MIGRATION AND SETTLEMENT:
2. FINLAND

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RR-79-9
November 1979

INTERNATIONAL INSTITUTE FOR APPLIED SYSTEMS ANALYSIS
Laxenburg, Austria

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FOREWORD

Interest in human settlement systems and policies has been a central part of urban-related work at the International Institute for Applied Systems Analysis (IIASA) from the outset. From 1975 through 1978 this interest was manifested in the work of the *Migration and Settlement Task*, which was formally concluded in November 1978. Since then, attention has turned to dissemination of the Task's results and to the conclusion of its comparative study, which, under the leadership of Dr. Frans Willekens, is focusing on a comparative quantitative assessment of recent migration patterns and spatial population dynamics in all of IIASA's 17 National Member Organization countries.

The comparative analysis of national patterns of interregional migration and spatial population growth is being carried out by an international network of scholars who are using methodology and computer programs developed at IIASA.

Professor Kalevi Rikkinen of the University of Helsinki prepared this report on multiregional population dynamics and policy in Finland. The analysis shows that some important and policy-relevant changes are taking place in both the age-structure of the population and in its regional distribution.

Reports, summarizing previous work on migration and settlement at IIASA, are listed at the end of this report.

Andrei Rogers
Chairman
Human Settlements
and Services Area

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1. INTRODUCTION

1.1 Purpose

This report is part of the Comparative Migration and Settlement Study included in the Migration and Settlement Task of IIASA's Human Settlements and Services Area, in which case studies were made in 17 countries. It gives a detailed survey of patterns, issues, and policies of internal migration in Finland and investigates the current spatial population dynamics by applying multiregional demographic techniques.

The aim is to establish a basis for comparative research. However, this work can also be examined independent of the other case studies. It is hoped that this paper will open new vistas and thus enlarge our understanding of the dynamics of multiregional population systems in Finland as well as provide policy makers with new tools for application in the analysis of human settlement systems.

The introductory section deals with general population changes in Finland. Light is also shed on special aspects of population research in the country. The second section of the study is concerned with input data: sources and the regional demographic characteristics of the Finnish population in the base year 1974. In connection with this, attention is also paid to certain past trends of fertility, mortality, and migration. In the third section the findings of multiregional demography are applied. The most important synthetic demographic information, such as the multiregional life table with a life expectancy matrix, mobility and fertility analysis, and population projections, are contained in this section. The last section

reviews the main features of population distribution policy in Finland. The measures of regional policy taken in Finland at various times are examined. It brings to the fore both the agricultural measures involved in the clearance of new land and the solutions to problems of urban growth and decline. Both direct and indirect population distribution policies are considered.

1.2 General Features of the Development of Population and Settlement

Finland, with its 4.6 million inhabitants, is the most sparsely settled country in Europe after Iceland (2 persons per km^2) and Norway (12 persons per km^2). In 1975, the mean population density was 15.5 persons per km^2 of land. There are, however, great regional differences in population density. The population is densest in the southwestern and southern parts of the country (in extensive areas over 20 persons per km^2), whereas in Lappi (the Lapland) the average density is only 2 inhabitants per km^2. Quite in the same way as great regional differences prevail within the country as a whole, there are differences within the provinces and individual communes. The urban centers are clearly distinguishable from the sparsely settled agricultural and forest areas.

The present distribution of the population is the result of a long evolutionary process. The natural development of the population followed the pattern of demographic transition. The trend of crude birthrates and crude death rates in Finland between 1820 and 1975 is depicted in Figure 1.1. With the exception of epidemic and war years, the birthrate has exceeded the death rate, although there has been a steady decline in the fertility level. Note, however, that in the year 1974 the number of births again shows a slight rise over the preceding year's figure. Since 1952 the crude death rate has remained at about 9‰. The natural population growth has in recent years declined to about 4‰.

The settlement of Finland expanded for a very long time only on the basis of agriculture. The general direction of the expansion was from the south toward the north, and from the west toward the east. When the population of Finland reached its first million mark in 1810, agricultural settlement had spread as far as the central parts of Lappi.

The predominantly agricultural structure of the Finnish national economy remained unchanged until about 1870 (Figure 1.2). In 1880, approximately 75% of the whole Finnish population gained its livelihood from agriculture and forestry. After that point, the advance of industry, the

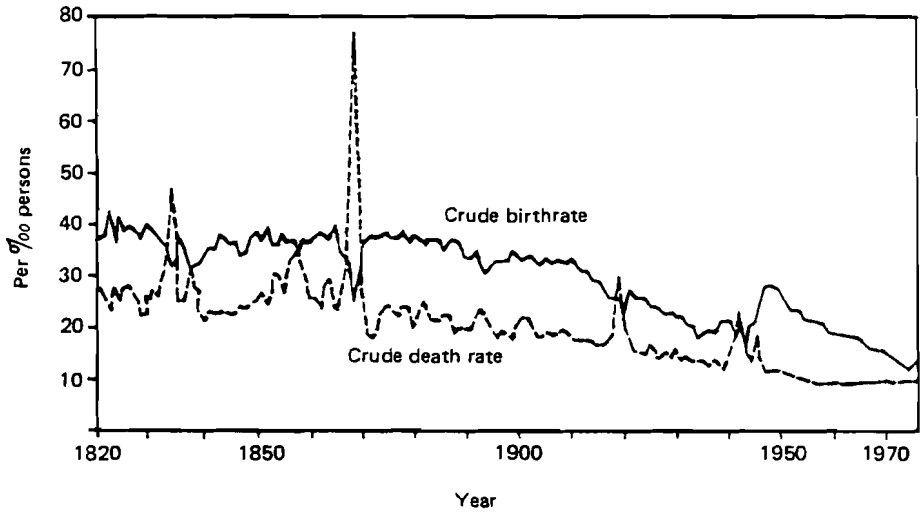


FIGURE 1.1 Crude birthrates and crude death rates, Finland, 1820–1975. Data from Strömmer (1969, p. 179) and Central Statistical Office of Finland (1976, p. 57).

improvement of traffic conditions, and the gradual realization of freedom of enterprise brought about a situation where the share of the farming population in the nation as a whole began to decline steadily.

Manufacturing services have increased especially since 1920. By contrast, the number of inhabitants dependent for their livelihood on agriculture and forestry has decreased, even in the absolute sense, since the decade of the 1930s. According to the census of 1970 of the occupationally employed people in Finland, 20.3% gained their livelihood from agriculture and forestry, 34.2% from the manufacturing and building industries, 26.0% from commerce and communication, 18.1% from the service sector, including trade, and 1.4% from unknown occupations. Associated with these sectoral changes has been a growing urban concentration (Figure 1.3).

A special stage in the evolution of population and settlement in Finland was introduced by the consequences of World War II. Nearly half a million inhabitants were evacuated from the territories ceded to the USSR, totalling 12% of the then cultivated area of Finland, and resettled in other parts of the country. The resettlement of the displaced persons was carried out mainly by creating new farmsteads in rural districts. The resettlement program also led to the clearing of considerable stretches of new arable land. The center of the cultivated farmlands of Finland shifted during the postwar period farther north. In recent years, however, the extreme northerly limit of settlement has moved south. This is discussed in Section 4.

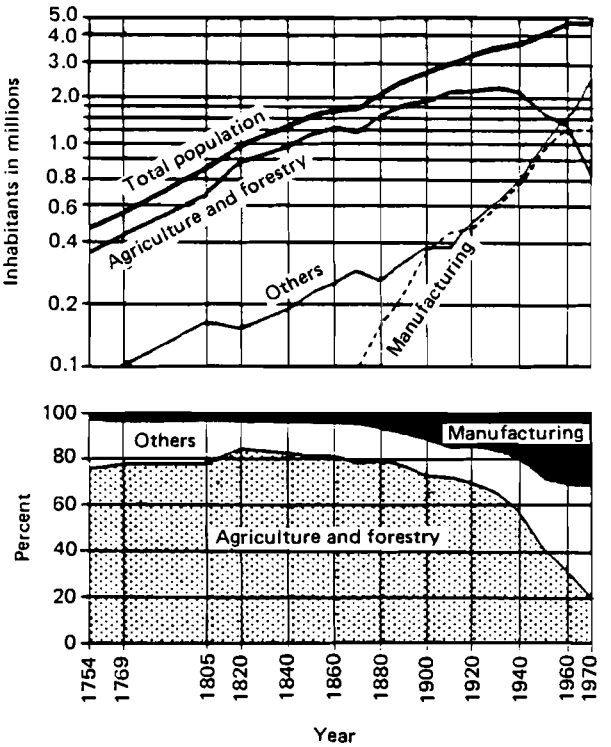


FIGURE 1.2 Occupational structure of population, Finland, 1754–1970. Source: Rikkinen (1977a, p. 10).

The migratory movement away from rural districts has resulted in the heaviest drain occurring in the more remote, sparsely settled areas.

In the past couple of decades, the migratory balance sheet of the majority of Finnish rural communes has been negative. The heaviest migratory losses have been suffered by the predominantly agricultural regions of northern and eastern Finland. The internal migration has been directed primarily toward the industrialized and urbanized south of Finland, notably the region of the national capital. Inside the urban communes, the trend has been one of the bigger agglomerations increasing in size at the expense of the sparsely settled and peripheral agricultural areas. Recently, however, the growth of the population in cities and the migratory deficit of the farming districts has slowed down. In this respect, the trend of the spatial population change in Finland seems to follow the urban evolution pattern observed in many industrialized countries.

The population trend in Finland has also been greatly influenced by

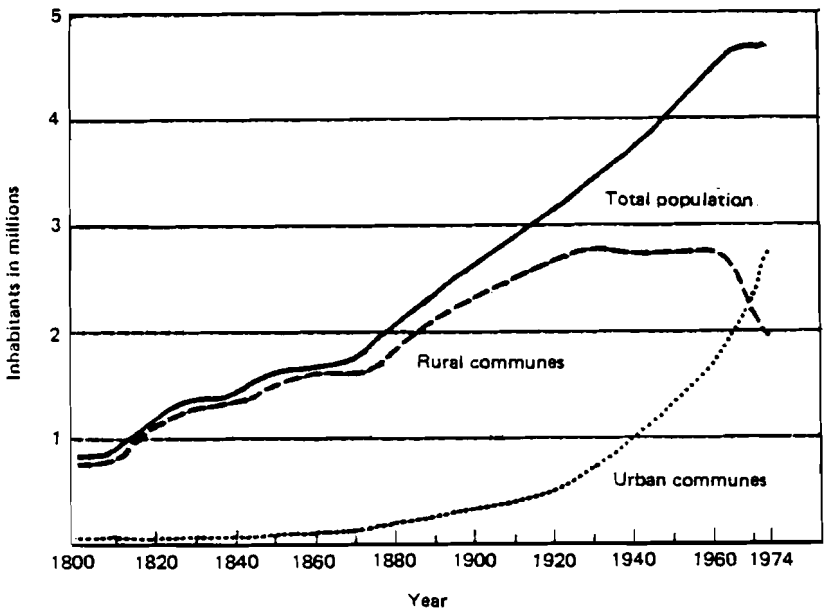


FIGURE 1.3 Population growth, Finland, 1800–1974. Source: Rikkinen (1977b, p. 56).

emigration. Between 1835 and 1930, it is estimated that some 380,000 Finns emigrated to the United States; 230,000 of these emigrants have apparently remained across the Atlantic. Population development has also been significantly affected by the emigration that took place in the 1960s and 1970s. This migratory wave was directed mainly toward neighboring Sweden. In the decade of the 1960s, Finland lost a total of 142,000 inhabitants through emigration. In the early 1970s, the migratory movement levelled off and in certain years the reverse trend was even stronger, with emigrants returning home. However, at the end of 1974, the situation again became more unfavorable to Finland, reflecting changes in the economic picture.

The low rate of natural population increase and the considerable emigration are primary concerns of Finnish population policy. When the migratory deficit is deducted from the natural population increase, the result is that the Finnish population increased in the 1965–1975 period at an average of between 13,000 and 28,000 persons annually. Exceptions were the years 1969 and 1970, when the total population decreased as a result of emigration to Sweden (Table 1.1). In the global framework, the rate of increase of the Finnish population (in 1975 it was 3.8‰) is quite low.

TABLE 1.1 Components of population change, Finland, 1960–1975.

