# Regional development and labour market dynamics in Finland<sup>1</sup>

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#### Introduction

A common feature of most countries in Europe is population ageing. Europe suffers from the problem of ageing population to a greater extent than other world regions. The current demographic revolution is predicted to continue in the coming years and the share of older persons in the total population is expected to increase, thereby posing important challenges to society (Council of Europe Publishing 2002).

The ageing of population and labour force has been common also in Finland. The ageing of population structure is essentially affected by the strong decrease in fertility. Immediately after the World War II fertility rose to an exceptional peak, producing the post-war "baby-boom generation". Since then, fertility has again decreased and as a consequence the elderly population has more that doubled in numbers over the past 40 years. Finland is a predecessor in population ageing in Europe and with Japan in the world (Karjalainen 1993; Parkkinen 2001). Regional imbalances caused by and effecting demographic change are unevenly spread across Finland. The northeast and southwest of Finland are in different stages of development, of economic renewal, due to the regional imbalances. Nowadays some 40 % of the Finnish population lives in the province of Southern Finland, and the area of the province is barely 10 % of the total area of Finland. Regional imbalances and differences can be problematic, from an economic development point of view, not only in the lagging regions, but also in the nodes where the pressure is high.

A common emergent problem is the future labour shortage, something which has already been experienced in certain sectors and in particular regions, and something that is forecast on a much broader scale in the future. The differences in fertility rates, mobility patterns, age structures or unemployment and employment patterns are complexly interrelated to differing economic performance levels in the local labour markets. The sustainability, in economic and social terms, of several labour markets is thus increasingly challenged as population decline continues (see Persson et al. 2004:7).

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# Purpose of the paper and study data

This paper deals with regional development and labour market dynamics in Finland. First, it is analyzed what type of regional demographic and economic processes are occurring in the Finnish local labour market areas and how these areas differ from each other in these processes. Second part of the research explores more closely the performance of the local labour markets, and it is done by the specific typology of the local labour markets developed by Hanell & Persson in 2003. This analysis takes into consideration for example gross mobility rates by mobility types, age and education structure of the working age population and net in-flow to employment of younger age groups. By this analysis it is possible to compare the current spatial pattern of economic renewal and demographic change in Finland.

Basic statistical data is used from the years 1993 and 2001 showing regional development in the Finnish local labour market areas. To the certain local labour market area are belonging the municipalities from which at least 10 % of labour force is working in the main centre of that local labour market area. There are 52 local labour market areas which consists more than one municipality, and 172 labour market areas which have only one municipality.

The specific data of the labour market performance is derived from the years 1999-2000 representing the economic boom in Finland. This gross-stream data serves to show the mobility between different labour market status groups from 1999 to 2000. Hence, it is possible to determine what has occurred for example to a person, who has been unemployed in 1999 by the end of the next year in the labour market; whether she/he has been employed following the migration, if she/ he is still unemployed or perhaps outside the labour force. In the case of gross-steam data, labour market areas with only one municipality is treated as a one area in the regional analysis because of lacking the more detailed data. The gross-stream data has been bought from the Statistics Finland.

### **Transitional labour markets**

Transitional labour markets are defined as legitimate, negotiated and politically supported sets of mobility options for the individual. (Schmid & Gazier 2002; see Heikkilä et al. 2004; see Persson et al. 2004). The theory of transitional labour markets draws attention to the fact that all labour market flows are interacting and can occur in both directions: from education to job and vice versa, from unemployment to job - can be temporary and repetitious - etc. Transitions can happen during the week, the month or year, and inevitably several times over the individual lifecycle. Transitions can lead to labour market inclusion or exclusion.

Most transitions take place within the limits of the commuter catchment area. The segmented structure of the labour markets according to formal qualifications will be inherent in the analysis. It is possible to describe to what extent, and where, labour in different pools or status groups, at different levels of education, is activated or deactivated. Activation rates are measured as the change in status to employment from year t to year t+1. Correspondingly, deactivation is seen as changes in status from employment year t to year t+1 (see Persson et al. 2004).

