medical concept. The new pensions decrease especially in the older age groups, which already in itself points to the previously applied mainly labour market-driven and company-internal reasons for restructuring. (see Hytti 1998). Figure 2.2. shows the decreasing frend of new disability pensions. The trend will certainly affect the average retirement age in the long run, but the effect on older workers employment rates is ambiguos.

The Finnish pension scheme includes a special so called unemployment pension meant for ageing long term unemployed. This means that unemployed people almost automatically may retire at 60, which process strongly controls the unemployment path to begin at about 55 years. Locally this phenomenon is called "the unemployment pipe-line" to retirement.

The unemployment pension is, thus defined, a purely labour market-driven pension form and is, thus, an even more difficult pension form when defining its risks. As the employment position for ageing people does not actually show signs of improvement, the decrease in new disability pensions probably will make the so called unemployment path to retirement even more tempting. Thus there may be a shift from disability to unemployment resulting in no improvement in employment rates.

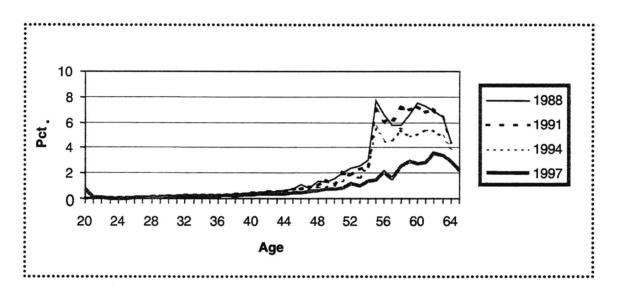


Figure 2.2. New disability pensions measured as pct. of insured population

3 SOME CALCULATIONS OF FUTURE ALTERNATIVES

This chapter presents some alternative calculations based on different assumptions of how ageing people are staying in active working life. The calculations should be helpful in grasping the size of the problem and the need for speedy timetables. As already stated above, the time period of the following 10-15 years is crucial in two ways: the large age groups of the post-war baby-boom are ageing and the educational level of the first large age groups of the post-war baby-boom is fairly low.

The alternatives are:

- The present situation continues, no improved employment figures (ACTUAL)
- The number of people outside working life remains at almost constant level, economically favourable aim (CST-OUT)
- Number of jobs constant, the worst alternative (CST-JOB)

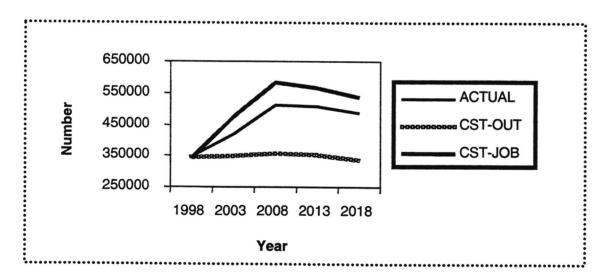


Figure 3.1. Esitimated number of non-employed 55-64 years old persons under different assumptions

The most favourable alternative would require that the rate of active participation in working life rise very rapidly to the present level of Iceland, Norway (see Table 2.1). This is not very probable, especially when observing the general labour market position and the educational level of the interesting age groups, which are described in the next chapter.

The alternative CST-JOB is based on the idea that the structures of the labour markets change fairly slowly. From the mid-term perspective now under scrutiny, the number of different types of jobs could well be more or less constant. This would have severe consequences due to the ageing of the large age groups of the post-war baby-boom.

If the jobs held by ageing people are especially connected with the person's age and possible other qualities connected with it, it is not self-evident that the number of jobs available to ageing people will rise from the present level, even though there were a larger supply of ageing labour force. This aspect is further supported by the age-related wage structure and the inflexibility of the wages downwards. The special working arrangements for ageing people may also freeze job structures.

Figure 3.2 shows that the difference between the best and the worst alternative is at the most about 300,000 persons. Of these people obviously not all would be retired, but in any case on the wrong side of the economic dependency ratio. The assumption of the forecasting model of the Central Pension Security Institute is much closer to the worst alternative, and is thus fairly cautious with regard to ageing people's continued participation in working life.

4 LABOUR MARKET SITUATION AND EDUCATION

The large age groups are better educated than those born before the War, but clearly less educated than the younger age groups and future generations. The following figures and tables show the education level in the different age groups. Basic education refers to comprehensive school (younger age groups) and elementary school (kansakoulu, older age groups). The somewhat indefinite term "unskilled" will also be used for this level later in the text. The numbers are from the population cohort corresponding to the percentages.