Year	Mean population (thousand)	Crude birth-rate (‰)	Crude death rate (‰)	Natural population change (‰)	Total population change (‰)
1960	4429.6	18.5	9.0	9.6	7.5
1961	4461.0	18.4	9.1	9.3	6.6
1962	4491.4	18.1	9.6	8.6	7.0
1963	4523.3	18.2	9.3	8.9	7.2
1964	4548.5	17.7	9.4	8.3	4.0
1965	4563.7	17.1	9.7	7.3	2.7
1966	4580.9	17.0	9.5	7.5	4.8
1967	4605.7	16.8	9.5	7.3	6.0
1968	4626.5	15.9	9.7	6.2	2.9
1969	4623.8	14.6	9.9	4.6	-4.1
1970	4606.3	14.0	9.6	4.4	-3.5
1971	4612.1	13.2	9.9	3.3	3.4
1972	4639.7	12.7	9.5	3.2	4.4
1973	4666.1	12.2	9.3	2.9	4.2
1974	4690.6	13.3	9.5	3.8	4.1
1975	4711.3	14.1	9.4	4.7	3.8

SOURCE: Central Statistical Office of Finland (1976, p. 57).

1.3 The Dynamics of Population Trends as a Research Topic

Research on the Finnish population has been carried out for a long time. Countless number of studies have been made because the national population statistics have been good. A bibliography has recently been published by the Population Research Institute (Väestöntutkimuslaitos) and lists the literature on population research published in Finland from 1973 to 1976. Although the bibliography does not give all the population studies printed in this period, there are still no less than about 350 publications listed (Population Research Institute, 1978, pp. 118–140).

The main research topics have been the primary problems involved in the national population trends, as pointed out in the preceding section, such as internal migratory movements, urbanization, and the natural population growth trends, along with their consequences. Some of the problems are international, others are purely domestic. Examples of the latter

are the post-World War II resettlement program and some special features of in-migratory movements. Further, the bilingual structure of the Finnish nation causes specific problems. The Swedish-speaking inhabitants, about 7% of the total population, are located regionally in the southwestern parts of the country as well as the southern and western coastal strips. This reflects the directions followed by the migratory currents.

In general, specialists in various fields of research have examined the population dynamics from the point of view of their own branch of inquiry. In addition, some of the research was basic research while some was more applied in nature and intended to be used by planners. Studies concerned with population dynamics can also be classified according to their research scale. In both the demographic and the spatial sense, studies can be found ranging from the microscopic to the macroscopic level. In other words, studies have been made in which at one extreme the life history and spatial mobility of one individual have been followed and at the other extreme the unit of study has been the Finnish population as a whole, but not in a spatial context.

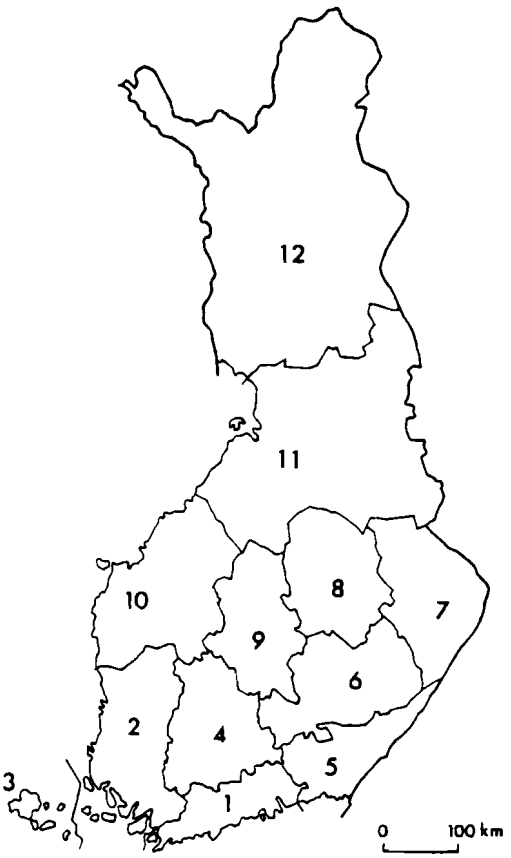
The extensive attention given to different sectors of population research did not always result in improved policy making, in particular in regional policy making. For instance, the postwar "baby-boom" population has, in growing older, constantly caused mistaken investment. In many places, for example, too many schools were built after these age classes had grown too old to use them. Therefore, it would appear that there is a need to develop policy-oriented analytical methods to study population dynamics of the kind pursued in the population research project of IIASA's Human Settlements and Services Area.

2. CURRENT PATTERNS OF SPATIAL POPULATION GROWTH

2.1 Regional Units and Data

The basic regional units used in this paper are the provinces (lääni). Finland has 12 provinces (Figure 2.1). Alternative regional units would be the economic regions, 16 in total. Because of the availability of data, the provinces have been selected.

The base year for the analysis is 1974, the last year for which data were available when this study was started. The observed population characteristics in 1974 are given in Appendix A. In the first column the population by age is listed. The second column population is the mid-year population, computed as the arithmetic mean of the population by age on



PROVINCE	LÄÄNI
1. Uusimaa	1. Uudenmaan lääni
2. Turku and Pori	2. Turun ja Porin lääni
3. Ahvenanmaa	3. Ahvenanmaan maakunta
4. Häme	4. Hämeen lääni
5. Kymi	5. Kymen lääni
6. Mikkeli	6. Mikkelin lääni
7. Pohjois-Karjala (Northern Karelia)	7. Pohjois-Karjalan lääni
8. Kuopio	8. Kuopion lääni
9. Keski-Suomi	9. Keski-Suomen lääni
10. Vaasa	10. Vaasan lääni
11. Oulu	11. Oulun lääni
12. Lappi (Lapland)	12. Lapin lääni

FIGURE 2.1 Administrative provinces of Finland.

December 31, 1973 and December 31, 1974.* The data are given in 5-year age groups. The last age group is open-ended and contains the population of 75 years and older.

The number of live births is given by age of mother (Central Statistical Office of Finland, 1977b, pp. 58–59). The number of regional age-specific deaths by sex is given in the same source (Central Statistical Office of Finland, 1977b, pp. 72–73).

Population statistics in Finland are taken from the decennial census data and from data on vital events that are reported monthly by the local population registrars to the Central Statistical Office. The registered population is divided into two categories: resident (those citizens living permanently in the country) and nonresident (those citizens living abroad). Also a domicile register exists. This census is taken annually on January 1. The purposes of this registration are to state the permanent place of residence of every person at the beginning of the year and, at the same time, to calculate the population by communes.

Since 1975 the local population registrars have submitted a weekly report on the vital and migratory statistics to the Population Registration Center. At the center the data are processed and transferred onto magnetic tapes. From these tapes the Central Statistical Office receives monthly data on live births, deaths, marriages contracted and dissolved, judicial separations, and migration.

Total migration flows between provinces are published annually in the *Statistical Yearbook of Finland*. Age-specific migration flow data are available for migration between the 475 communes (*kuntas*). They are, however, in unpublished form. The data are based on a registration system. For the present study, these data have been aggregated to give the age-specific migration flow matrices for the provinces. These results are given in Appendix A. The migrations between communes but within provinces are also given in Appendix A. In 1974, the intraprovincial migrations accounted for 58% of the total intercommunal migration.

Before we can make a multiregional analysis, it is necessary to study the demographic characteristics of the population in the base year, 1974, and some historical and recent trends. We will consider fertility, mortality, and migration separately. Table 2.1 summarizes the regional differences in demographic parameters.

*The data differ slightly from recently published mean population data by province (Central Statistical Office of Finland, 1977b, p. 43).

TABLE 2.1 Components of demographic change by province, Finland, 1961–1970 and 1974.

Province	Crude birthrate (‰)		Crude death rate (‰)		Natural population change (‰)		Net internal migration (‰)	Total population change (‰)	
	1961–1970	1974	1961–1970	1974	1961–1970	1974	1974	1961–1970	1974
Uusimaa	17.0	14.3	9.4	8.8	7.6	5.6	6.2	18.6	12.1
Turkpor[a]	15.5	12.7	10.2	9.8	5.3	2.9	3.0	2.2	6.7
Ahvenan[a]	14.9	12.9	11.3	11.6	3.6	1.3	7.9	-1.5	10.6
Häme	15.7	13.0	9.7	9.5	6.0	3.4	3.0	7.2	0.6
Kymi	15.3	11.9	10.1	10.7	5.2	1.2	-1.9	1.8	-1.0
Mikkeli	15.4	11.3	10.9	11.7	4.5	-0.4	-7.0	-6.7	-7.5
Poh.Kar[a]	16.2	11.9	9.8	10.4	6.3	1.6	-7.3	-11.3	-5.8
Kuopio	16.6	12.0	9.8	10.3	6.7	1.8	-4.8	-5.6	-3.4
Keski[a]	16.7	12.8	9.4	9.4	7.2	3.3	-3.2	-2.9	-0.2
Vaasa	17.0	13.9	9.5	9.7	7.4	4.3	-5.5	-2.4	-1.3
Oulu	19.8	15.6	8.1	8.5	11.8	7.1	-3.4	-1.4	4.7
Lappi	21.3	13.4	7.3	8.0	14.0	5.4	-8.9	-2.8	-4.7
Urban	18.3	14.5	8.8	8.5	9.4	6.0	4.0	31.0	17.5
Rural	15.5	11.6	10.1	10.9	5.4	0.7	-5.5	-19.1	-14.5
Finland	16.8	13.3	9.5	9.5	7.2	3.8	–	3.3	4.1

[a]The following abbreviations for provinces have been used in some of the tables in the report: *Turkpor* for Turku and Pori, *Ahvenan* for Ahvenanmaa, *Poh.Kar* for Pohjois-Karjala, and *Keski* for Keski-Suomi.

SOURCE: Central Statistical Office of Finland (1977a, pp. 58–59, 76).

2.2 Fertility

2.2.1 HISTORICAL TRENDS

It is possible to analyze Finland's population development since the year 1722. The crude birthrate reached its peak in 1755 (46.9‰). Since then it has been declining. During the 1850s, the crude birthrate declined to a level of about 35‰. There were considerable differences between the cities and the countryside. For example, during the period 1871–1875, the crude birthrate in urban communes was 28.6‰, but in rural communes it was 37.7‰. The main reason for this was the higher proportion of married women in rural areas (Strömmer, 1969, p. 30). The decline in the birthrate in urban communes because of industrialization brought about clear regional differences around the turn of the 19th century. The crude birthrate in urban centers was low and the growth of the urban population was for the most part a result of in-migration. The rural population began to adopt ideals that had previously been characteristic of urban society, and in the early 20th century the crude birthrate declined sharply throughout the country (Table 2.2).

Declining birthrates had a remarkable influence on the population development in the 1950s, 1960s, and 1970s. The birthrate was lowest at the level of 12.2‰ in 1973 when there were only about 57,000 births. After 1973 the birthrate increased slightly because of social (family) efforts and policy measures.

In 1950, fertility was above the national average in all the provinces outside the industrialized part of Finland (Table 2.3). As can be seen from the tables, fertility was below the national average in the southern provinces of Uusimaa, Turku and Pori, Häme, and Kymi, which are the most industrialized.

In the 1950s, fertility increased only in the provinces of Ahvenanmaa and Uusimaa and decreased in all others, with the sharpest decline in the provinces of northern and eastern Finland. In the 1960s there were great changes in regional fertility trends. The differences in fertility between the various parts of the country, which, however, were still distinct in 1960, *levelled off during the 1960s.* The decline in fertility was most dramatic in regions of high fertility, namely, northern and eastern Finland. In 1961–1970 the crude birthrate was highest in Lappi, 21.3‰ (Table 2.1), but in 1975 the rate was only 14.4‰. The diffusion of declining birthrates has thus affected the whole country, causing a remarkably low fertility rate.

If fertility is investigated by age group, it can be seen that after World War II, children were born to younger age groups than previously, i.e. the

TABLE 2.2 Reproduction rates, Finland, 1938–1974.

