

# Internal Migration and Specialising Labour Markets in Finland

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## Abstract

A short description on phases of internal migration and industrial changes in Finland is given from a historical perspective. The main part of the article concentrates on special features of internal migration that are related to the specialisation of the labour markets in the 1990s. Three interconnected developments are analysed – internal migration and growth of urban centres with well-developed high-tech industries, unemployment, and the relationship of internal and international migration. Urban centres with developed high-tech industries have strengthened their edge over others in developing a new economy of network societies. The 1990s are also characterised by increased migration of the unemployed. The trend started during the depression in the 1990s, and seems to have continued ever since. Internal and international migration are related to each other. The largest urban centres play an important role as linking points of these two forms of migration. Internal migration can be seen as a step-wise approach to unfamiliar conditions. Almost three out of ten emigrants made internal moves before emigrating in the 1990s.

**Keywords:** internal migration, urban high-tech centre, unemployment, specialising labour markets, selective migration

## Aim of the Study

The aim of the study is to analyse the role of migration in three developments:

1) growth of major urban high-tech centres, 2) changes in employment, and 3) internationalisation. All these three phenomena grew in importance in the 1990s, and all of them are closely related to human mobility. Together they seem to increase unbalanced regional development in Finland.

The analyses utilise data that comprise a ten percent sample of internal and international migrants in Finland in 1987-1998, provided by Statistics Finland. The database includes information on individual migrants collected from different registers and joined together by social security number. The data comprise various fields of mobility that provide information about departure and arrival localities or countries, educational degrees and fields, employment status, and locality of job before and after migration and so on. This allows the researcher to follow one person's mobility and changes of living and working conditions over several moves, provided that the moves occurred within the period of 1987-1998. In this article, educational issues are considered particularly interesting in terms of the growth of urban high-tech centres. The analyses of changes in employment status following migration concern only employed and unemployed migrants (see Tables 4 and 5). Those who migrated but did not change jobs are excluded, as well as those who were outside the labour force before migration and entered the labour force only after migration. Finally, internal migration is assumed to be related to international migration, both of them being mainly oriented to a few urban centres.

## **Trends of internal migration from a historical perspective**

In the early phase of industrialisation in the 19<sup>th</sup> century migration flows reflected drastic changes in Finnish society. The country was undergoing huge structural changes resulting in regional shifts and strengthening the flow of migration from rural areas to industrialising urban areas. The changes were based in new legislation. The guild system was suppressed in 1868, and a complete freedom of trade and occupation was declared in 1879. Contemporary laws on poor relief and vagrants extended the right to move to all population groups in the country.

Many developmental trends of agriculture accelerated the use of the liberties given by new legislation. During the 19<sup>th</sup> century, the number of tenant farmers, hill cottagers and dependent lodgers increased manifold compared to that of farm-owners. The countryside was full of potential migrants, so-called excess population. In more modern terms it was a question of migration pressure rather than surplus population. Migration pressure was also strengthened by a custom adopted by farmers giving the farm undivided to the oldest heir, as well as by very rigid limitations on industrial activity. In addition, the value of land and forests went up along with industrialisation, and farmers were no longer willing to convey land to tenants in exchange for their work. Tenant farmers became a burden to farmers who had no difficulty cancelling oral agreements, and tenant farmers had no other choice but to try and find the means of making a living somewhere else.

Two developments characterise migration at the turn of the century. First, industrialising cities in Southern Finland, mainly Vyborg and Helsinki, attracted migrants from rural areas. Second, a growing economy in the United States needed immigrant workers from Europe, and a great portion of mobile people, particularly from the countryside, went over the sea to North America in hopes of a better life. The cities of Vyborg and Helsinki extended their attraction mainly to the eastern and northern parts of Finland, while North America attracted the southern and western parts of the country. These trends continued until World War II. However, emigration to the United States practically ceased in the 1920s because of the American Immigration Acts of 1921, 1924 and 1927, making Canada the major destination from the 1920s onward. After World War II, Vyborg was ceded to the Soviet Union, and Helsinki, the capital, became the main destination for internal migrants.

Traditionally, major migration trends follow structural changes in society, and Finland was no exception. It has been estimated that the industrial structure of Finland changed in a period of 35 years after World War II as much as that of Norway in over a hundred years and that of Sweden in seventy years (Kiljunen 1979). One reason for this extremely rapid change was the paying out of war reparations which was possible only by expanding existing industries and by creating new fields and products. Probably the most effective change from a migration perspective was the development from an agrarian society to a service and information society. In the 1950s society was still based on agriculture and forestry, and migration was strongest between rural areas. However, manufacturing and service industries were growing rapidly, encouraging migration to expanding urban areas. In the 1960s service and manufacturing industries continued to grow at an increasing speed, particularly in large urban areas, and as a consequence migration to large centres accelerated. The 1960s and the beginning of the 1970s were a period of vigorous migration, dubbed the "mad years" of migration. Population was declining in rural areas, as was migration within the countryside. To a great extent, the development was similar in Sweden and Norway. However, the net migration gain of the capital province (Uusimaa) was much greater in Finland than in Sweden (Stockholm) and Norway (Oslo/Åkerhus) (Korkiasaari 1991). In addition, much of migration pressure in peripheral regions of Finland oriented to Sweden. Should Sweden not have been such a competitive alternative for Finnish migrants, the net migration gain of the capital province Uusimaa would probably have been even greater. In all three countries the spatial distribution of population became more balanced in the late 1970s but turned again to favour more developed regions in the 1980s.