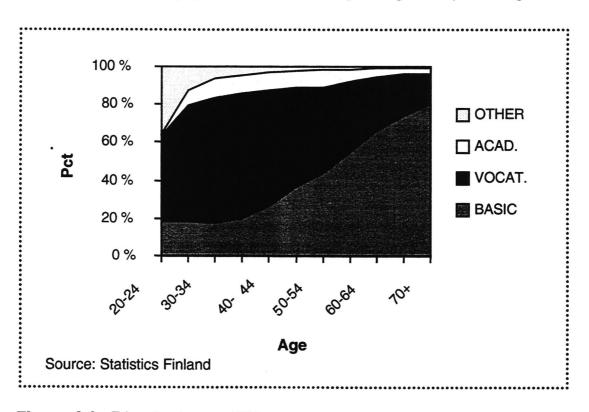


Figure 4.1. Education by age 1996

Table 4.1 presents estimated future percentages of those who do not have a degree, i.e. those who only have elementary school/comprehensive school education. Figure 4.2 presents the same data in absolute numbers.

The figures have been worked up by using present statistics and population forecasts, assuming that the educational level of a certain cohort will not remarkably change after the age of 30. Preliminary forecast figures made at the Ministry of Education have been considered as reference data and as supplement to basic figures. As is seen from the figures, the number of unskilled ageing workers will go down only slowly, since even if the percentages of unskilled persons will go down, the numbers of unskilled ageing workers will not decrease due to the large age groups, i.e. the baby boomers.

Table 4.1. Proportion of people with basic eduacation only (pct. of respective age group)

	•••••								
	Age cohort								
year	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64
1995	20	18	17	22	28	38	46	58	68
2005	22	14	13	16	15	21	28	38	46
2010 2015	9	12 7	13 11	12 12	15 12	15 15	21 15	28 21	38 28
2010	9	12	13	12	15	15	21	28	38

Due to differences in data classification, the population cohorts in Table 4.1 are not completely comparable with those of table 1.1. and the calculations presented in Ch. 3. However, the approximate values for the large age cohorts and the comparison groups can be obtained from the approximate linearity of changes between the cohorts.

The following figure shows the improvement in the educational level of ageing persons in numbers. The situation will improve significantly when the better educated age groups reach the age of 55-64, i.e. around 2010-2015.

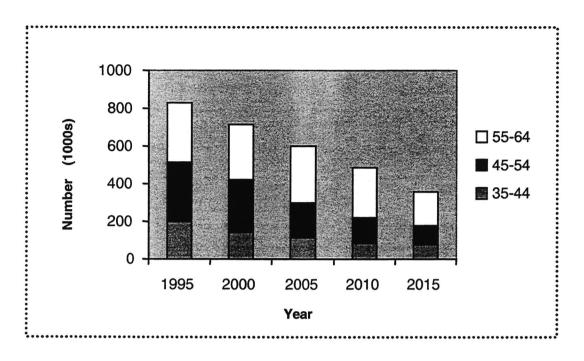


Figure 4.2. Number of persons with basic education only

Table 4.2 summarises the approximate actual situation with regard to the labour market inflow/outflow. The groups "entrants" and "leavers" are not really population cohorts, but rough estimates on typical entrants during the next few years based on the figures presented, and corresponding estimates on those who are leaving the labour market. We can see that there is a remarkable difference. Of course the entrants group correlate with younger persons and the leavers group with older persons.

Table 4.2. Rough estimate on present educational levels of some labour market groups

	basic	vocational	academic	other	
"entrants"	15	65	20	-	
45-49	33	55	9	3	
50-54	41	48	9	2	
"leavers"	72	25	3	-	

As expected, the highest educational level is that of entrants, so the number of those who only have a basic degree will fall dramatically in the labour market within the coming decades. The number of those who have a vocational degree, and especially those who have an academic degree, will proportionally grow fairly rapidly. The problem is that the large age groups are still comparatively low-skilled. This, in turn, means that the absolute numbers of low-skilled ageing workers will not decrease within the next 15 years.

When the educational level of those who are presently aged 40-54 is proportioned to the corresponding population cohorts, we find that about 400,000 persons of this group consisting of 1.2 million persons do not have any other degree than basic education, i.e. elementary school (kansakoulu).

Their vocational training may also be out-dated or insufficient, and their professional skills very much bound to the work place or/and work tasks.

Thus, the need for training due to these factors will easily amount to at least 200,000 full training years, given that the need is taken seriously enough, which means, for instance, that the training should aim at a degree suitable for a certain function.