Year	Net reproduction rates			Gross reproduction rates		
	Whole country	Urban communes[a]	Rural communes[a]	Whole country	Urban communes[a]	Rural communes[a]
1941–1945	1.048	0.812[b]	1.166[c]	1.262	0.938[b]	1.405[c]
1946–1950	1.469	1.171[b]	1.605[c]	1.637	1.279[b]	1.798[c]
1951–1955	1.373	1.125	1.538	1.452	1.177	1.637
1956–1960	1.301	1.123	1.436	1.357	1.164	1.502
1961–1965	1.236	1.114	1.357	1.276	1.148	1.403
1966–1970	1.009	0.955	1.061	1.035	0.979	1.091
1938	1.011	0.564	1.209	1.220	0.674	1.462
1950	1.379	1.063	1.525	1.536	1.161	1.707
1962	1.255	1.122	1.366	1.296	1.157	1.412
1963	1.259	1.132	1.380	1.300	1.167	1.426
1964	1.219	1.115	1.324	1.258	1.149	1.368
1965	1.167	1.079	1.262	1.204	1.112	1.304
1966	1.150	1.084	1.225	1.180	1.111	1.260
1967	1.099	1.038	1.181	1.129	1.064	1.214
1968	1.020	0.971	1.184	1.047	0.995	1.217
1969	0.916	0.872	0.979	0.940	0.894	1.007
1970	0.870	0.833	0.924	0.893	0.854	0.950
1971	0.812	0.784	0.854	0.833	0.804	0.877
1972	0.751	0.721	0.806	0.771	0.739	0.829
1973	0.709	0.684	0.758	0.728	0.701	0.779
1974	0.776	0.754	0.821	0.796	0.772	0.843

[a]Since 1951, the mortality of towns and rural communes has been separately observed at the calculation of the net reproduction rates.
[b]Excluding second-class towns. (*kauppalas*: intermediate between urban centers and villages).
[c]Including second-class towns.

SOURCE: Central Statistical Office of Finland (1976, p. 65).

TABLE 2.3 General fertility rates by province, Finland, 1950, 1960, and 1970 (number of children per 1000 women of reproductive age).

Province	1950	1960	1970
Uusimaa	74	76	59
Turkpor	94	78	62
Ahvenan	73	83	73
Häme	93	78	61
Kymi	98	84	58
Mikkeli	120	94	62
Poh.Kar	–	110	63
Kuopio	134	98	65
Keski	–	93	64
Vaasa	114	87	71
Oulu	148	117	78
Lappi	158	128	72
National average	106	89	64

SOURCE: CICRED (1974, p. 13).

age group with maximum fertility rate shifted, in general, toward the younger age group (Figure 2.2, Table 2.4). In the youngest age group, 15–19, the fertility rate increased until 1967 (36.2‰). This is partially due to the fact that the marriage frequency among persons under the age of 20 increased. But in recent years the fertility rate in this youngest age group has decreased again. Most recent efforts to increase the birthrate have had their greatest effects on older age groups.

2.2.2 FERTILITY IN 1974

The 1974 age-specific fertility rates by province are shown in Table 2.5. The fertility rates are computed by dividing the annual number of births by the mid-year total population in each age group. The gross reproduction rate (GRR) is five times the sum of the age-specific fertility rates. For Uusimaa, for example, the GRR is 0.7632. The main trend is a relatively high fertility in the northern provinces of Lappi, Oulu, and Vaasa. The crude birthrate is the total number of births divided by the total mid-year population. It is 14‰ for Uusimaa. The mean age given in the table is the mean age of the fertility schedule, which is different from the mean age of

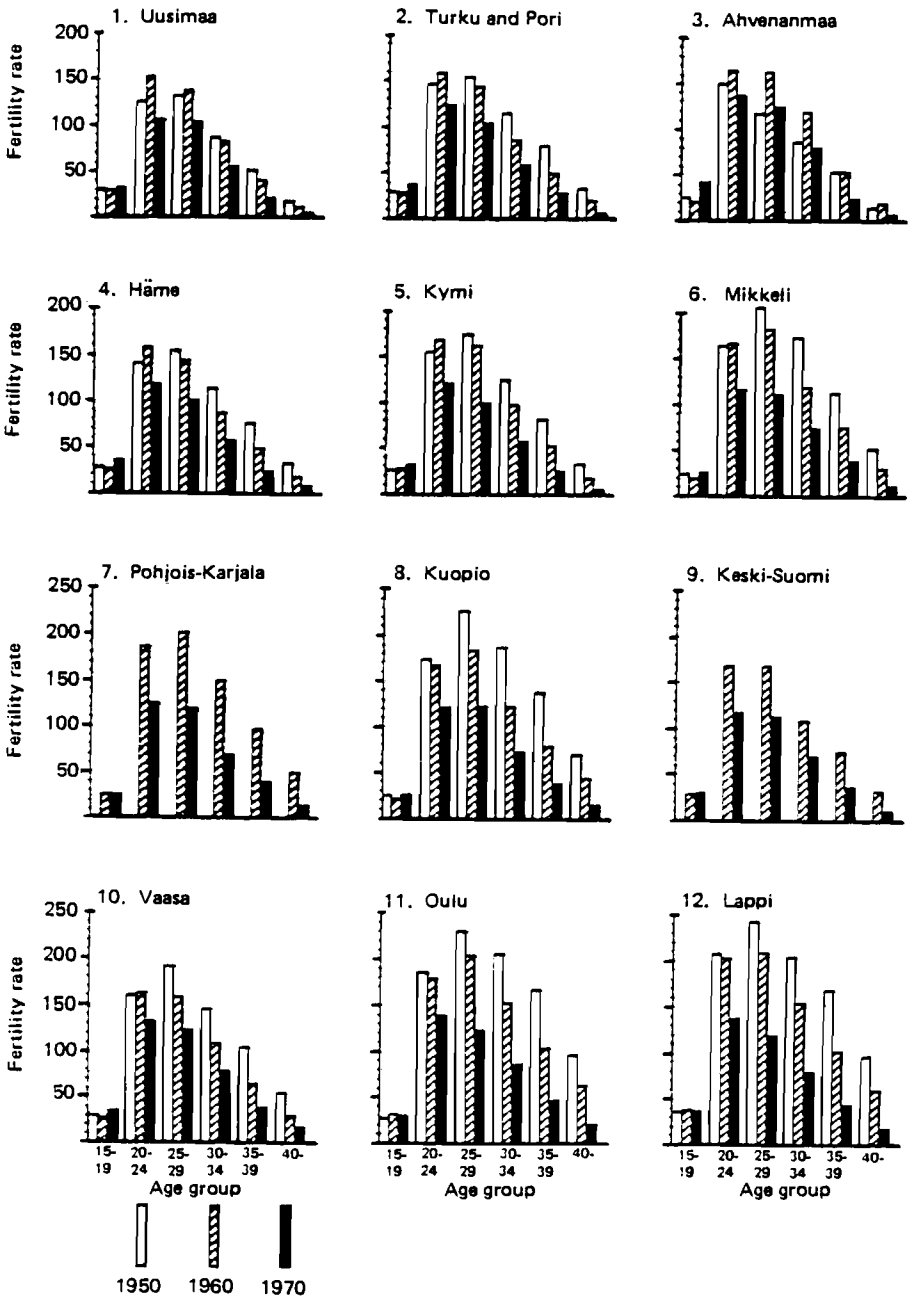


FIGURE 2.2 Age-specific fertility by province, Finland, 1950, 1960, and 1970 (per 1,000 women of each age group). Source: CICRED (1974, p.14).

TABLE 2.4 Age-specific fertility rates, Finland, 1891–1974 (per 1000 women of the age group indicated).

Year	Age group						
	15–19	20–24	25–29	30–34	35–39	40–44	45–49
1891–1900	17.4	157.8	213.0	236.9	191.0	114.3	18.2
1901–1910	16.8	147.7	226.8	227.4	192.6	109.1	16.2
1911–1920	14.9	122.8	181.4	181.9	155.2	92.9	14.0
1921–1930	14.2	110.0	156.9	143.8	116.8	67.4	10.5
1931–1940	14.4	96.5	126.2	108.9	82.8	43.5	5.9
1941–1945	11.3	105.2	144.9	124.3	88.4	41.8	5.4
1946–1950	25.7	161.9	189.4	147.5	100.5	43.3	5.0
1951–1955	27.2	157.6	165.8	125.0	81.0	35.1	3.9
1956–1960	29.3	161.4	159.6	108.1	67.5	27.5	2.8
1961–1965	30.7	156.7	156.0	98.8	55.7	22.5	2.2
1966–1970	34.7	131.9	125.9	76.5	39.7	13.7	1.4
1966	35.8	144.5	143.2	90.6	47.7	17.1	1.8
1967	36.2	141.4	138.9	83.4	45.6	16.2	1.7
1968	35.7	135.3	125.8	76.6	38.7	14.1	1.5
1969	33.5	122.6	113.8	68.5	34.9	11.7	1.2
1970	32.2	119.4	108.6	64.6	30.5	9.3	0.8
1971	29.7	111.3	107.5	58.1	25.2	7.1	0.6
1972	28.6	104.3	103.9	53.2	21.9	6.1	0.5
1973	26.2	96.5	98.9	51.2	21.7	5.7	0.5
1974	27.2	103.9	107.7	56.7	23.0	5.8	0.5

SOURCE: Central Statistical Office of Finland (1976, p. 65).

parents. The mean age of the fertility schedule of Uusimaa, for example, is 26.76.

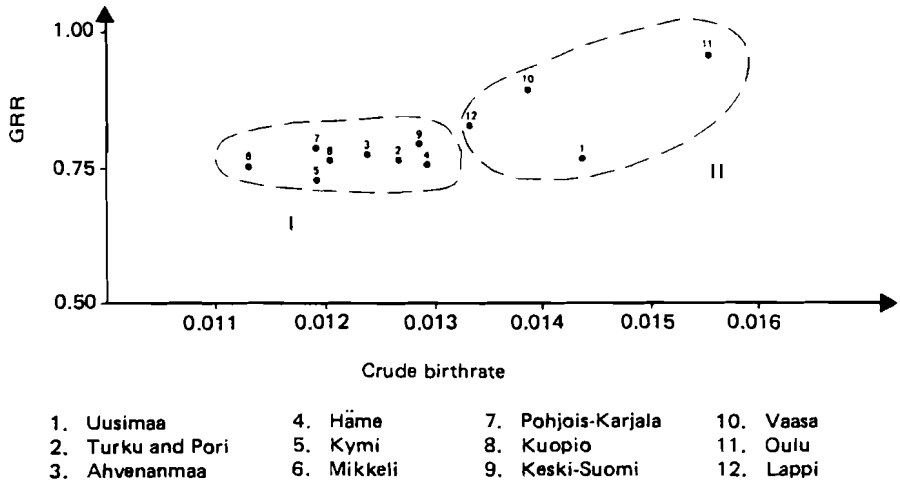
The deviation between the GRR and the crude birthrate measures the impact of the age composition on the overall fertility. If each age group had the same number of people, both measures would be the same. Figure 2.3 demonstrates the relationship between GRRs and crude birthrates.

The provinces may be grouped in two categories. Most are in Category I, with nearly a constant gross fertility rate of 0.75 but different crude birthrates. For example, provinces 4 (Häme) and 6 (Mikkeli) have the same gross fertility rate but completely different crude birthrates. The reason for this is the concentration of Häme's population in the fertility age groups relative to Mikkeli's population, which has a higher share of people below age 20 and above age 40 (Appendix A). The share of the population in the 20–39 age group is 32% for Häme and 28% for Mikkeli. Both provinces

TABLE 2.5 Age-specific fertility rates by province, Finland, 1974.

Age	Uusimaa	Turkpor	Ahvenan	Häme	Kymi	Mikkeli	Poh.Kar	Kuopio	Keski	Vaasa	Oulu	Lappi
0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	0.000026	0.000019	0.000000	0.000000	0.000000	0.000000	0.000059	0.000000	0.000000	0.000000	0.000000	0.000000
15	0.013099	0.014399	0.014417	0.013941	0.012714	0.010000	0.012272	0.010806	0.011572	0.014604	0.014444	0.014464
20	0.048500	0.051922	0.049696	0.051032	0.048165	0.044438	0.044336	0.046919	0.048733	0.054313	0.056725	0.051876
25	0.051974	0.049795	0.053883	0.048288	0.049635	0.053533	0.050265	0.052229	0.053326	0.059949	0.062256	0.051448
30	0.028172	0.024199	0.021739	0.024287	0.024420	0.027390	0.033182	0.029198	0.029868	0.031441	0.033404	0.029220
35	0.008877	0.009580	0.011542	0.010601	0.008524	0.010588	0.013257	0.011938	0.012698	0.014683	0.014269	0.014433
40	0.001871	0.002253	0.003484	0.002882	0.002159	0.004223	0.003619	0.002577	0.003063	0.004091	0.005513	0.003774
45	0.000129	0.000366	0.000000	0.000148	0.000136	0.000147	0.000177	0.000185	0.000332	0.000422	0.000420	0.200753
50	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
60	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
65	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
70	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
75	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Gross[a]	0.763240	0.762677	0.801417	0.752895	0.728763	0.751604	0.785835	0.769261	0.797959	0.897653	0.960145	0.829833
Crude[b]	0.014347	0.012692	0.012858	0.012947	0.011920	0.011320	0.011930	0.012048	0.012868	0.013909	0.015572	0.013387
M. age[c]	26.7558	26.5433	26.6023	26.6371	26.6388	27.4131	27.5702	27. 2731	27.3090	27.2539	27.5663	27.2474

[a]Gross, Gross reproduction rate.
[b]Crude, Crude birthrate.
[c]M. age, Mean age of the fertility schedule.