In the early 1970s population growth occurred mainly in cities and their suburban areas. Traditional industrial urban areas grew rapidly while the countryside lost its population. The oil crisis levelled regional population development in the middle of the 1970s, and, followed by the economic recession, speeded up the reorganisation of production in big industries. The rate of unemployment began to rise in large southern industrial cities, but the reorganisation of production and the trade with the Soviet Union helped to

postpone the crisis by a few years. The unemployment rate grew rapidly during the early 1980s. In some regions the expansion of the public sector, especially health care and education, temporarily slowed down the rise of unemployment.

In the late 1970s, economic growth was relatively the greatest in less developed regions, while big industries in southern cities suffered from structural changes that resulted in declining demand for labour from peripheral regions. This development decreased migration flows to large urban areas. The balanced development of population distribution could still be seen in many regions in the 1980s, particularly in the eastern parts of Finland (see Korkiasaari 1991; Korkiasaari and Söderling 1994).

In the early 1980s, big manufacturing industries continued to suffer from structural changes and were obliged to decrease the number of workers. Old, traditionally strong industrial communities in the southern parts of Finland were hit by this problem, but the influence of the high-tech industry, though still minor, could already be detected, predicting the future expansion of certain industries in the southern parts of the country and in urban centres and their commuting areas. For example, employees in information occupations requiring high skills and knowledge concentrated in communities that already had many such employees. The concentration was already apparent in the late 1970s, but became much stronger in the early 1980s (Kuusi 1989).

The 1980s was a period of great industrial change. Even so, the influence of economy on spatial mobility was not as strong as in earlier decades, and there were many reasons for this. First, the supply and demand of labour did not meet, which was probably greatly due to structural changes in industry. Second, the region of the capital suffered from a shortage of labour while at the same time there was a severe shortage of housing, which placed barriers on migration. Third, the growth of the labour force did not continue, and it was also ageing (Korkiasaari and Söderling 1994, 243-244).

Such developments as described above tend to create migration pressure that has little possibility of being released internally within a country. However, Finns have traditionally had channels for releasing the pressure: first, North America around the turn of the 19<sup>th</sup> and 20<sup>th</sup> centuries, then Sweden since the 1960s. It is not surprising that emigration to Sweden in many ways resembled internal migration in Finland. Sweden was an alternative to the urban centres of Southern Finland. Many of the migrants were compelled to move because of real or impending unemployment. Towards the end of the 1980s, labour markets in all developed countries became more and more specialised, putting up barriers for potential migrants with only primary education. This development touched many potential Finnish emigrants because a significant number of migrants originating in rural areas and outside of the southern part of Finland had little or no secondary or higher education. For example, 57.8 percent of the Finnish emigrants to Sweden had only primary education in 1981, and nine years later, in 1990, the

percentage dropped down to 44.3 percent (Kultalahti 1992). The greatest increase was in the percentage of those with secondary, vocational education. The number of Finnish emigrants to Sweden plummeted to less than a half during the decade. Sweden no longer represented the same choice for Finnish migrants, and many who did emigrate were "quick returnees" who came back to Finland within a year or so (Kultalahti 1993).

Throughout the history of independent Finland, the general tendencies and fluctuations of internal migration are both reasons for and consequences of regional differentiation. The 1990s saw rapid technological changes all over the world, which represented one of the major reasons for unbalanced regional development that in turn resulted in the growth of the largest urban areas in Finland. A great number of new jobs were created in these centres, offering job opportunities for those with specialised skills or the ability to acquire new skills and knowledge quickly through on-the-job training. Many studies have indicated that unbalanced development is still accelerating rather than slowing down – the largest urban areas have a positive net migration (see e.g. Vartiainen 1997). According to preliminary figures by Statistics Finland, the growth of the largest centres seemed still to be continuing in 1999, but not at an accelerating speed (HS 31.12.2000).

## **Growth of urban high-tech centres<sup>1</sup> and migration in the 1990s**

The rapid growth and specialisation of the largest urban areas are closely related to both internal and international migration. In the 1990s, jobs created by new technology concentrated mainly in a few centres, implying an unbalanced spatial population distribution. This is not to say that the growth of information technology was the only reason for accelerating migration, but it was and still is one of the most important factors. Vartiainen (1997) reports on new features of internal migration trends during the first half of the last decade (1993-1996). His analyses are not directly connected with the growth of urban technological centres, but the results indicate that as far as the largest urban areas are concerned, the growth is, with few exceptions, closely related to new technology.

Vartiainen (1997, 10-14) divides the sub-regional areas (NUTS 4, see Statistics Finland 2000) into groups by net migration. The Helsinki area is the clear winner, but the margin to the groups that follow seems to be narrowing. The second group of winners comprises all other large urban areas. An interesting exception in this group is the small community of Salo in the south-western part of Finland. Salo has a high concentration of high-tech jobs, mainly in the Nokia concern and the companies related to it. The importance of new technology is well indicated by the concentration of high-tech activities

<sup>1</sup> In this article, the term "urban high-tech centre" refers to urban centres with a relatively great share of jobs in the field of new technology.

in all major urban centres receiving net gains of migration, notably the Helsinki, Tampere, Turku, and Oulu areas. The third group of winners consists of regional centres. These centres obtain either small net gains or losses.

The fourth group has small net migration losses. The group includes some regional centres and the outlying areas of larger urban areas. The losses experienced by the outlying areas suggest a shift in population development from the earlier decentralisation *within* urban areas to a concentration in core centres. Core areas attract particularly students and the employed and unemployed, while retired persons and families with children tend to choose the outskirts of urban agglomerations. The fifth group with modest losses comprised mainly smaller centres of manufacturing industries and rural centres. The last group, with the severest losses, is located mainly in the peripheral areas of Eastern and Northern Finland but also in some areas of Central Finland.