The following major statuses (year t and year t+1) can be defined in the analysis: employed (wage labour or self employed), unemployed, retirement, studies and others outside of labour force. There are local transitions and transitions in which countryinternal migration or even international migration is connected. In Figure 1 it is shown the frame of the transitional labour markets.

The institutionalization of transitional labour markets establishes stable bridges

linking all forms of productive activity and facilitating movement in one directions or the other: paid work with variable employment relationships or working times, lifelong learning, unpaid family or do-it-yourself work, other recognized forms of social work, such as voluntary work, sabbaticals etc. The institutions of labour market policy should be designed in such a way as to create incentives for the transitions between these various forms of productive work, to make possible combinations of various forms of work and to provide social protection for the ensuing risks (Schmid 2002:188).



#### The transitional labour market

Figure 1. The transitional labour market with flows of "individual careers" to and from employment occurring during one year (Source: After Schmid 1998; see Persson et al. 2004).

# Regional demographic and economic processes

The total fertility rate of Finland has remained rather stagnant for the last twenty years, being 1.7 at present. Nevertheless, since the number of women at childbearing age is decreasing, the total number of births is decreasing as well. Furthermore, it seems that the more urban the region is the smaller the total fertility rate. The share of women without children in the age group of 30-39 years varies also in accordance with the type of region: in the sparsely populated rural communities the average share was 18.9 % in 2001, whereas in the city of Helsinki the share was nearly 50 % (Pikkala 2003).

Although the total population increase is still positive in Finland, the growth has been decreasing for the last decade. At the end of 2001, the number of births exceeded the number of deaths by over 7 600. In addition, due to the net immigration of 5 800 persons, the population increase in 2001 was nearly 13 500, or 0.3 %. Fewer and fewer children are born in Finland, and the number of deaths has increased. Thus, the population of Finland is ageing. The life expectancy of women is higher than men; in 2001 the life expectancy of women was 81.5 years, and men 74.6 years (Statistics Finland 2002a).

Population decline and ageing are regional problems, and especially in the rural areas the trend has been negative due to selective out-migration. In 2001, the urban municipalities of Finland increased their population by 23 000, whereas at the same time the population in rural municipalities declined by some 10 000. What makes this outflow of rural people more sticking is the fact that nearly 70 % of Finnish municipalities are classified as rural, and only some 20 % of the population lives in the rural areas. The population of semi-urban municipalities has remained rather stagnant. The net population loss of sparsely populated rural districts has been greater than the one of rural centres (Statistics Finland 2002b). Migration will also be affected by the oversupply of labour force i.e. the number of people reaching working age during a year is higher than the annual retirement figure. This demographic migration pressure (potential) has been the highest in the province of Oulu.

Ageing process varies remarkably between the local labour market areas. In 2001, the greatest share of 65-years-olds and over among the labour market areas with more than one municipality was in Kristiinankaupunki (23 %), compared to the slightest in Oulu (11 %). Among the labour market areas with one municipality the share of 65-years-olds and over reached over 20 % in 108 areas, of which greatest in Luhanka (31 %).

Migration flows from one municipality to another has increased considerably in recent years, mainly due to the improved economical situation after the depression of the early 1990s. In 2001 the internal migration in Finland was at its highest with nearly 282 000 persons moving from one municipality to another (Rapo 2003). It has not been that high since 1974 when the migration of "baby boom generation" was most active. Yet, in 1974 the amount of people belonging to the migration active age group was over 30 % bigger than today. Thus the generation of today will most probably move more often than the generations before.

Continuous net out-migration from northern and eastern Finland has had drastic effects especially on the population structure of the Eastern Finland. In the flow of intermunicipal migration the age group of 15-24-years-old is the most active, with 35 % of the moves. Also the second category, the age group of 25-34-years-old, shares rather large proportion of the moves with 26 % (Statistics Finland 2002c). In northern Finland the birth rate has remained relatively high and thus still compensates the net loss of migration (Karjalainen 1993:72-73; Sosiaali- ja terveysministeriö 2001).