1. Uusimaa
2. Turku and Pori
3. Ahvenanmaa
4. Häme
5. Kymi
6. Mikkeli
7. Pohjois-Karjala
8. Kuopio
9. Keski-Suomi
10. Vaasa
11. Oulu
12. Lappi

FIGURE 2.3 Gross reproduction rates and crude birthrates by province, Finland, 1974.

however, have almost the same mean age (Häme: 34.6 and Mikkeli: 34.9).

Category II is characterized by higher GRRs and crude birthrates. It consists of the three northern provinces and Uusimaa.

Figure 2.4 contains fertility curves for four selected regions. All the curves have the same shape. The highest fertility rates are in age groups 20–24 and 25–29. The mean age of the fertility schedule ranges from between 26.54 and 27.58, the difference being only about 1 year.

2.3 Mortality

2.3.1 HISTORICAL TRENDS

After the famine years of 1866 to 1868, there was a sharp increase in the crude death rate. However, this rate began to decrease in the 1880s. This decreasing trend continued up to the 1950s, when the crude death rate fell to the level of about 9.5‰. Since the end of the 1950s, the crude death rate has remained constant. The mean life expectancy has increased considerably, especially in the age group 0–4. The life expectancy at the age of 0 years was 45.3 years for men and 48.1 years for women in the first half of the 20th century, but rose to 65.9 years for men and 73.6 years for women during the 1966–1970 period.

In the decline of the mortality rate there are some features that are characteristic of Finland in comparison with development in other industrialized countries. The decline in the women's mortality rate was considerably sharper than in that of men. This led to a continuous increase in

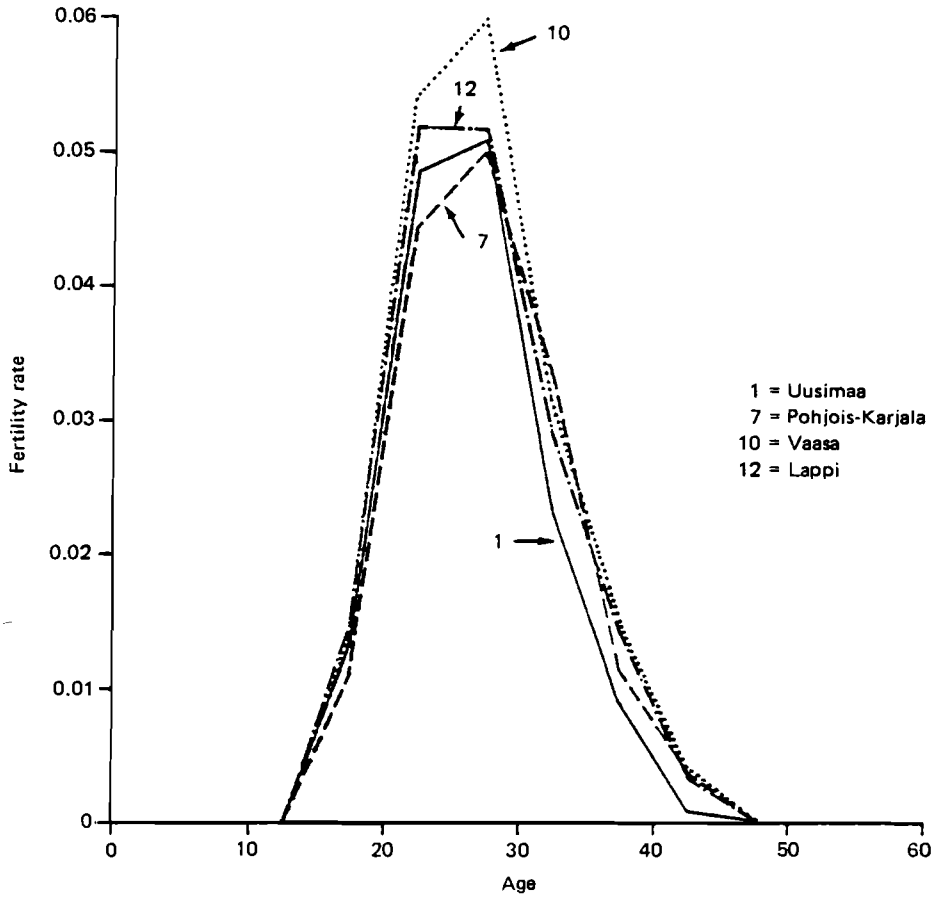


FIGURE 2.4 The fertility schedules for selected provinces, Finland, 1974.

the difference between the mean life expectancies of men and women of the same age. As late as the early 20th century, the difference between the mean expectancies at birth was 3 years, i.e., women would live 3 years longer than men, but in 1974 the difference grew to 8.5 years.

Table 2.6 shows the mortality rates by age groups in 1960 and 1970. The greater mortality of men is distinct when the mortality rates of the sexes are compared. The mortality rate is higher among men in all age groups. The difference is particularly noticeable in the age groups over 30. Higher male mortality appears in the younger age groups partly because of accidents. Various heart and circulatory diseases are common among men over 40 years and cause more deaths in the age groups over 40.

TABLE 2.6 Age-specific mortality rates, Finland, 1960, 1970 (per 1000 population by sex and age group).

Age group	1960			1970		
	Males	Females	Total	Males	Females	Total
0–4	5.8	4.3	5.1	3.5	2.6	3.1
5–9	0.6	0.4	0.5	0.6	0.4	0.5
10–14	0.6	0.3	0.4	0.5	0.2	0.4
15–19	1.2	0.4	0.8	1.2	0.4	0.8
20–24	1.5	0.7	1.1	1.5	0.5	1.0
25–29	2.0	0.8	1.4	1.7	0.5	1.1
30–34	2.6	1.1	1.9	2.3	0.8	1.6
35–39	3.7	1.6	2.6	3.8	1.2	2.5
40–44	5.2	2.4	3.7	5.3	1.9	3.6
45–49	8.4	3.7	5.9	8.7	3.1	5.7
50–54	13.5	5.4	9.2	13.2	5.2	8.8
55–59	20.3	8.6	13.9	20.9	7.4	13.4
60–64	32.1	15.2	22.4	31.9	13.1	21.2
65–69	47.8	26.2	34.9	47.2	22.8	32.7
70–74	73.8	49.6	58.5	74.0	41.5	53.5
75–79	107.3	87.3	94.2	107.0	76.8	87.3
80–	189.3	174.7	179.4	195.1	162.8	172.6
Crude rate	9.7	8.3	9.0	10.7	8.5	9.6

SOURCE: Central Statistical Office of Finland (1976, p. 69).

For the years 1961–1965 the regional differences in the mean life expectancy can be investigated on the basis of the existing statistics. As illustrated in Table 2.7, the mean life expectancies of both men and women were somewhat higher in the southern parts of the country. Mean life expectancy was lowest for men in Northern Karelia, i.e., 63.7 years, whereas it was highest for women in southwestern Finland (province of Turku and Pori), i.e., 73.7 years.

In all regions, the mortality rate was distinctly higher among men. It was highest among men in Northern Karelia, where the difference between the life expectancies of men and women at the age of 0 years was more than 8 years. The least difference was in Central Ostrobothnia, where there was slightly over 6 years difference between the life expectancies of men and women.

TABLE 2.7 Mean life expectancy by region, Finland, 1961–1965.

Region	Men		Women	
	Mean life expectancy	All Finland = 100	Mean life expectancy	All Finland = 100
Province of Uusimaa				
Uusimaa	65.7	100.5	73.3	101.0
Ahvenanmaa	–	–	–	–
Province of Turku and Pori				
Varsinais-Suomi	67.1	102.6	73.7	101.5
Satakunta	65.1	101.1	72.9	100.4
Province of Häme				
Tammemnaa	66.7	102.0	73.1	100.7
Southern Häme	66.0	100.9	72.6	100.0
Province of Kymi				
Southeastern Finland	65.4	100.0	73.2	100.8
Province of Mikkeli				
Southern Savo	65.3	99.8	72.2	99.4
Province of Pohjois-Karjala				
Northern Karelia	63.7	97.4	71.8	98.9
Province of Kuopio				
Northern Savo	65.0	99.4	72.3	99.6
Province of Keski-Suomi				
Central Finland	65.5	100.2	72.0	99.2
Province of Vaasa				
Southern Ostrobothnia	67.0	102.4	73.3	101.0
Central Ostrobothnia	65.8	100.6	72.2	99.4
Province of Oulu				
Kainuu	65.1	99.5	72.0	99.2
Northern Ostrobothnia	64.0	97.9	72.0	99.2
Province of Lappi				
Lappi	64.7	98.9	72.4	99.7
Finland	65.4	100.0	72.6	100.0

SOURCE: CICRED (1974, p. 17).

2.3.2 MORTALITY IN 1974

The observed age- and region-specific crude death rates for 1974 are presented in Appendix B. They are obtained in a way similar to the way fertility rates are obtained.

The crude death rates in Finland are among the lowest in the world. The relationship between the regional gross and crude death rates is given in Figure 2.5. Two groups of provinces may be distinguished. Group I is made up of the northern and eastern provinces. The gross mortality rates of this group are high, especially among men. The relatively high mortality in this part of Finland is a well-known fact and has caused a number of regional mortality studies to be made. Several explanations for the high mortality rates have been proposed; one, in particular, is the unbalanced diet of the population. However, no consensus of opinion has been achieved.

For a particular gross mortality rate, differences in crude death rates are caused by differences in the age composition of the population (Figure 2.5). The mean age of the population of the provinces shown in the right-hand side of the diagram is above the national average. The mortality schedules for four selected provinces are given in Figure 2.6. Note that all the curves have the same shape.

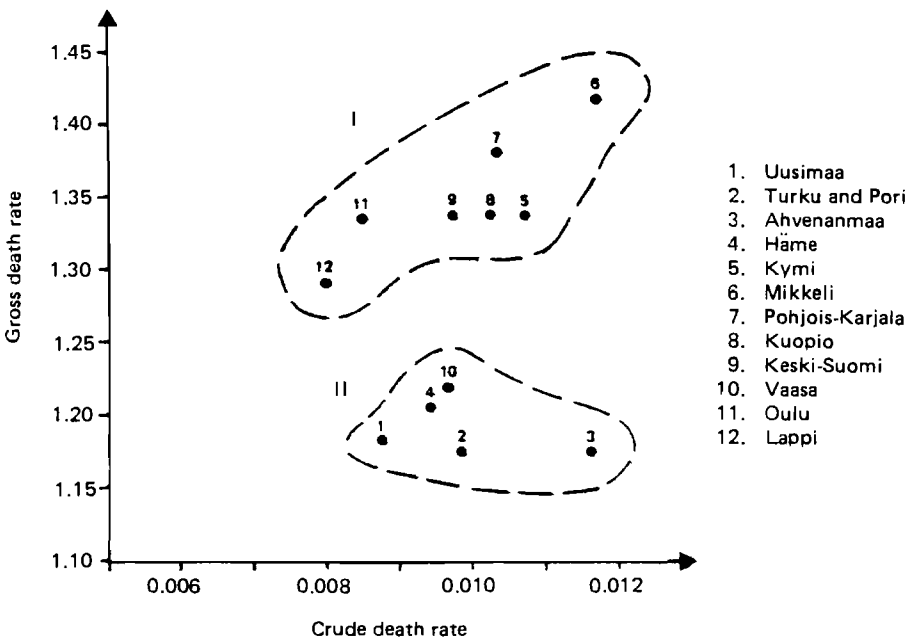


FIGURE 2.5 Gross and crude death rates by province, Finland, 1974.