The concentration of population in larger urban areas continued in the late 1990s. Skills required by new technology have increased the selectivity of demand for employees. This selectivity can in turn be seen in the components of population changes (net birth, migration and immigration rates) in 1994-1999. The four southern regions, which are the top regions of technological development, increased their population in all three components. The regions of Lapland in the north and the region of Kainuu in the north-east experienced just the opposite development in the three components (Statistics Finland 2000, see HS 29.10.2000). For example, in Lapland the recent low birth rate threatens the entire structure of the school system there. Birth rates declined by 28.8 percent in the 1990s (Niemelä 2000).

According to some other statistics, the city of Oulu had the most rapid population increase in 1998 and 1999 (Table 1). Other cities, such as Salo, Tampere, Helsinki, and Turku experienced considerable population growth too. There were, however, some interesting differences in the components of the population increase between these cities. In Helsinki, the increase of population in 1998-1999 was mostly based on internal net migration, while in Tampere and Turku it was based on both internal and international net migration. In Oulu, the proportion of natural increase was notable, and in Salo the population growth fairly evenly comprised all three components (see Table 1). The minor role of net immigration flows to Helsinki is based on a very large volume of emigration, and the sum of immigration and emigration flows exceeds many times that of the other large centres of international migration, being around one-fourth of the total flows in the country (Kultalahti and Karppi 1999). The results emphasise the importance of high-tech industries in the internationalisation of urban areas outside the capital region. The same trend can also be seen in the proportion of foreign stock, which is in general highest in high-tech centres (Kuntapuntari 4/2000).

Table 1. The relative importance (%) of components of population growth in selected cities 1999\*

City	Population 31.12.1999	Population increase (%) 1998-1999	Components of growth		
			Natural increase	Net internal migration	Net immigration
Helsinki	551 123	0.87	21.1	65.0	14.9
Tampere	193 174	1.00	22.4	57.8	19.8
Turku	172 107	0.69	15.5	63.6	20.9
Oulu	117 670	1.88	43.9	56.2	-0.1
Salo	24 199	1.17	23.8	42.3	33.9

\*Source: Adapted from Population Statistics, Statistics Finland, Kuntapuntari 4/2000.

It is worth mentioning that a new law on the municipality of residence had a considerable impact on the net migration gains of university cities such as Helsinki, Tampere, Turku and Oulu, as well as other communities with educational institutions. The law came into effect in 1994 and made it possible for students to be registered as residents in their study community. Many students took advantage of this possibility, and the registration showed up in the statistics as a new move although really it was only a change of registration. However, there were big differences between cities. According to one study (Pulkkinen and Saari 1998), the net gains of Helsinki, Tampere and Oulu were mainly based on real moves, not on the influence of the law. The proportion of quasi-moves was the smallest in the Helsinki area (29 percent) and somewhat greater in the Tampere and Oulu areas (about 40 percent). Whereas in the Turku area, one of the three largest university centres in the country, the net migration gain was mainly based on the influence of the law (72 percent). In the Jyväskylä area net migration was actually negative without students. On the average, 62 percent of net gains were real in the five largest university centres in 1995–1996. The study indicates also that the greatest net losses were mostly based on real migration flows.

Table 2 (page 110) gives additional information about the influence that the mobility of migrants with special education had on population growth in selected urban high-tech centres and other communities in the 1990s. The table places special emphasis on "business education", referring to fields closely related to industrial production, management and marketing. These fields are business, law, social sciences, science, engineering, manufacturing and construction. The rest of the fields of education and training are more obviously connected to the social infrastructure necessary for basic activities and welfare in society.

Table 2. Net migration (15 years and more) by education and centre in 1991–94 and 1995–98\*

City	1991–94			1995–98		
	A. All	B. Business education**	Effect of B on A (%)***	A. All	B. Business education**	Effect of B on A (%)***
Helsinki	21300	1260	5.9	28030	4330	15.4
Tampere	5650	1590	28.1	10800	2210	20.5
Turku	4280	550	12.9	7940	-160	- 2.0
Oulu	2270	610	26.9	5630	1570	27.9
Salo	380	50	13.2	1290	520	40.3
Other regional centres	8430	1010	12.0	6690	-1750	-20.7
Other	-5070	-42310	-12.0	-60430	-6720	-11.1

\*The figures are obtained by multiplying by ten the 10 % sample of migrants (internal and international) provided by Statistics Finland. Given a sampling error, the figures present an approximation of real numbers.

\*\*Fields of social sciences, business and law, science, and engineering, manufacturing and construction. "All" comprises both the "business-related fields of education and primary education, and other secondary and higher-degree tertiary level education (see Finnish Standard Classification of Education 1997, Statistics Finland 1999).

\*\*\*"Effect of B on A" indicates what share of total net migration (A. All) can be accounted for the net migration of migrants with business-related education.

These fields include general programmes, education, humanities and arts, agriculture, health and welfare, personal, transport and security services, environmental protection, and so on. These fields are not shown as a separate column in the table but form instead a part of the column "A All" indicating the total net migration of all migrants.

Total net migration is positive in all large and medium-sized centres but not in small towns and rural areas. The same applies to the migrants with "business education" in the early 1990s. Table 2 shows, however, that *in the late 1990s, the migrants with business education started concentrating in larger urban centres, and even the regional centres experienced losses*. The column "Effect of B on A" is perhaps more interesting than the other two because it shows the influence of business-related education and training on net migration of all migrants. There are clear differences between the largest cities in the early 1990s. The population growth of Tampere and Oulu most strongly depended on migrants with the knowledge necessary for high-tech development. In absolute numbers, the population growth of Tampere exceeds even that of Helsinki. In the late 1990s the development was more balanced among the largest urban centres (and Salo) but in the country as a whole the opposite was true. The results suggest that *urban centres with developed high-tech industries have strengthened their edge over the others in developing a new economy of network societies*. The question is one of regional polarisation during a period of drastic changes in economic structures.