As the net price of one single training year including loss in work input etc., amounts to at least FIM 200,000, we find that it is a question of large amounts of money, i.e. many billions per year even if divided over several years. The schedule implies that the main part of the training should be completed within the next 5-10 years. It is thus a very demanding project.

The fact is that the competitiveness and productivity of ageing workers would have to be significantly improved in a few years. The present so called active labour market policy is not sufficient, but we would need a new kind of infrastructure in which there would be more co-operation between different administrative sectors. The target group is especially also the working population, the "problem-free" group, and not merely the unemployed or those who are under threat of unemployment.

One observation behind the realisation of the need for training is that the degree from the present comprehensive school is more diversified and extensive than the previous elementary school (kansakoulu), which is the basic education of the large age-classes. This factor can strongly affect employment opportunities, especially in the fields where at least a passable knowledge of mathematics and English is required. This applies to sectors such as industry and the service and public sector. In these sectors modern management, technical development, internationalisation and tourism have a strong impact.

Education, age and disability pensions

The educational level also greatly affects the level of new disability pensions in that less educated workers are much more inclined to disability pensions. Moreover, the educational influence on new disability pensions remains almost the same regardless of age, being even stronger in the younger age groups. Thus, the risk of a person who has a post-gradual academic degree to retire on a disability pension will be only one tenth compared to that of a person who has only basic education.

The steepest decrease in the number of new disability pensions is located between the lower and higher secondary educational level. The impact of age as a single factor is similar, and the ratio of retirement probabilities between a 40-year-old and a 55-year-old is also about one tenth.

Thus, the joint effect of education and age is very strong. The ratio between new disability pensions of an educated person aged 40 and an unskilled person aged 55 thus amounts to 1/100, and the reverse: the disability risk of a well educated 55-year-old is roughly the same as that of an unskilled 40-year-old. (Calculations made by Helka Hytti of the Social Insurance Institution)

Education and unemployment

Labour market statistics clearly show that in all age groups the educational structure of unemployed persons is weaker than that of those who are working. The impact of education on continued participation in working life is seen in all age groups in a way where those who only have a basic degree are overrepresented among the unemployed. Among the ageing persons the difference seems smaller than it actually is with regard to employability, since the unskilled population is also more inclined to retire, i.e. to leave the work force definitely.

5 DO AGEING UNEMPLOYED FIND JOBS?

This chapter will focus on the employability of ageing workers as measured by actual statistical flow-data. The figures show that it seems very unlikely that unemployed ageing persons would find employment.

The poor employability of ageing workers is clearly seen in the number of new employment contracts in the TEL-branches (TEL= Employees' Pensions Act), which are presented in Figure 5.1. The TEL-branches form the "engine" of Finnish economy, covering most industry and private sector services, and more than half of all employees.

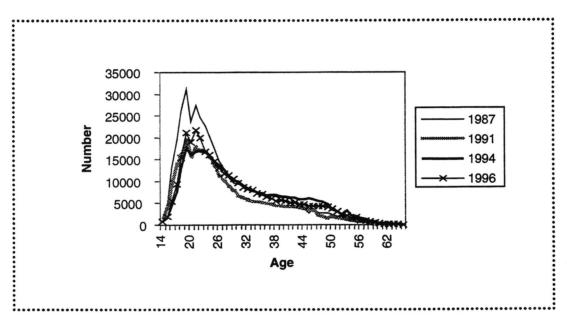


Figure 5.1. New employment contracts in main private sector branches

These figures should still be interpreted with some caution, since a large group of labour market entrants is always included in the youngest age brackets. However, the rather sharp turn downwards in the graph according to age speaks for itself, as does the very low absolute number of new entrants among ageing persons. One can say that there are almost no employment contracts made available for older workers in these branches.

One interesting fact is also that the depression years in the 1990's hardly at all affected the number of entrants among those over 45. The number

remained very low both proportionally and on an absolute level, whereas the number of young persons was very strongly affected.

The year 1994 forms an exception, however, when middle-aged who had been made redundant during the depression were obviously re-employed. This effect did not reach those over 55, however.

The employees' own expectations as regards getting a new job is in line with this, i.e. they are strongly age-dependent. In a survey made by Statistics Finland in 1990 and 1997, employees were asked about working conditions in general and among other things whether their chances of getting a new job are good. Only 4 pct. of people aged over 55 regarded themselves as having good chances.

What about the development of employability over time? Figure 5.2 shows a graph of flow-data from unemployment to jobs on the labour market. The situation is registered at the end of each year, and again for the same persons at the end of next year. The figures thus represent the proportion of unemployed people who were able to find a job within twelve months, the probability of being employed, and thus represent "employability" in a statistical number.