The local labour market areas can be classified into four groups according to the demographic development and countryinternal migration: 1) natural population increase and positive net migration, 2) natural population increase and negative net migration, 3) natural population decrease and positive net migration, and 4) natural population decrease and negative net migration. The group one represents the most favourable type of demographic development where both the natural change and the net-migration were positive and reinforced each other with the result that population increased. This does not, however, automatically lead to the conclusion that the regions in group one have the sharpest population increase – instead this is naturally a function of the relation between natural population change and net-migration. In the second group the positive effect of natural population change neutralized the negative net-migration effect and in the third group the opposite was true. The least favourable case with regard to development and dynamics is group four where the natural population decrease is reinforced by net out-migration, which can result in a viscous circle and a negative

spiral process. The regions in group four can be characterized as depopulation areas.

Based on data from the year 2001, the share of local labour market areas was greatest in the last group with 67 %, followed by the group two (16 %), the group three (11 %) and the group one (7 %) (Figure 2). Thus, majority of the Finnish local labour market areas experienced a population decrease by both negative natural population development and net out-migration. The most favourable local labour market areas have been regions located in or around the metropolitan or growth centres.

Instead of having a look just on countryinternal migration, some notable changes can be recognised if including immigration also into the analysis. The local labour market areas of Kaustinen, Lappeenranta, Mäntyharju, Tammisaari and Vaasa experience negative internal migration balance, but they benefit from immigration in the way that the total net migration is positive if immigration is included. Lappeenranta and Tammisaari labour market areas have even greater impact because negative population development (natural population decrease and negative country-internal migration balance) turned to be positive population development because of immigration.

The differences in regional development can by analyzed by population age structure. The balance of the regional labour force structure is studied from the perspective of new potential labour force, i.e. 20-24-years olds, and those who are soon leaving the labour force, i.e. 60-64-years olds. The balance between the inflow of young labour force (20-24-years) and outflow of old labour force (60-64-years) varies according to the local labour market areas



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Figure 2. Natural population development and net country-internal migration by local labour market areas in Finland in 2001.

(Figure 3). When having a look on those local labour market areas with more than one municipality in 2001, the loss of working age population, i.e. the outflow of 60-64-years-olds is greater than the inflow of 20-24-years-olds, was greatest in Kemijärvi labour market area (with the index of 56). Whereas, among the labour market areas of single municipalities the loss of working age population was notable within the 14 local labour market areas, of which the greatest loss was experienced in Luhanka and Rautavaara in which the index was only 34. At the same time, the increase of working age population, i.e. when the inflow of 20-24years-olds is greater than the outflow of 60-64-years-olds, was greatest in the labour market areas of Oulu, Jyväskylä and Joensuu (with the index over 155).

It is important to analyze migrants by their characteristics like education background, because the net gain or net loss of know-how has great importance to the regional development. Southern and central Finland have been winners to gain educated people. Especially in Lohja labour market area the growth has been great, around 3 %. Salo, with Nokia effect, and Tammisaari labour market areas are other significant gainers in the southern Finland. Oulu labour market area in the northern part of Finland is pulling highly educated people. It is surprising that the university cities like Joensuu, Rovaniemi and Turku are losing highly educated people.

#### Labour market dynamics

Hanell and Persson (2003) developed a common Nordic typology of local labour

markets by using combinations of structural factors describing each local labour market areas in Finland, Norway, Denmark and Sweden. The analysis of the labour market dynamics in Finland is mainly done using their typology. The seven regional types are: 1) capital region, 2) metropolises, 3) regional centres with university, 4) other regional centres, 5) medium-sized towns, 6) small labour areas, and 7) micro labour areas (Persson et al. 2004:50).

#### Age structure

The age structure of the labour force in 1999 varies especially in the younger groups, 16-34 years olds, when looking by the seven typologies of regions in Finland (Figure 4). The most favourable structure is found in the capital region and the proportions of this age group diminishes step by step towards the micro labour areas. The share of 16-34 years olds in the capital region is 36 % and in the micro labour areas only 25 %, which is very below the national average 32 %.