Some conclusions can be drawn from the development of high-tech centres and migration in the 1990s. First, net gains in migration that create further conditions for growth concentrate in large and diverse urban areas. Second, industrial areas with one-sided manufacturing and traditional developing regions are not keeping up with this competition. Even core areas of less developed regions are experiencing a declining development. The differences between the winners and losers seem now to be deeper than before. The relative stagnation of mid-sized service centres is also a new feature in spatial development. The analyses clearly indicate a strengthening polarisation of regional development, not only in volume but also in the structural changes of migration.

## **Unemployment and migration in the 1990s**

The depression of 1991–1993 was the deepest since the beginning of independent Finland in 1917. Between 1990 and 1993, the GDP dropped by several percentage units, and the unemployment rate grew from 3.4 percent in 1990 to 18.4 percent in 1994 (see e.g. Statistical Yearbook of Finland 1997).

Unemployment and migration are traditionally linked. According to one economic theory, migration functions as a balancing mechanism between regional supply and demand of labour. In an expanding economy, the migration of labour seems to work this way. However, during a declining economy, particularly such as the early 1990s depression in Finland, migration functions poorly as a balancing mechanism of regional supply and demand of labour. For example, the number of unemployed migrants grew noticeably during the depression, but few of them succeeded in finding a job after migrating (Kultalahti 1997). More recent statistics suggest that the same trend still continues (Figure 1; cf. Vartiainen 1997). Consequently, social differences between the employed and unemployed tend to increase in these large urban communities.

According to Pulkkinen (1998), the migration propensity of the unemployed was rather stable during 1988–1996. Annually, about 7.5 percent of all unemployed migrated. However, in our sample the migration propensity of the unemployed was between six and seven percent before the depression, began to rise at the end of the depression, and was over eight percent after the depression. The sample clearly shows that the migration propensity of the employed was lower, ranging from 3.5 percent in 1987–90 to about 4 percent in 1991–93 and 1994–97. It is worth mentioning that the number of unemployed migrants more than quadrupled by 1997. Table 3 shows that the number and proportion of the unemployed among all migrants increased strongly after the depression, the proportion being about 30 percent. Figure 1 gives a more detailed picture of the connection of employment status and migration in 1987–97. The drop in the total volume of internal migration was mainly caused by a strongly declined mobility of people moving from one job to another. Their number was highest in 1989, falling by two-thirds by

1993. The increasing mobility of the unemployed before migration began a couple of years later and peaked in 1994. Figure 1 differentiates two types of mobility among the unemployed: migrants classified as unemployed both before and after migration ("unemployed before and after") and successful unemployed job-seekers who were employed after migration ("employed after").

Table 3. Finnish migrants in 1987–1998 by employment status\*

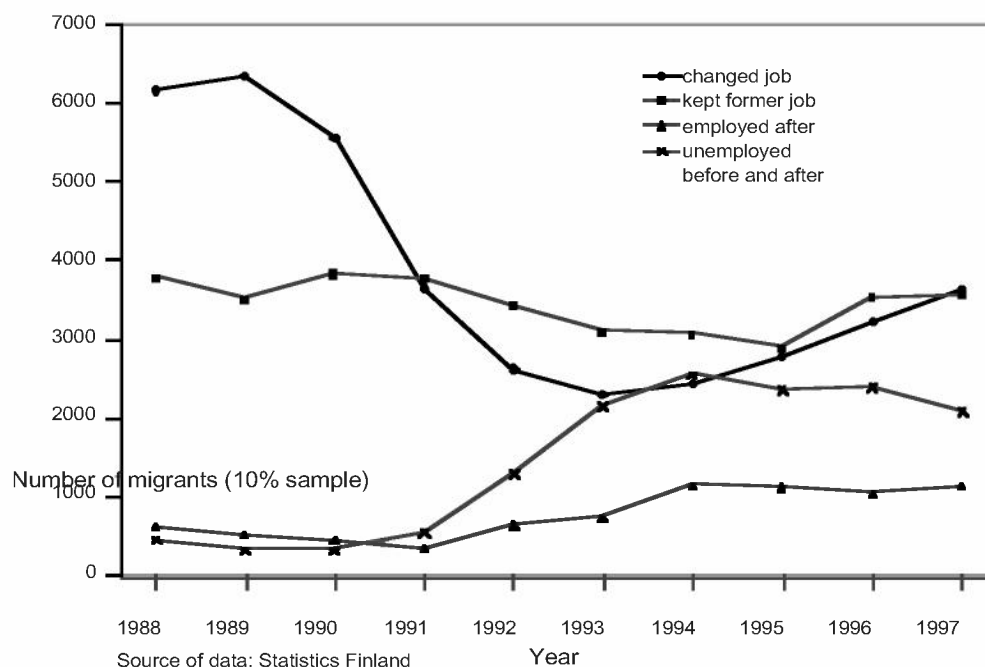
Employment status before migration	1987-1990	1991-1993	1994-1997
Employed	92.5	81.5	69.6
Unemployed	7.5	18.5	30.4
Total %	100	100	100
Total N	36741	31246	45772

\*10 % sample of internal Finnish migrants in the country provided by Statistics Finland. All migrants belonging to the labour force (employed and unemployed) before migration are included.