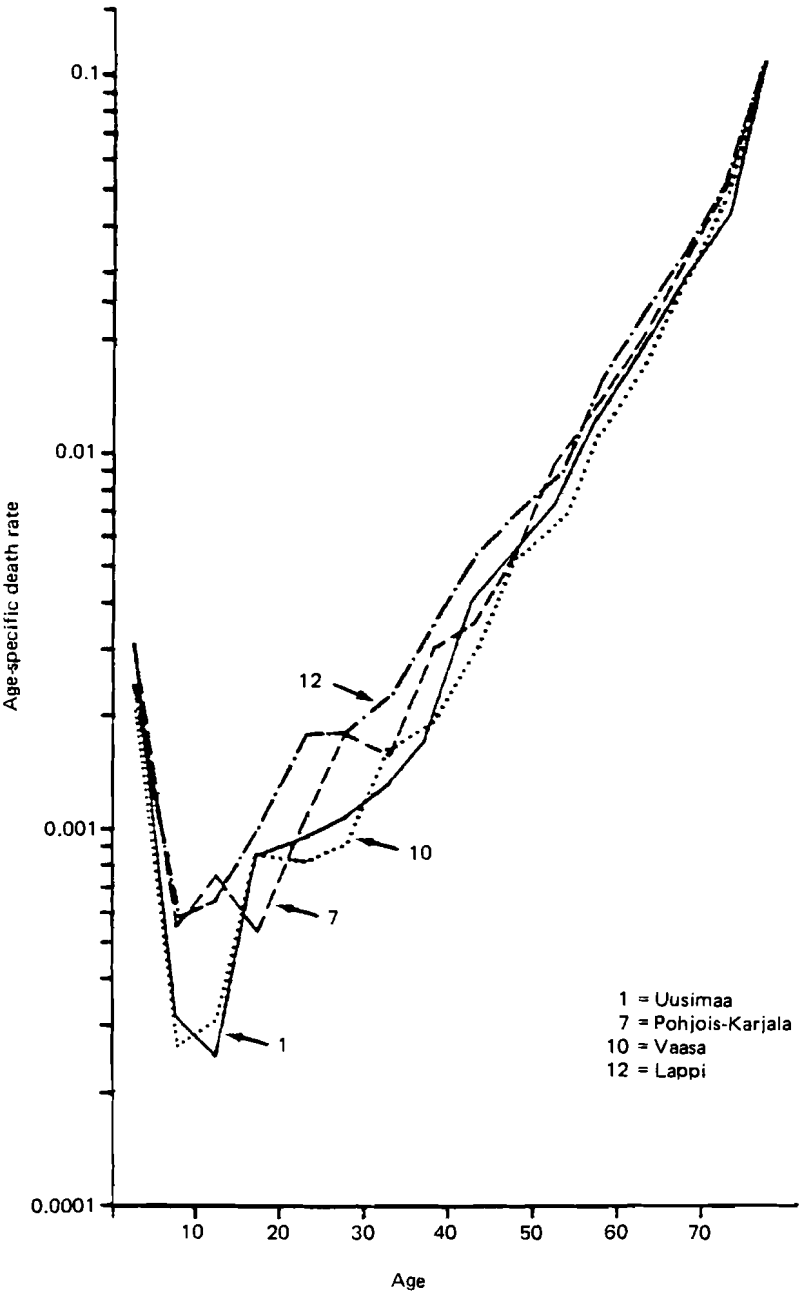


FIGURE 2.6 The mortality schedules for selected provinces, Finland, 1974.

2.4 Migration

2.4.1 HISTORICAL TRENDS

During the time of the agrarian society, the general distribution of the population corresponded largely to the distribution of fertile land. The rapid industrialization of Finland brought about, however, a redistribution of the population. As a result of industrialization, people began to gravitate toward urban communities, located mostly in southwestern and southern Finland, where harbors and the urbanization process that had started earlier offered industry the most favorable conditions.

This development process in the population structure also involved changes in the structure of the family unit. The average family size and birthrate decreased. One reason for this was that in industrial communities children could not be put to work nearly as effectively as in agricultural communities. The high agrarian birthrate and low urban birthrate resulted in a conspicuous difference in the population structure of the two levels of societies.

Figure 2.7 shows the regional distribution of the Finnish population by provinces in 1970 and the growth of the population in the past two decades. It can be seen that the population has grown, on the one hand, in the southernmost provinces and, on the other, in the two northernmost provinces. The relatively vigorous growth experienced by the provinces in southern Finland is due expressly to the migratory movement into urban communities and their surroundings. The populations of the northern provinces of Lappi and Oulu, again, have grown mainly as a result of relatively high birthrates. It was not until the end of the 1950–1970 period that the population figures in these provinces began to show a downward trend.

The strongest migratory magnets in the south have been the cities and other urban centers of Uusimaa province. The exceptional character of this province becomes quite clear upon an examination of the net outmigration of the province in relation to its 1970 population (Figure 2.8). The diagram reveals that Uusimaa has experienced a migratory gain of the same magnitude in different 5-year periods. The province received no less than a quarter of its 1970 population through in-migration taking place during the previous two decades. It was not until the end of the 1960s that the migratory gain began to have any significant effect on the population structure in the other provinces experiencing such a gain.

The heaviest losses through migration have been experienced by the provinces of Pohjois-Karjala, Mikkeli, and Kuopio. The province of Lappi

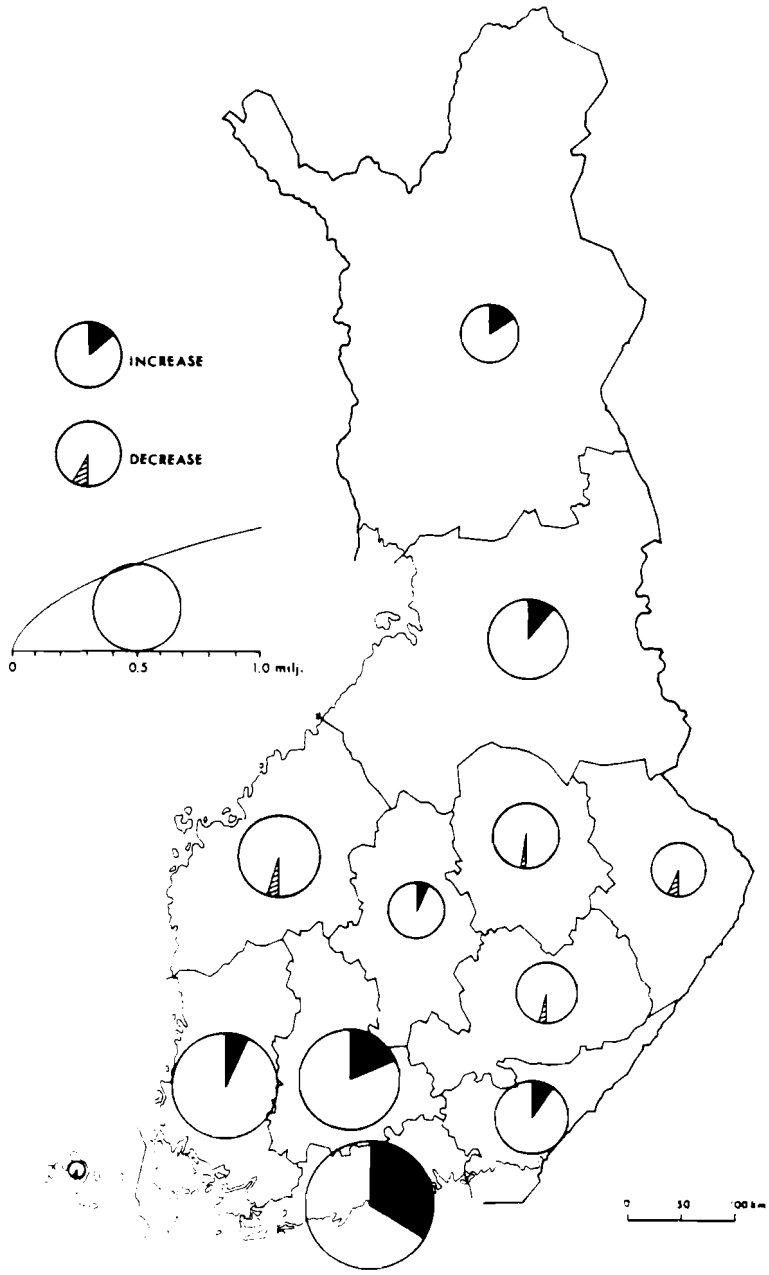


FIGURE 2.7 Regional distribution of population in 1970 and change in population in 1950–1970 in relation to population size in 1970, Finland. Source: CICRED (1974, p. 30).

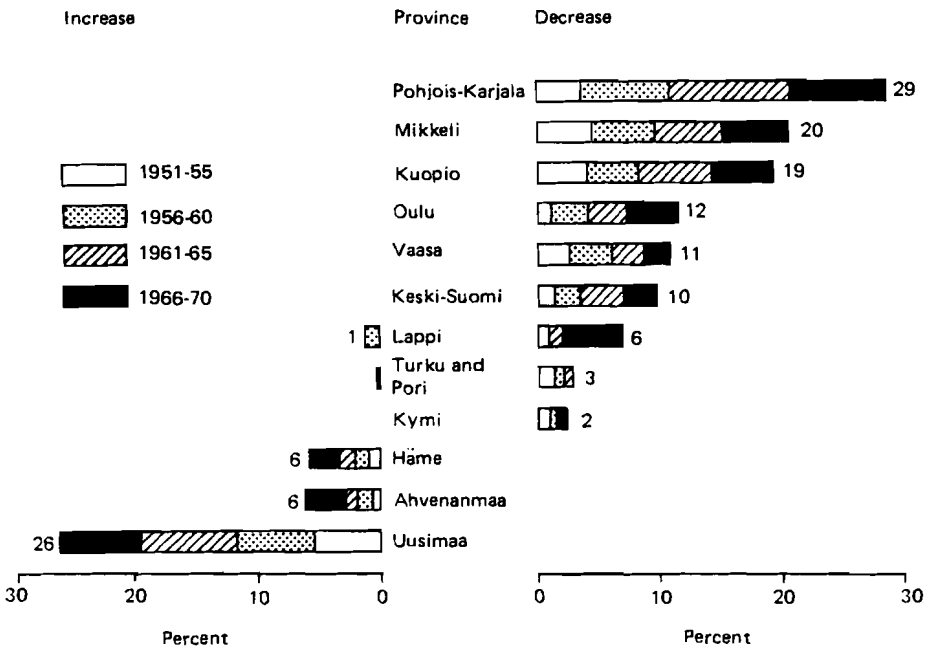


FIGURE 2.8 Changes in population in 1970 caused by internal migration by province in quinquennial periods 1950–1970, Finland. Source: CICRED (1974, p. 31).

is interesting in that, exceptionally, it experienced migratory gains in the 1956–1960 period but 10 years later sustained heavy migratory losses, mostly due to the massive wave of emigration to Sweden.

A regional study of the migratory flows between the Finnish provinces reveals that Uusimaa registered gains during the entire 20-year period at the expense of all the other regions. During the 1966–1970 period, the province of Häme also started to emerge as a clear population gainer through migration (Figure 2.9). Häme was on the losing end of the migratory balance sheet only in comparison with Uusimaa. The persistent flow of migratory streams in the same direction has led to an ever-greater concentration of the Finnish population in southern and southwestern Finland. This trend was at first slowed down by the markedly higher birthrate of the regions sustaining migratory losses. The levelling-off that has taken place in the birthrate means, however, that the migratory currents now reflect more and more the overall population trends in the different regions. In other words, the regional differences in the birthrate and the natural population growth are affecting the regional distribution of the population less than are migratory movements.