Among 35-54 years olds, the micro labour areas have the highest proportion (62 %) while the lowest figure is found from the capital region (53 %). In the older age groups the regional differences are not so remarkable although the micro labour areas have again the slightly higher proportions.

The Figure 5 shows the gross mobility rates by mobility types. All mobility rates are measured in per cent of the stock of employed in the first year of period. By standardizing the rates it is possible to measure how much each type of mobility contributes to the total gross mobility in Finland. Most important type of mobility



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Figure 3. Potential labour force growth (20-24-years-olds) versus potential labour force outflow (60-64-years-olds) in the local labour market areas in Finland in 2001.



Figure 4. Age structure of labour force in 1999 by 7 typologies of regions and national average in Finland (Data: Statistics Finland).



Figure 5. Gross entries to job and gross exits from job in Finland in 1999-2000 (Data: Statistics Finland).

is the change of jobs within the local labour market areas. There are more entries to job from local unemployment than from local education. In Finland, the unemployment level is still higher compared to for example other Nordic countries. The highest unemployment rate of the Finnish local labour markets is 18.9 % and the lowest 1.9 % which shows the great regional variations. Immigration is not yet playing very visible role in the Finnish labour markets but it is expected to get higher importance in the future.

### Demographic renewal, activation and retirement of labour

The demographic renewal of the labour force measured as the net in-flow to employment in the age group of 16-34 years olds is the highest in the capital region (3.5 %), metropolises (3.8 %) and regional centres with university (3.6 %). In the small labour areas and micro labour areas the figure is only 2.3 %.

The highest net in-flow of 16-34 years olds from local education to job is found in the regional centres with university. This shows how important the educational institutions are for these areas to get new labour. The activation of unemployed to employment has been also important factor in the labour markets and the share of this net in-flow has been again the highest in the regional centres with university. The net inflow of the local others to job has been quite in the same level in the different regions.

Migration plays an important role among 16-34 years olds which is also the most migratory active age group. Capital region is gaining of this net in-flow while the smaller labour market areas are facing negative net-inflow i.e. these regions are losing population which is in the most active age for working to the other regions. Immigration is still in low numbers in Finland.

Retirement is important flow to deactivation of labour and in Finland the average retirement age, 59 years, is below the OECD average level of 61 years. In Figure 6 it can be seen that the net exits to retirement among 55+ is the greatest in the small labour areas and micro labour areas. This is one sign of the older age structure



Figure 6. Net exits from job to retirement of 55+ years old in 1999-2000 by 7 typologies of regions in Finland. Percent of stock of employed 16-74 years old in 2000 (Data: Statistics Finland).

of the labour force (see Figure 4). It is interesting to notice that there is also the flow of people from retirement to employment although the share is small in all regions.

The positive effects of net flows of employed with higher education is the strongest in the metropolises and in the capital region followed by the regional centres with university (Figure 7). Micro labour areas show negative net effects of labour flows of post-secondary educated. Secondary educated have the highest net growth rates in metropolises while primary educated have the net growth the greatest in the capital region.



Figure 7. Net flows of labour by educational levels 1999-2000 in Finland by seven typologies of regions (Data: Statistics Finland).

#### Amount of jobs and net-inflow to economic sectors

Finland faced the most negative depression period among Nordic countries when using as a measure the development of unemployment. From the depression year 1993 the amount of jobs has increased in all seven typologies of regions (Figure 8). In absolute numbers, it can be seen that the number of jobs in the capital region has grown nearly by 160 000 and the growth percentage has been over 30 % during 1993-2000. The growth rate in the metropolises was 27% and in the regional centres with university 17 %. In the micro labour areas the growth has been the lowest: the add of the jobs was 4 600 and the growth only under 2 %.

In 2001, over 30 % of jobs were located in Helsinki labour market area. The second largest employing labour market areas were Tampere and Turku, with 7 % and 6

% of jobs respectively. When comparing same time the unemployment situation in Finland in 1993 and 2001, the situation has improved notably: from 22 % in 1993 to 12 % in 2001. The change in the amount of jobs from 1993 to 2001 was negative within the five local labour market areas with more than one municipality, of which the decrease of jobs was most drastic in Nurmes and Kemijärvi, with about 10 % decrease. In addition, among those single municipality local labour market areas, the change in the amount of jobs from 1993 to 2001 was negative within 88 areas, of which most drastic in Luhanka labour market area. with nearly 30 % decrease.