The strongest increase can be seen among the first group. What is interesting is that the mobility of the "unemployed" did not seem to decline after the depression to any remarkable extent. Figure 1 suggests four general trends between economic fluctuation and internal migration: 1) *a deep economic recession slows down the overall migration volume*, 2) *mobility of the employed who keep their former job after migration is not essentially affected by the economic fluctuation*, 3) *the strongest decline in migration during the depression can be seen among migrants moving from one job to another*, and 4) *mobility of the unemployed increases during a declining economy particularly in absolute terms, and the high mobility rate seems to continue during the recovery period*. It is worth mentioning that a high migration propensity among the unemployed is by no means a new phenomenon. For example, in the late 1970s the unemployment rate was two times higher among internal migrants than among the others (Söderling 1983).

Many developments in the labour markets encourage the unemployed to migrate in spite of a low probability of employment. The following may serve as good examples. First, in spite of an expanding economy following the depression, 13 percent of all jobs in the country disappeared between 1987 and 1997. There were regional variations – for example, in the most prosperous province of Uusimaa the loss was only eight percent, nine percent in Pirkanmaa, while in some other regions the loss was significantly greater (Statistics Finland 1999). Consequently, the imbalance between regional supply and demand of labour increased.

Figure 1. Migration and employment status 1987–97



Second, the specialisation of the labour market has weakened the position of certain employee groups more than others. For example, Kultalahti (1999) noticed in his study on migration and employment that although education generally helps a migrant to obtain a new job after moving, the relation is not straightforward. The demand of labour is related to the industrial structure of a particular region, and the high skills that are available in that region do not always meet the demand. In addition, even education that matches the demand does not always guarantee a new job (Mykkänen 1999). Labour markets have become more and more polarised into primary and secondary segments (see e.g. Nätti 1985 and 1988; Lampinen & Laukkanen 1990; Korkiasaari 1991). The primary segment is characterised by long employment contracts, good probabilities for career advancement and improved skills, and the secondary segment by unstable working conditions, repeated unemployment periods, poor possibilities for career advancement etc. The latter segment expanded during the depression, and the jobs of many skilled employees fell into this category. The probability of unemployment is higher in the secondary segment. The dissatisfaction created by this type of development spurs potential migrants to make the decision to move.

Third, public employment programs increased considerably the number of short-term jobs. In 1991, 250,000 employees, that is, 13 percent of the wage and salary earners, were only temporarily employed, and by 1998 their number had gone up to 330 000. The relative increase was even greater because the total number of people in the labour force decreased at the same time. The peak year was 1995 when only one in three new

employees was hired permanently. The same employees had several short-term jobs that were supported by labour force authorities. Two out of three temporarily hired workers were women, and one in two young employees (under the age of 25 years) worked under a temporary or short-term contract. The majority of these jobs are in the public sector, which also includes jobs supported by the state and municipalities (Lindberg 2000). According to one report, short-term work increased rapidly also in the region of the capital (Statistics Finland 1997). Nowadays more than a half of all new jobs are temporary. Short-term jobs are even seen as necessary for meeting employment rate targets set by the government (Myrskylä 1999). The growing number of temporary jobs might be seen as increased flexibility of the labour market. However, there are other interpretations. The Finnish labour market may look mobile but, in reality, the market has been divided into two more or less permanent segments. While some workers have regular jobs, others continue to fluctuate between unemployment and temporary jobs (Kananen 1999). Short-term jobs seem to maintain the instability of the labour market during an expanding economy. Education probably makes available better jobs for job-seekers, but many of the jobs remain temporary.

Fourth, some people may not have any other choice but to move along together with their families. For example, Söderling (1983, 100-110) observed in his study on internal migration in Finland that moving was more often related to work among males than among females. Greenwood (1997, 702-703) discussed family migration decisions by referring to Mincer (1978), whose analyses show that family ties<sup>2</sup> result in negative personal externalities that are usually internalised by the family and that thus tend to discourage migration. Mincer also indicated that "such ties tend to reduce the employment and earnings of those wives who do migrate and to increase the employment and earnings of their husbands" (Greenwood 1997, 703). However, the importance of family ties in migration decisions, as well as their economic and other consequences, have not been sufficiently studied, but it seems reasonable to assume that the increasing selectivity of migration makes a "tied" family member's chances of finding a job worse. The probability of a tied family member to match demand for skills in the area of destination is lowered by a specialised labour market that favours the spouse dominating migration decision.

The volume of migration declined in 1991-93 during the deep recession. In 1994 the economy took a turn for the better and the economy has been booming ever since. The volume of migration flows increased but the unemployment rate remained high and some aspects of polarising trends in society have deepened even further. Many people perceived the period between 1994-1997 as some kind of slow recovery period rather than a booming economy. However, the depression never prevented the unemployed from moving, and migrants without any information of a job in the new locality accounted for a great portion of the migration to urban areas, not only to the largest urban

2 "Tied persons in the family are those whose gains from migration are (in absolute value) dominated by gains (or losses) of the spouse" (Mincer 1978, 753, as referred to by Greenwood 1997).

agglomerations but also to mid-sized and small centres. The trend was so strong that the large centres of manufacturing industries suffering from total net losses gained more unemployed migrants than they lost (Vartiainen 1997).