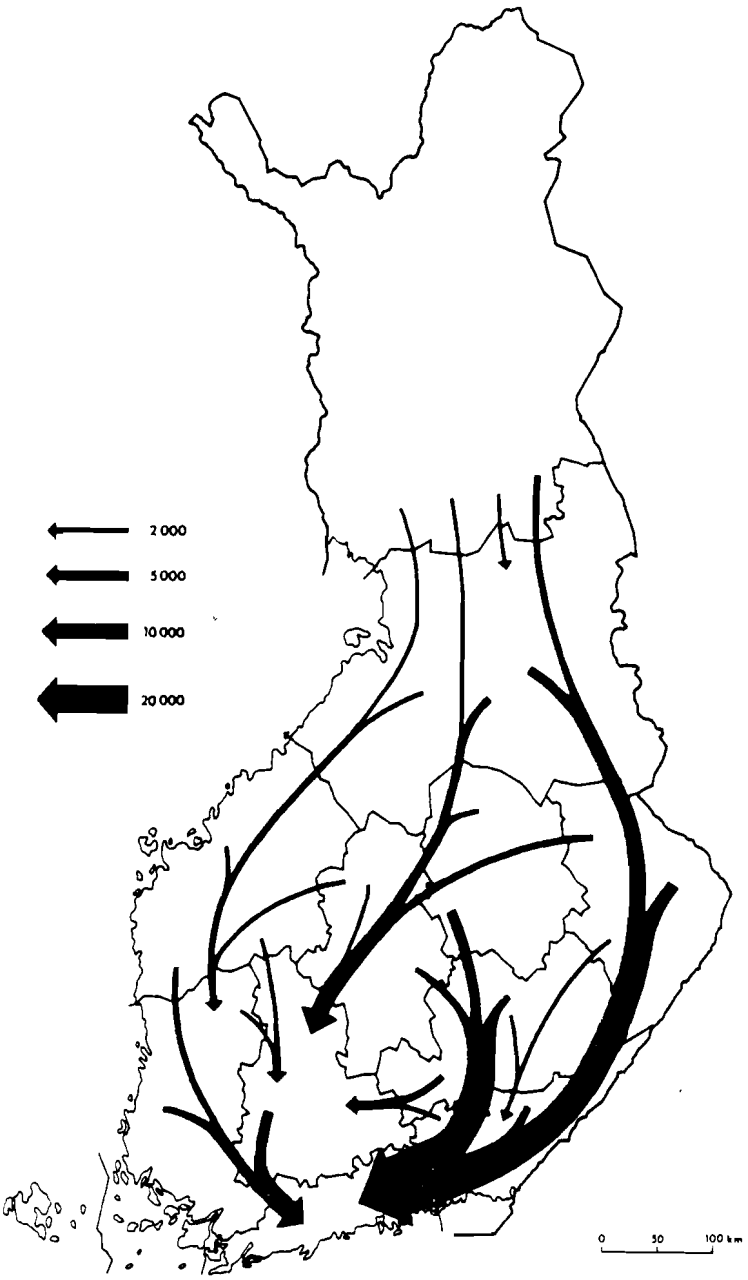


FIGURE 2.9 Directions of net in-migration flows between provinces, Finland, 1966–1970. Source: CICRED (1974, p. 32).

2.4.2 MIGRATION IN 1974

Figure 2.10 presents, for each region of origin, the number and age structure of the out-migrants by region of destination. A number of observations can be made. First, the province of Uusimaa is a major destination area. On the other hand, however, it is an important source of out-migrants. Second, two other southern provinces are important in- and out-migration provinces: Turku and Pori, and Häme. A third observation concerns the migration distance. Distance affects migration negatively. A considerable proportion of out-migrants stay in adjacent provinces. Fourth, the province of Ahvenanmaa exchanges migrants with only three provinces: Uusimaa, Turku and Pori, and Vaasa. This is due to the representation of the Swedish language in these three provinces.

Out-migration rates by provinces are given in Appendix B. The total out-migration rate for a specific age group of the interprovincial and intraprovincial (between communes of the same province) migration rates are drawn in Figure 2.11. One observes high migration rates in age group 20–24 and in age group 0–4.

A comparison between intraprovincial and interprovincial migration rates deserves some attention. Figure 2.12 gives the gross migration rates. Observe the high intraprovincial migration rates of Uusimaa (No. 1). This may be explained by the suburbanization process around Helsinki. The interprovincial migration rate is lowest for the isolated Swedish-speaking province of Ahvenanmaa (No. 3). The gross out-migration rates decline as the intraprovincial migration rates increase.

The mean age of the total interprovincial migration rate is between 23.91 and 26.06 years. The mean age of the intraprovincial migration rate is between 24.44 and 26.23 years.

2.5 Total Population System in 1974

Table 2.8 summarizes the demographic information of the whole system, i.e., the country. It is an aggregation of the regional data. The migration column contains the number of migrants between the regions (provinces) in the system, including the migration between communes within the same province.

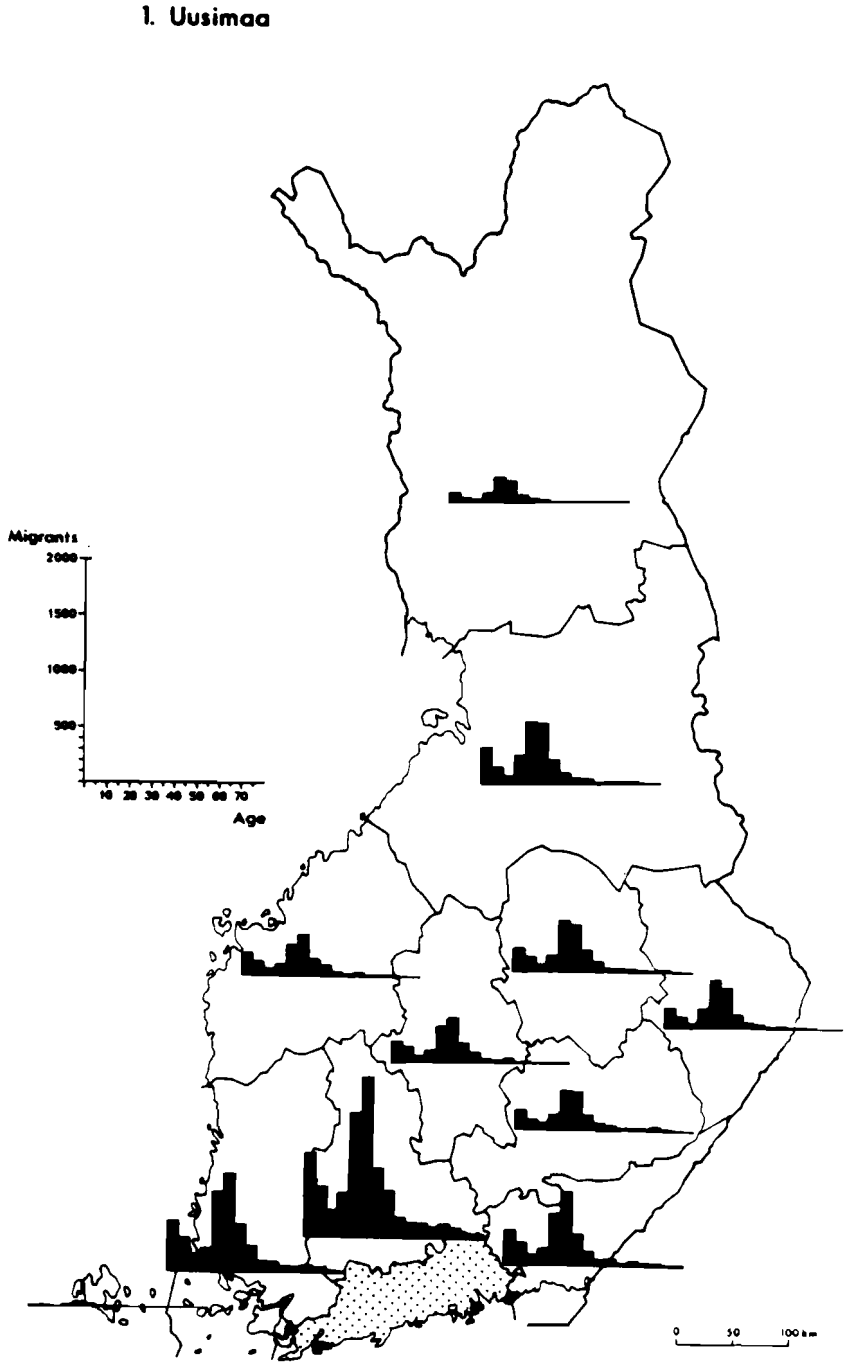


FIGURE 2.10 The number and age structure of the out-migrants by province of origin and province of destination, Finland, 1974. Dotted province is province of origin.