Economic renewal of the Finnish economy can be seen in the Finnish society. KIBS –sector (Knowledge intensive business services) has faced the most positive total net in-flow measured by the net in-flow from unemployment, studies and others outside of labour force between



Figure 8. Amount of jobs in 1993 and 2000 and the change percent during 1993-2000 by 7 typologies of regions in Finland (Data: Statistics Finland).

years 1999-2000: the growth has been 5.6 % of the total employed in KIBS. The growth in construction has been over 4 % and in ITC-manufacturing almost 4 %. Most negative total net-inflow has been in primary and mining nearly -2 %.

From which pools the economic sectors have got the labour? KIBS –sector has recruited new personnel from studies. This is the case also for ICT-manufacturing and education. The growth of primary and mining sector through studies has been only 0.5 %. Net in-flow from unemployment has been the greatest to construction, health and social work and unspecified sectors and the lowest to ITC-wholesale (0.1 %). Net inflow from other pools outside of labour force has been negative in all sectors except in ITC-manufacturing 0.3 %.

### Conclusion and future challenges

The production and employment have developed favourable in Finland and in its regions after the depression which occurred during the first half of the 1990s. Regional concentration, however, has gained strength and the regional differences have grown during the fast economic growth. The main part of the growth has taken place in the growth centres, where the service enterprises of electric and electronic industries are mainly located. This reflects straight to the demand of labour force and also to population development. Very alarming development is in the labour market areas where can be seen both natural population decrease and negative balance in country-internal migration.

According to the forecasts the population grows during 2000-2015 only in five counties and within them mostly in the growth centres. Fastest growth will be still in the capital area and in the Uusimaa county where the capital area is located (cf. Laakso & Vuori 2003). After natural population increase slows down and turns to decrease the meaning of migration for the regional population development will grow higher and in the future it is the only way to increase population and labour force in different regions.

Double residency will be more and more common in the future. People will have a small place where their jobs are officially located and then they will have a larger residence in the rural areas. With more flexible working hours and the opportunity to work from home, this will become an possible alternative. Commuter patterns already vary greatly among different educational and professional categories. A more flexible and mobile labour market in combination with attractive housing environments will come to have a pull and competitive effect in the future (Johansson & Heikkilä 2003).

The supply of the labour force will begin to decrease in Finland and there will be shortage of the labour force. From the beginning of 2010 the active population will decrease and by the year 2030 the amount of decrease will be around 400 000 persons, i.e. a little under 20 000 on a yearly basis. The decrease is fastest in the decade beginning 2010, at its highest almost 30 000 persons per year. The worst situation after 2010 is in the counties of the eastern Finland where the people of working age who are entering to labour force accounts only 60 % of those who are leaving labour force. According to projections the number of people leaving working life because of retirement and death is around one million between years 2000 and 2015. From 2000 to 2010 over 600 000 people are going out from work which means nearly 30 % of the employed in 2000. During this time, only the age group 55-64 years shows an increase, about 200 000 persons, within the labour force. In general the average age of the labour force will rise. The share of the elderly in the dependency ratio will increase significantly after the retirement of babyboom generation (see Mella 2001; Parkkinen 2001; Työministeriö 2003).

There has been discussion recently on whether Finland should recruit labour from abroad in order to prevent a shortage of labour that is estimated to occur in the near future. The key principles of the government's immigration and refugee programs are openness, internationality, human rights, good management and legal security on the one hand, and preventing illegal immigration on the other. Immigrants can stimulate the development of Finland's economy and culture and act as a bridge in international communications. Observing current developments in the economy and society, a controlled promotion of immigration is thus desirable. Flexible and efficient integration of all immigrants into Finnish society and working life is the primary goal of immigration policy (Ministry of the Interior 2003). Finland is, however, competing of the skilled immigrants with the other countries.

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