The unemployment rate of the total labour force was between three and four percent in 1987–1990, but during the depression it came close to twenty and declined very slowly in the years to come. Tables 4 and 5 (cf. Figure 1) present figures on migrants' employment in 1987–1997. *A general principle seems to be that the unemployment rate among Finnish migrants is about twice as high as in the total labour force* (Table 4)<sup>3</sup>. A similar result was obtained some twenty years earlier (Söderling 1983). However, as for the numbers of unemployed migrants, the migration periods differ notably from each other. In the late 1980s, during a flourishing economy, the employment rate was so high that the small number of the unemployed consisted mostly of those who did not match the demands of the labour market. Unemployment was obviously based on structural barriers. The same phenomenon appeared among the unemployed migrants, too: one year after migration, the unemployment rate among migrants had increased rather than the opposite. The situation was different during the depression (1991–1993). The unemployment rate among migrants was extremely high, but within a year of migrating, relatively many of the unemployed migrants succeeded in finding a job. In addition, a change-over in status to that of a student, retired person or home worker

Table 4. Main activity of the Finnish labour force after migration in Finland 1987-1996\*

Employment status after migration***	Years of migration**					
	1987-1990		1991-1993		1994-1997	
	$t_i$	$t_{i+1}$	$t_i$	$t_{i+1}$	$t_i$	$t_{i+1}$
Employed	77.1	-0.8	49.6	+2.1	51.0	+6.8
Unemployed	8.6	+0.4	32.3	-4.4	29.6	-7.4
Student	6.3	0.0	9.1	+1.2	12.2	-0.6
Retired	1.6	+0.5	1.7	+0.6	1.4	+0.5
Other	6.4	-0.1	7.3	+0.5	5.8	+0.7
Total %	100	0	100	0	100	0
Total N	25554	25460	20875	20809	32567	32407

\*10 % sample of internal Finnish migrants in the country provided by Statistics Finland. Because we are interested in how migration results in changes in employment status, all migrants who moved from one municipality to another but kept their former jobs are excluded. This was done by including only those migrants whose municipality of work was not the same before and after migration or who started their new jobs during the year of migration.

\*\*The last week of the previous year of migration.

\*\*\* $t_i$  = the last week of the year of migration,  $t_{i+1}$  = a year later: change in percentage unit. The total N is somewhat smaller a year later because of emigration and deaths.

<sup>3</sup>The result is based only on the migrants who belong to the labour force (employed and unemployed) before migration. Because we are interested in how migration works as a balancing mechanism between regional supply and demand of labour, those who entered the labour force only after migration were excluded, as well as those who moved and did not change their jobs (see footnote in Table 4).

Table 5. Main activity of the Finnish labour force after migration by employment status before migration in Finland 1987-1997\*

Employment status after migration***	Years of migration and employment status before migration**											
	1987-1990				1991-1993				1994-1997			
	Employed		Unemployed		Employed		Unemployed		Employed		Unemployed	
$t_i$	$t_{i+1}$	$t_i$	$t_{i+1}$	$t_i$	$t_{i+1}$	$t_i$	$t_{i+1}$	$t_i$	$t_{i+1}$	$t_i$	$t_{i+1}$	
Employed	79.3	-0.6	58.6	-2.6	56.9	+2.6	30.3	+0.7	64.8	+6.1	32.4	+7.7
Unemployed	7.1	+0.4	20.8	+0.4	26.0	-4.7	48.8	-3.6	18.2	-6.2	44.9	-9.6
Student	6.3	-0.2	6.5	+0.9	8.8	+0.5	9.7	+3.2	10.6	-0.6	14.4	+0.2
Retired	1.7	+0.5	0.7	+1.1	2.3	+0.7	0.3	+0.4	2.1	+0.3	0.4	+0.7
Other	5.6	-0.1	13.4	+0.2	6.0	+0.9	10.9	-0.7	4.3	+0.4	7.9	+1.0
Total %	100	0	100	0	100	0	100	0	100	0	100	0
Total N	2279	22707	2763	2753	15100	15059	5775	5750	18690	18618	13877	13789

\*10 % sample of internal Finnish migrants in the country provided by Statistics Finland. Because we are interested in how migration results in changes in employment status, all migrants who moved from one municipality to another but kept their former jobs are excluded. This was done by including only those migrants whose municipality of work was not the same before and after migration or who started their new jobs during the year of migration.

\*\*The last week of the previous year of migration.

\*\*\* $t_i$  = the last week of the year of migration,  $t_{i+1}$  = a year later: change in percentage unit. The total N is somewhat smaller a year later because of emigration and deaths.

seemed to be quite a popular solution. The trend was strongest during the depression but was apparent later on as well. A rapidly recovering economy in 1994–97 did not seem to lower the unemployment rate among migrants who had been in the labour force before migration. However, the probability of being employed a year later was considerably higher (Table 4).

Table 5 shows detailed information about employment of migrants by status before migration. The table sheds additional light on the connection between employment and migration during different economic periods. Migration helped unemployed job-seekers find a job during a flourishing economy in 1987–90. Almost two out of every three unemployed was employed after migration. During the depression, the success rate plummeted to thirty percent and remained at the same level in 1994–97. However, the recovering economy showed its better side after a certain time of adaptation, and the proportion of those unemployed who succeeded in getting a job after migration increased by almost eight percentage units, while during the depression the corresponding percentage unit was practically zero.

There were also differences in change-over from employment status to another between the periods. In the booming economy of the late 1980s the status achieved after migration seemed to predict one's employment status one year later rather well. During the depression a new feature commenced, i.e. mobility from one status to another increased. The unemployment rate decreased because there was change-over in all directions – employment, retirement, studying and staying home. In 1994–97 the change-over in status from unemployed to employed increased clearly.

As for the adaptation time needed after migration, a period of a few years would probably show an even higher job search success rate; one year is a short period for integration in the labour market (see Laakso 1998). There are many reasons for emphasising the importance of an adaptation period after migration. Some of them have already been mentioned in this article, such as disappearance of jobs, specialisation of the labour markets, growing number of unemployed migrants, increase in temporary jobs, willingness to keep a regular job as long as possible, and dominance of the breadwinner's career. The following could be added to the list: ageing of the labour force and out-dating of skills in the midst of rapid changes. First, the ageing of the labour force makes the retraining of the unemployed difficult. Second, during the depression, many employees with professional skills fell into unemployment. At the same time the labour markets changed rapidly, and an unemployment period of two or three years made many skills outdated. This has also happened in communications technology.