2. Turku and Pori

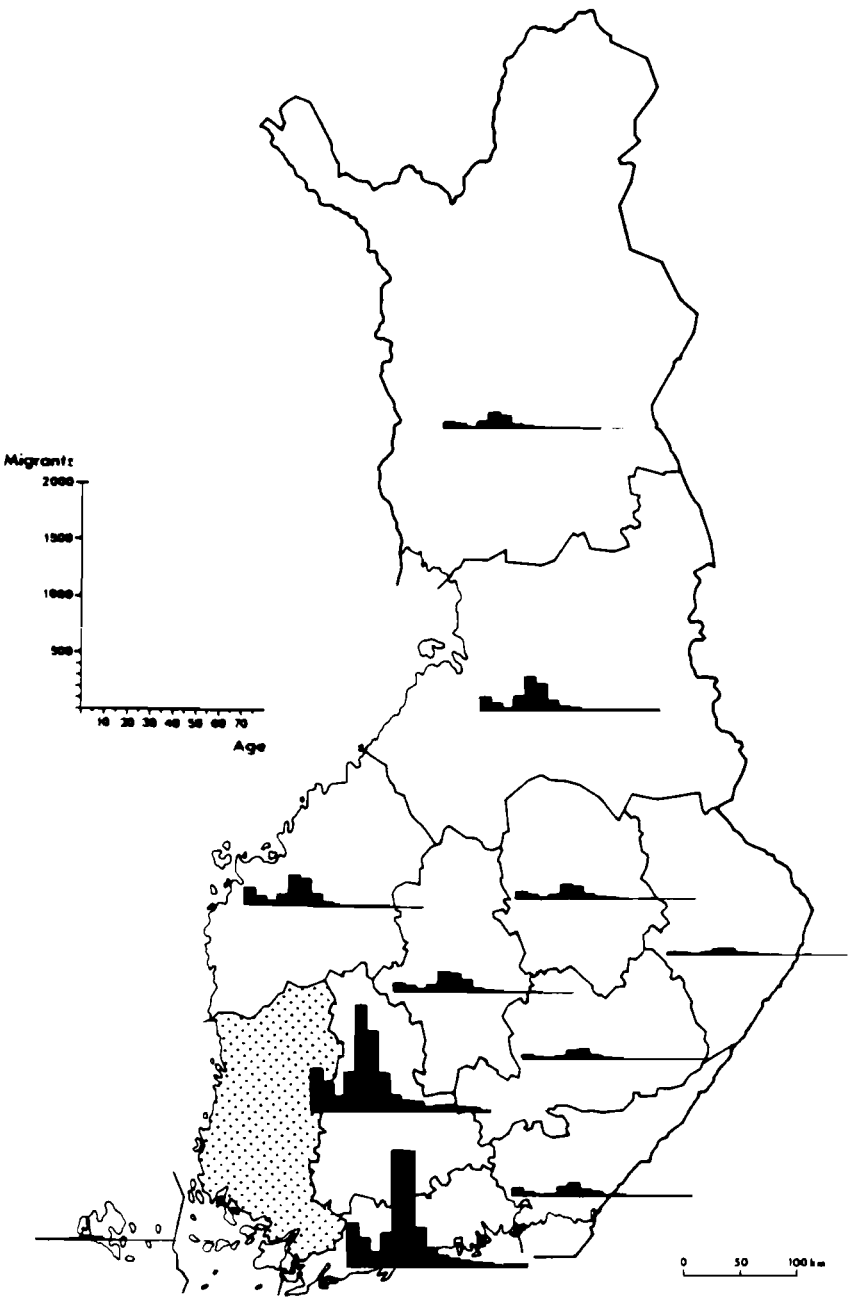


FIGURE 2.10 *Continued.*

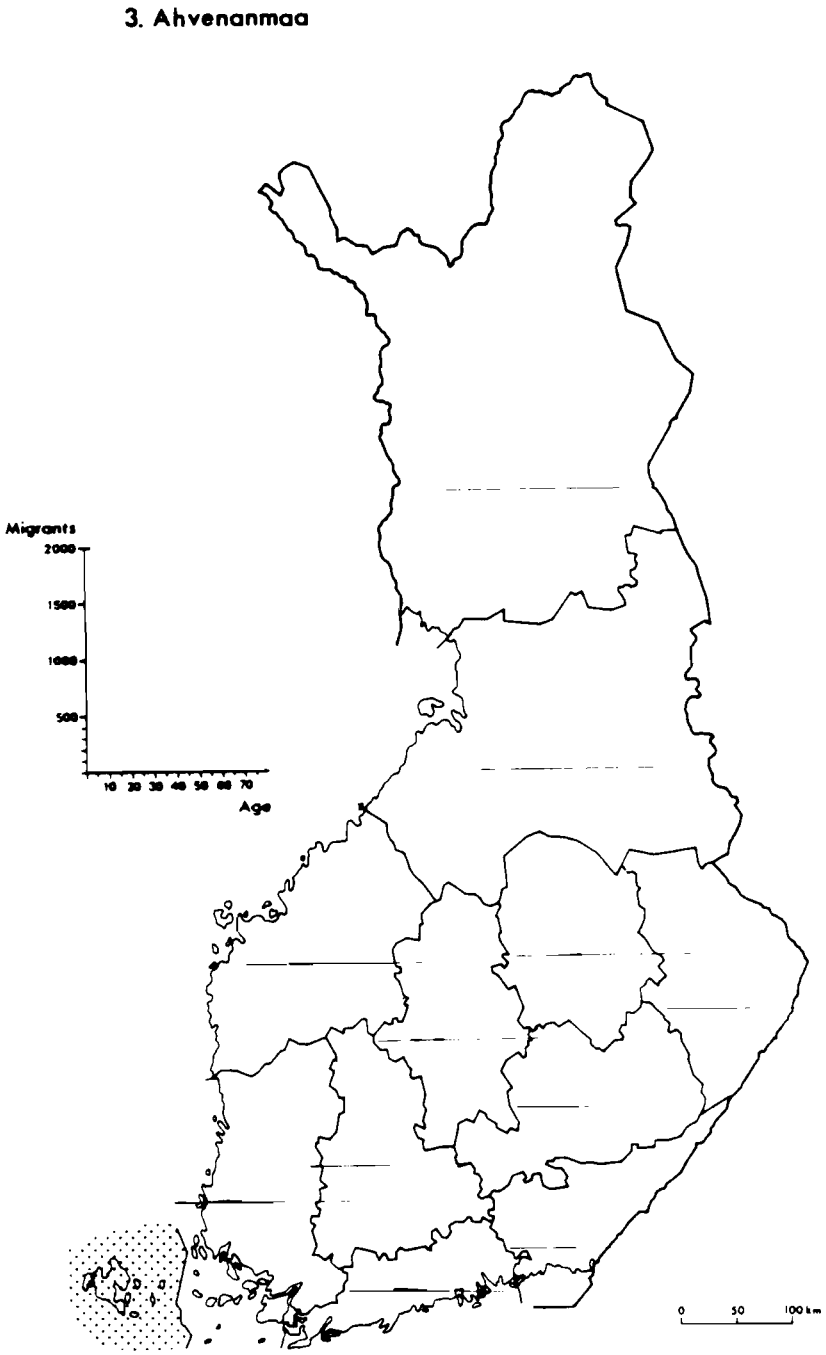
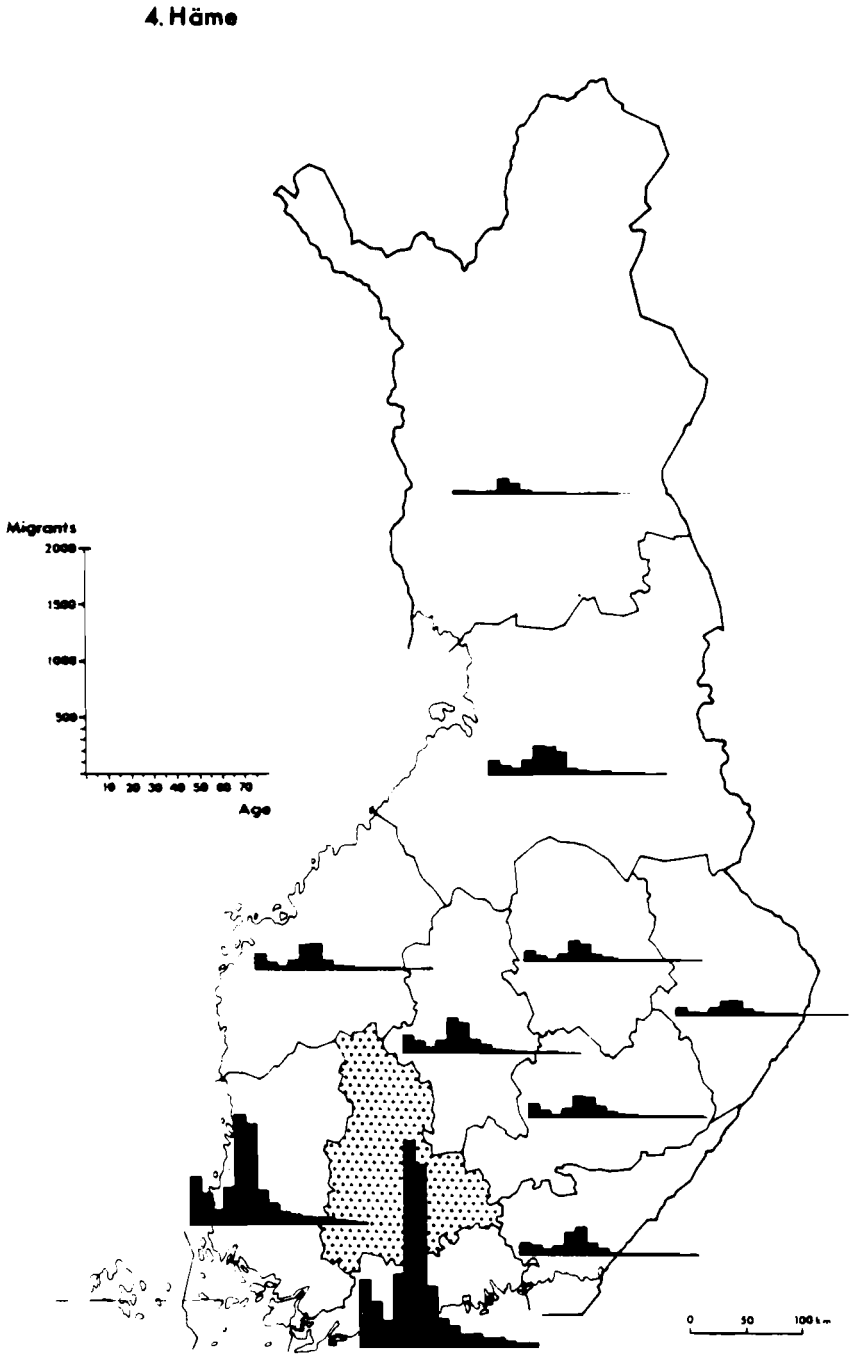


FIGURE 2.10 *Continued*.



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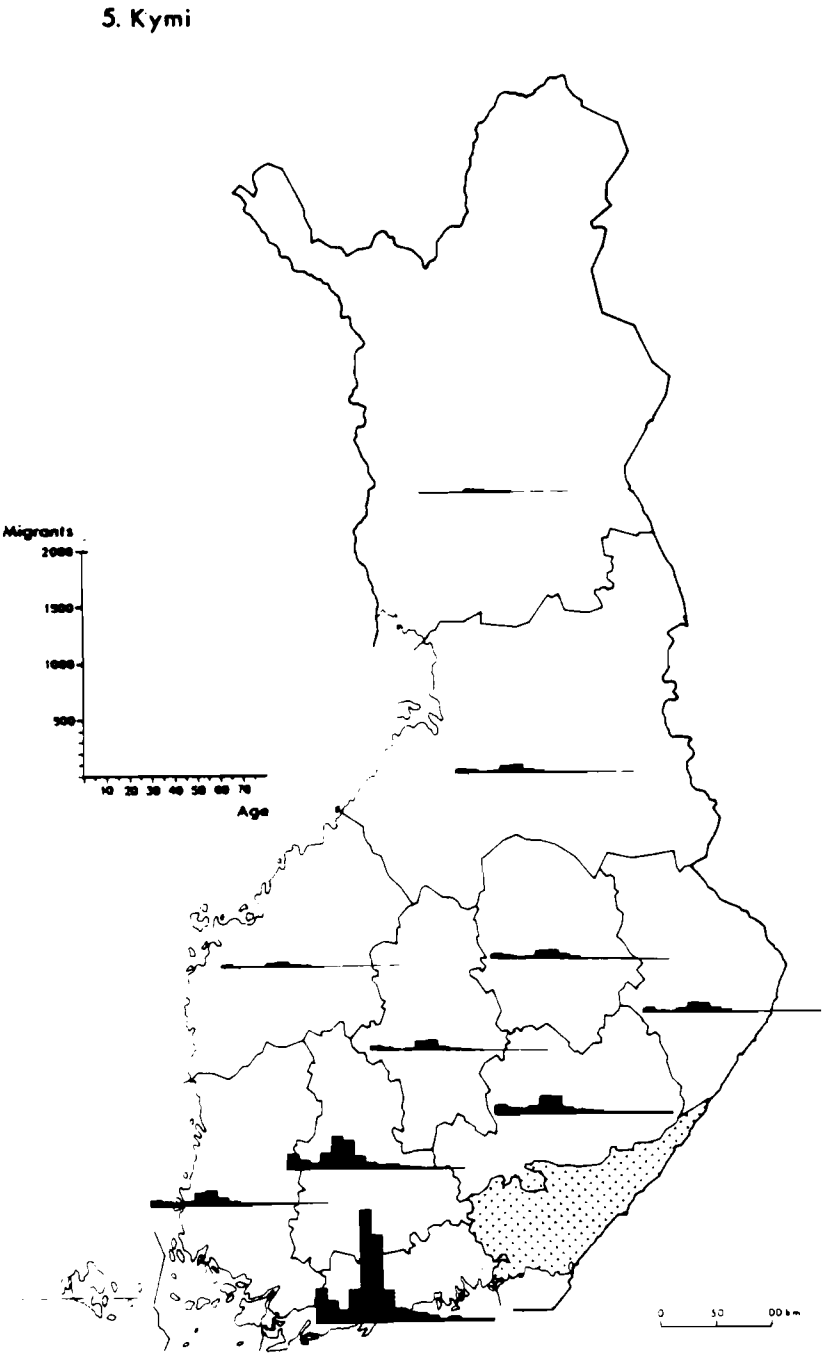

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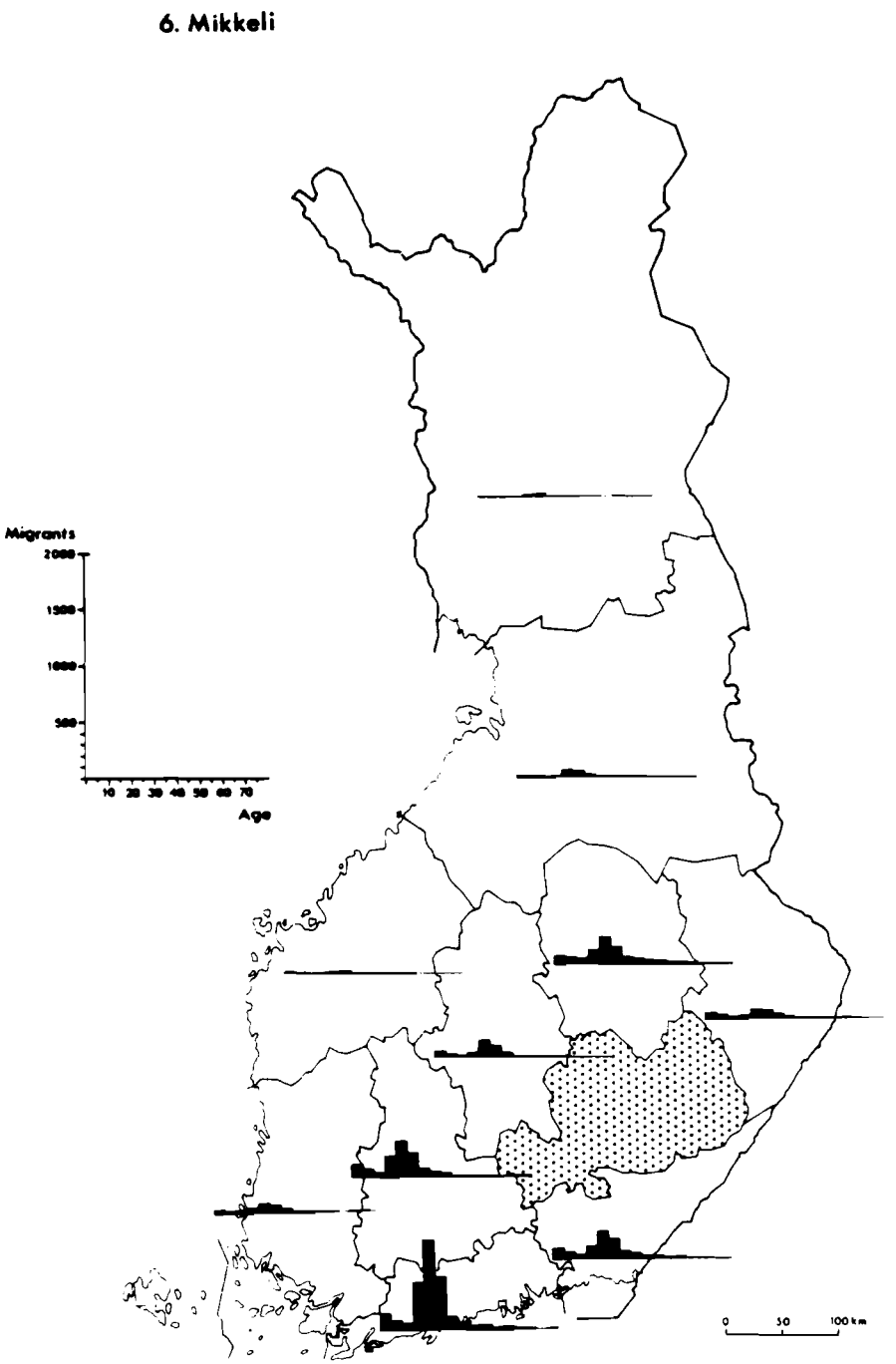