We can see that while the employability of a person aged 45-54 during the boom in the late 1980s was about 40 % during one year it was only 20% in 1995-96. Correspondingly, the employability of a person aged 55-64 was about 20 % before the depression and in 1995-96 only slightly more than 3 %, i.e. virtually non-existent.

These are alarming figures, not only for the 55-64 years old, but for the 45-54 years old too.

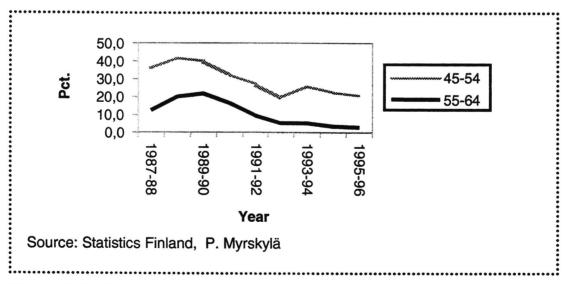


Figure 5.2. Flow from unemployment to employment during 12 months

Figure 5.3 shows the exit from working life of persons over 50 in the light of the ratios for new and terminated employment contracts in the TEL branches. A ratio exceeding 1 thus represents net inflow to employment and vice versa.

It is, of course, natural that there are more new than terminated employment contracts of young persons, and that the inflow is positive, whereas the steep fall in the ratio for those aged 53-58 from about 0.8 to about 0.2 is likely to be a consequence of the unemployment path to retirement.

The figures show relative similarity from year to year, with some exceptions. The year 1994 deviates upwards, as net outflow is seen only in the group over 50. This phenomenon can probably be explained by the fact that the skilled labour force was re-employed at the beginning of the economic upturn. Year 1991 was the worst year of depression, showing net outflow even among younger workers. The years 1987 and 1996 show strikingly similar figures, as do also the rest of the ten year period.



Figure 5.3. Inflow/outflow quotient of main private branches by age

6 SUMMARY

The situation looks rather bleak given the size of the large age groups and their relatively poor educational level. There are approximately 400,000 ageing persons aged 40-54 having only an elementary school degree. The prospects are primarily darkened by the push factors (and external pull factors) in the labour market practice in Finland.

According to the estimates, the unfavourable situation will persist at least for the next 10-15 years. The education and skills of the ageing labour force will have a crucial impact. In order to make the educational level turn upwards in a few years, large-scale employment and training operations amounting to tens of billions of marks would need to be started. However, there would probably not be sufficient resources for this. Even if we had the money needed, it is not self-evident that sufficient available intellectual resources would be found for such large-scale training and development projects.

It is therefore likely that the pensions system will face growing demands, and that the expenditure due to early retirement will grow. Fortunately, this has been prepared for also in the forecasts. The forecasts of the Central Pension Security Institute do not include too optimistic presumptions concerning the ageing population's participation in the labour market.

Should we then focus on the continued participation in working life of those ageing persons who are working, or should we more efficiently and to a greater extent focus on creating employment for the unemployed? On the basis of the information presented in this report, we can conclude that more efforts should be made for keeping the existing jobs in the labour market.

On the basis of empirical figures, it seems very difficult to find employment for ageing unemployed persons, even if it would be a great social value.

Keeping ageing persons in working life is also difficult, considering the relatively poor educational level of these large age groups. A fact evident from the figures is that ageing persons are only in rare cases being employed at present. There is also reason to believe that a great number of these are in supported employment through labour market measures.

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Eläketurvakeskus on Suomen työeläkejärjestelmän lakisääteinen keskuslaitos. Sen tutkimustoiminta koostuu pääasiassa sosiaaliturvaan ja eläkejärjestelmiin liittyvistä aiheista. Tutkimuksissa pyritään monipuolisesti ottamaan huomioon sosiaalipoliittiset, sosiologiset ja taloudelliset näkökulmat.

Pensionsskyddscentralen är lagstadgat centralorgan för arbetspensionssystemet i Finland. Forskningsverksamheten koncentrerar sig i huvudsak på den sociala tryggheten och på de olika pensionssystemen. Målet för forskningsprojekten är att mångsidigt belysa aspekter inom socialpolitik, sociologi och ekonomi.

The Central Pension Security Institute is the statutory central body of the Finnish employment pension scheme. Its research activities mainly cover the fields of social security and pension schemes. The studies aim to paint a comprehensive picture of the sociopolitical, sosiological and financial aspects involved.

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