## From internal to international migration

The 1990s created new requirements for potential emigrants. There was no more demand for unskilled labour, and even among employees with specialised skills a new kind of selection process materialised. In the decades preceding the 1990s, Finns were always able to opt for Sweden, as a country with decent living conditions, and earn enough money to return back to Finland. For unskilled people, this option is fading out with the specialising labour markets.

Under these circumstances internal migration easily develops a closer connection with international migration. This applies both to immigration and emigration. Certain regions and urban agglomerations function as destinations for internal migrants before their emigration, as well as destinations for immigrants and their further internal moves (Kultalahti and Karppi 1999). Since a potential migrant is never fully prepared for new conditions, internal moves before leaving a country can be seen as a step-wise approach to unfamiliar conditions and the culture of a foreign country. The most general trend is from a rural locality to a small agglomeration and from there further on to a larger urban area and later perhaps to another country. Internal step-migration is one way to broaden experiences and knowledge of new and unfamiliar circumstances before potential emigration.

The Swedish language, or in a broader sense the Swedish-language culture in Finland, seems to offer better cultural conditions than the Finnish language for migrants to emigrate directly, without internal moves, to Sweden (Table 6).<sup>4</sup> The trend is similar, though not as clear, in case of other countries as well. Table 6 sheds some empirical light on step-wise mobility in Finland. Almost one-third (28 %) of the emigrants had at least one internal move preceding emigration to Sweden in 1991–98.

Table 6. Finnish emigrants to Sweden with internal moves\*\* before emigration by spoken language 1991–1998\*

Language	Internal moves before emigration		Total	
	No	Yes	%	N
Finnish	69	31	100	1580
Swedish	82	18	100	542
All	72	28	100	2122

\*10 % sample of internal Finnish migrants in the country provided by Statistics Finland.

\*\*The period under observation for possible internal moves of each emigrant is four years before emigration to Sweden.

<sup>4</sup>Ahvenanmaa is a special case with very close cultural connections to Sweden. However, Ahvenanmaa has such a small number of emigrants, if compared to those in the regions in continental Finland, that its influence on total figures is not essential.



Step-wise migration is closely connected with a hierarchical system of urban centres. International migration has clearly developed in two trends: migration became globalised and spatially concentrated in the 1990s (Kultalahti and Karppi 1999). The City of Helsinki is the major gate for both immigrants and emigrants. Many migrants move first to Helsinki and only then emigrate, and many immigrants arrive first in Helsinki and may later move elsewhere in the country. The share of Helsinki was about one-fourth of all immigration and emigration, meaning that the proportion of international migrants in Helsinki was two and a half times higher than its total proportion in the country. Basically the importance of the cities as gateways for international migrants followed the hierarchy of the urban centres. There were some exceptions, most notably the Swedish-speaking areas in western parts of Finland (Kultalahti and Karppi 1999).

According to the same study (Kultalahti and Karppi 1999), the roles of Helsinki and its neighbouring cities Espoo and Vantaa have grown in the 1990s, as has that of Tampere and some others. Among the urban agglomerations that play a growing role in immigration but not in emigration are Lahti, Jyväskylä and Lappeenranta, suggesting that internationalisation has spread from the capital region to other urban centres too. This trend is partly connected to the development of high-tech industries (notably Tampere and Oulu), transportation (Lappeenranta on the southern coast), and geographical location (Tornio on the Swedish border) and cultural location (Tornio, Vaasa and Mariehamn in the Swedish-speaking regions).

In conclusion, we can say that large urban agglomerations play an important role as the "hubs" of migration networks where internal and international migrations link together. The importance of the hubs has increased in Finland, and there are also smaller urban areas which have adopted an essential role in this sense, but their role is based on cultural and geographical closeness to Sweden rather than on the general globalisation of migration. A special feature of the 1990s, in terms of links between internal and international migration, is the spread of internationalisation from the capital region to other large high-tech centres, and the contemporary concentration of departure and arrival regions in a few urban agglomerations.

## Conclusions

Internal migration has reflected periods of rapid social and industrial changes. A new type of migration from rural areas to urban centres started along with awakening industrialisation and liberalising legislation in the latter part of the 19<sup>th</sup> century. The period after the Second World War can be characterised by the influence of urbanisation. Industrial changes were still essential but the dominance of the service sector became obvious. Economic fluctuations by region have played an important role during the decades. For example, in the late 1970s economic growth was relatively the greatest in less developed regions, and big industries in southern cities suffered from structural

changes resulting in declining demand for labour from peripheral regions. The regional distribution of population became more even. This balanced development of population distribution could still be seen in many regions in the 1980s, particularly in the eastern parts of Finland.

The 1990s saw rapid technological changes all over the world, and this represented one of the major reasons for unbalanced regional development that resulted in the growth of the largest urban areas in Finland. A great number of new jobs were created in these centres, offering job opportunities for those with the necessary special skills or the ability to acquire new skills and knowledge quickly through on-the-job training. Net gains of migration created further conditions for growth to concentrate in large and diverse urban areas. The urban centres with developed high-tech industries have strengthened their edge over the others in developing a new economy of network societies. One-sided industrial manufacturing areas and traditional developing regions are not keeping up with this competition. In the late 1990s migrants with business education started concentrating in larger urban centres, and even regional centres experienced losses. The analyses clearly reflect an increasing polarisation of regional development, not only in volume but also in the structural changes in migration. The differences between the winners and losers seem now to be deeper than before.

The development of the Finnish urban systems and migration described above does not deviate from the development in other countries. Castells (1996, 401-403) points out that while the central cities are still shaped by their history, the development of modern urban hierarchical systems is increasingly based on the formation of the network society. As Castells, referring to Tarr and Dupuy (1988), puts it: "...the business center does not exist by itself but by its connection to other equivalent locales organized in a network that forms the actual unit of management, innovation, and work." He goes on to say that the business centre is the engine of the city, with a strong infrastructure of telecommunications, communications, advanced services, and educational institutions. There is a clear difference between American and European cities. In American cities, "The new managerial-technocratic-political elite does create exclusive spaces, as segregated and removed from the city at large as the bourgeois quarters of the industrial society..." Unlike America, in European cities, "the truly exclusive residential areas tend to appropriate urban culture and history, by locating in rehabilitated or well-preserved areas of the central city" (Castells 1996, 401).

While keeping in mind the smaller scale and smaller differences between population groups and between residential areas, these observations concerning European cities seem fairly well to apply to the fastest growing larger centres in Finland. These cities are relatively small but they still carry characteristics that are similar to their larger counterparts in European core areas. As Sassen (1999, 219-224) points out, both the sharp growth in the globalisation of economic activity and the growing service intensity

in the organisation of all industries can be seen at different levels of a nation's urban system. This emphasises the importance of highly educated professionals for the growth of urban centres, as could be seen in the figures above describing migration development in Finland.

As for the social conditions for attracting educated professionals, even the largest urban centres in Finland, perhaps with the exception of the Helsinki region, suffering from a great shortage of housing among other things, have some small-scale advantages. Cities are the loci for difference and diversity, implying also the potential for conflict (cf. McDowell 1999, 96-108). Social conflicts are often related to inequality, in turn implying isolation and deviation that result in increased social disturbances and criminality. Social problems related to social and spatial structures are still minor in Finland, including Helsinki, if compared with some larger urban centres in Europe. However, also in Finland, social safety is considered an important factor when skilled employees are choosing an urban locale to live and work in (e.g. Raunio and Linnamaa 2000). In the future, these issues will probably become increasingly important factors in the migration decisions of skilled professionals in Finland.

The industrial structure of Finnish cities is still to a great extent dependent on traditional industries, while the growth of the urban areas is based on modern high technologies and telecommunications and communications services. This is shown, for example, by analyses of major urban centres by industry, using an index of industrial concentration (location quotient: ratio that indicates the proportion of a certain industry in all industries in a region, to the proportion of the industry among all industries in the country). The results indicate that the attractive urban centres with highly developed modern fields of industry, such as electronics and ADP services, are still relatively strong in their traditional industries. The Tampere region, the second largest urban region with a high concentration of high technologies, is still (1996) specialised also in its traditionally strong industries, such as textiles and clothing, rubber and plastics, automotive, machine and instrumentation industries. The Turku region, the third largest urban region, is a good example with its traditional ship-building industry, and so on. The Oulu region, the fourth largest urban region, is an exception in that it has by far the greatest relative concentration of electronics industry (Laakso and Loikkanen 2000). All these regions are among the most rapidly growing urban centres.

The 1990s in Finland was also characterised by the increased migration of the unemployed. The trend started during the depression in the early 1990s, and seems to be continuing ever since. There are many reasons for this, such as the growing number of the unemployed in the total labour force, disappearance of jobs, specialisation of the labour markets, increase in temporary jobs, and dominance of the bread-winner's career. The propensity of the unemployed to migrate remained fairly steady, rose slightly at the end of the depression, and remained at that level since then. It seems reasonable

to conclude that the labour market recovered from the depression, but the polarisation of the labour markets, which deepened during the depression, has not disappeared. The phenomenon can be seen also among migrants.

In this article the perspective of economic status and migration has been that of individual migrants. In the literature, regional and national approaches have been more popular, mainly because of the availability of data. That is why existing information concerning the association of personal unemployment before and after migration in other countries is not affluent. Some results are available however. Greenwood (1997) presents results produced in several studies that indicate differences between American and European countries. For example, DaVanzo (1978) found that the unemployed were particularly sensitive to local unemployment rates. Greenwood points out that a number of European studies fail to confirm DaVanzo's result. Herzog's and Schlottmann's study (1984) shows that in the United States individuals who were unemployed in the 1960s were more likely to migrate than those who were not. This relationship held for all occupational groups observed. Hughes and McCormick (1989) point out that personal unemployment raises the propensity to migrate in the U.S., U.K., and the Netherlands, the propensity being much higher in the two European countries. The results presented in this article show that in Finland the propensity of the unemployed to migrate was clearly higher than that of the employed. It is worth emphasising that the employment status was measured only during the last week of the preceding year of migration, meaning that there is no information of whether there were changes in economic status between the measuring week and the actual move. However, the differences in the proportion of unemployed migrants among all labour force migrants between the periods of observation are so great (7.5%, 18.5% and 30.4% respectively, see Table 3) that it seems reasonable to assume that the main trends are accurate.

Internal and international migration are related to each other. Internal migration can be seen as a step-wise approach to unfamiliar conditions. Large urban agglomerations play an important role as linking points of internal and international migration. The importance of these hubs has increased in Finland, and there are also smaller urban areas which have adopted an essential role in this sense, but their role is based on cultural and geographical closeness to Sweden rather than on the general globalisation of migration. A special feature of the 1990s, in terms of links between internal and international migration, is the spread of internationalisation from the capital region to other large urban high-tech centres, and the contemporary concentration of departure and arrival regions in a few urban agglomerations.

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