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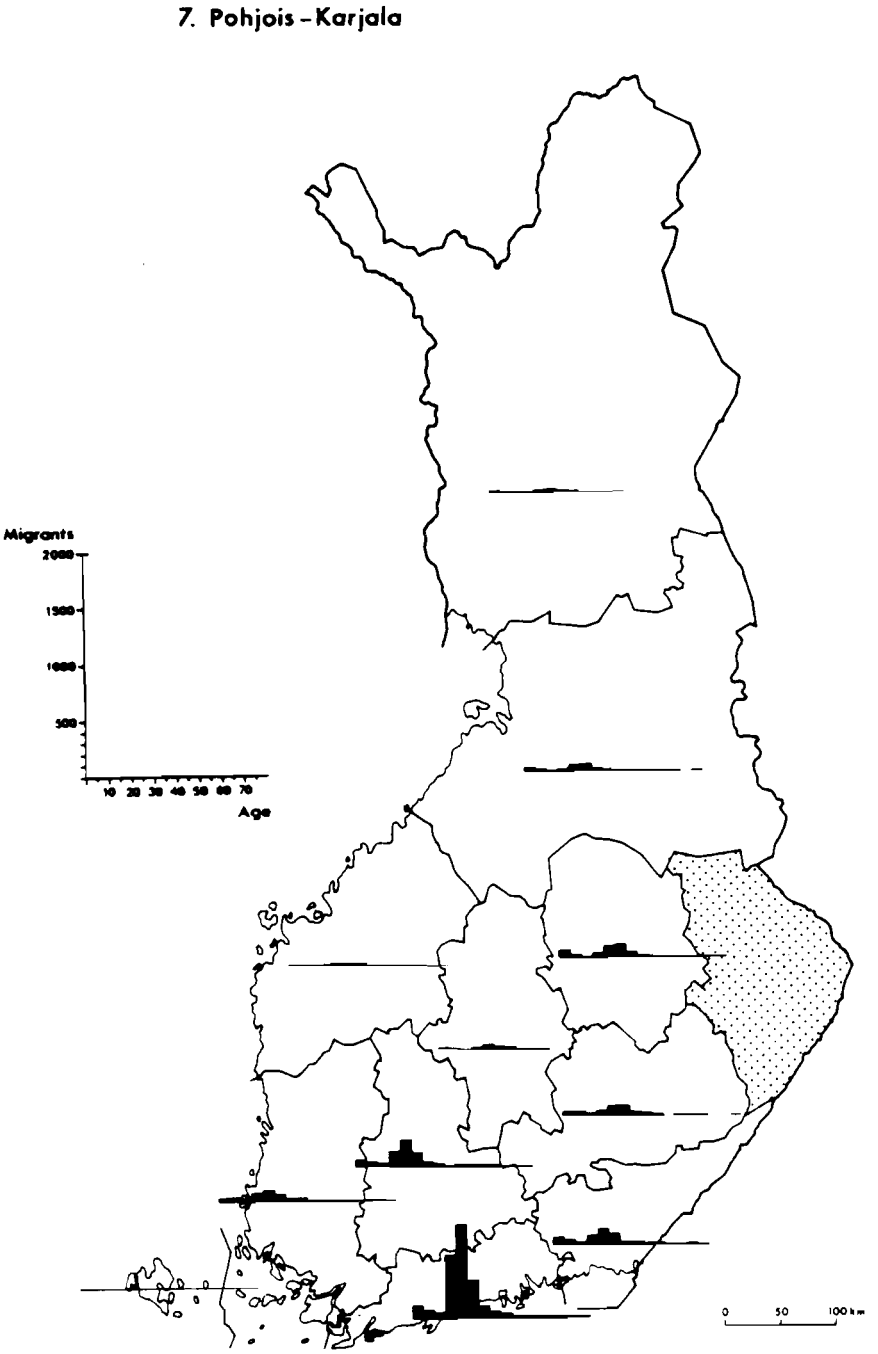

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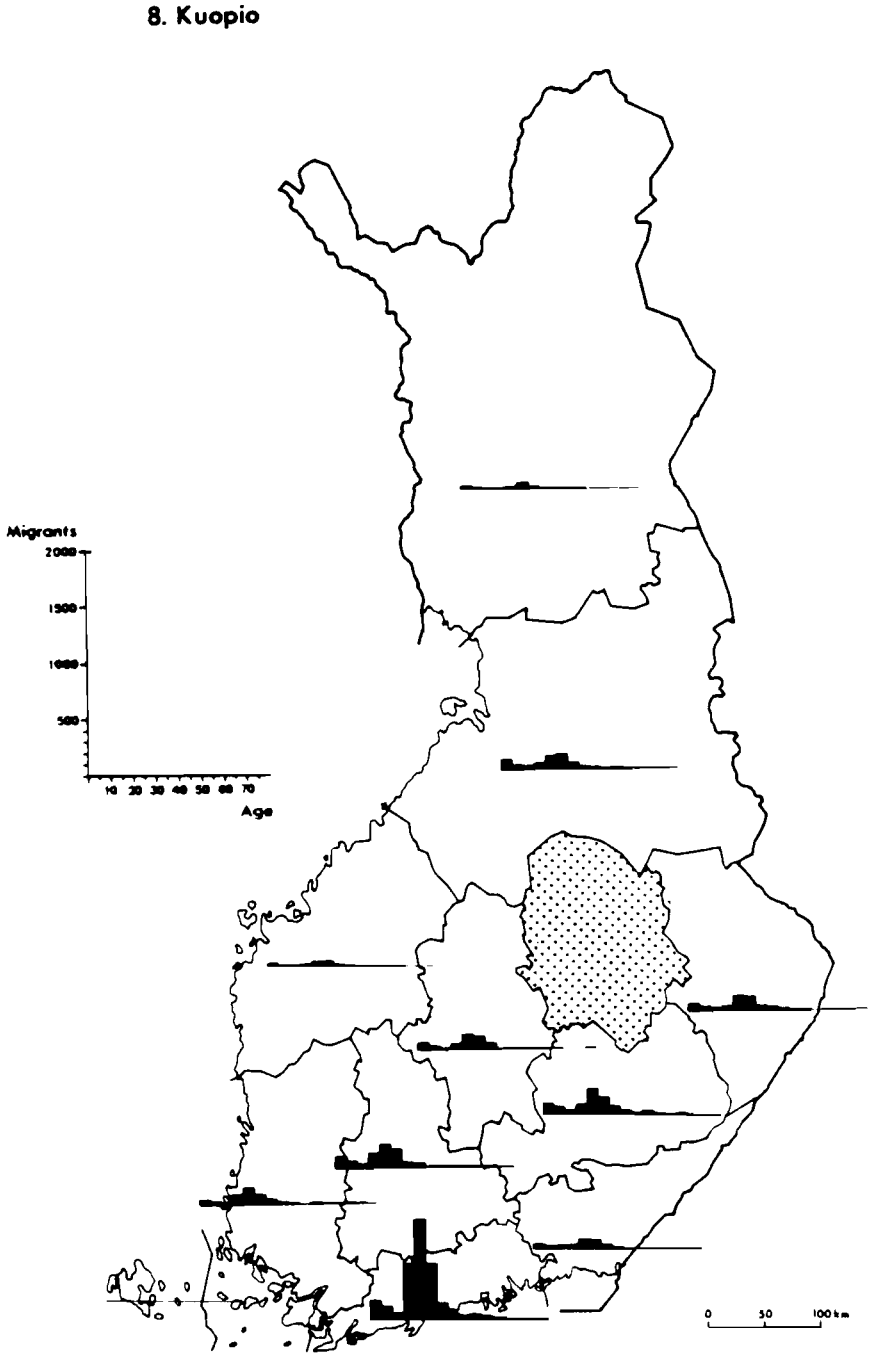


FIGURE 2.10 *Continued*.

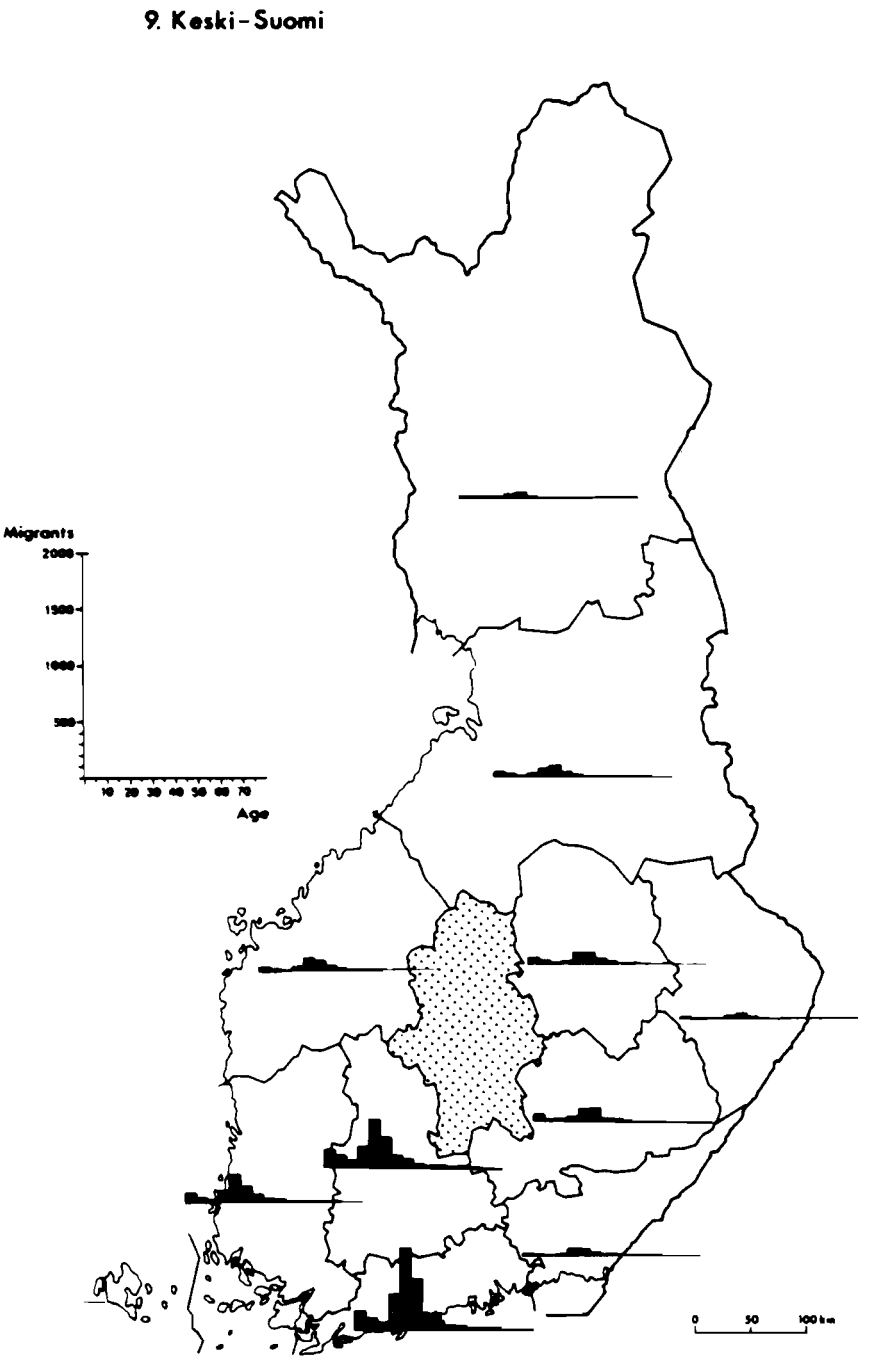


FIGURE 2.10 *Continued*.

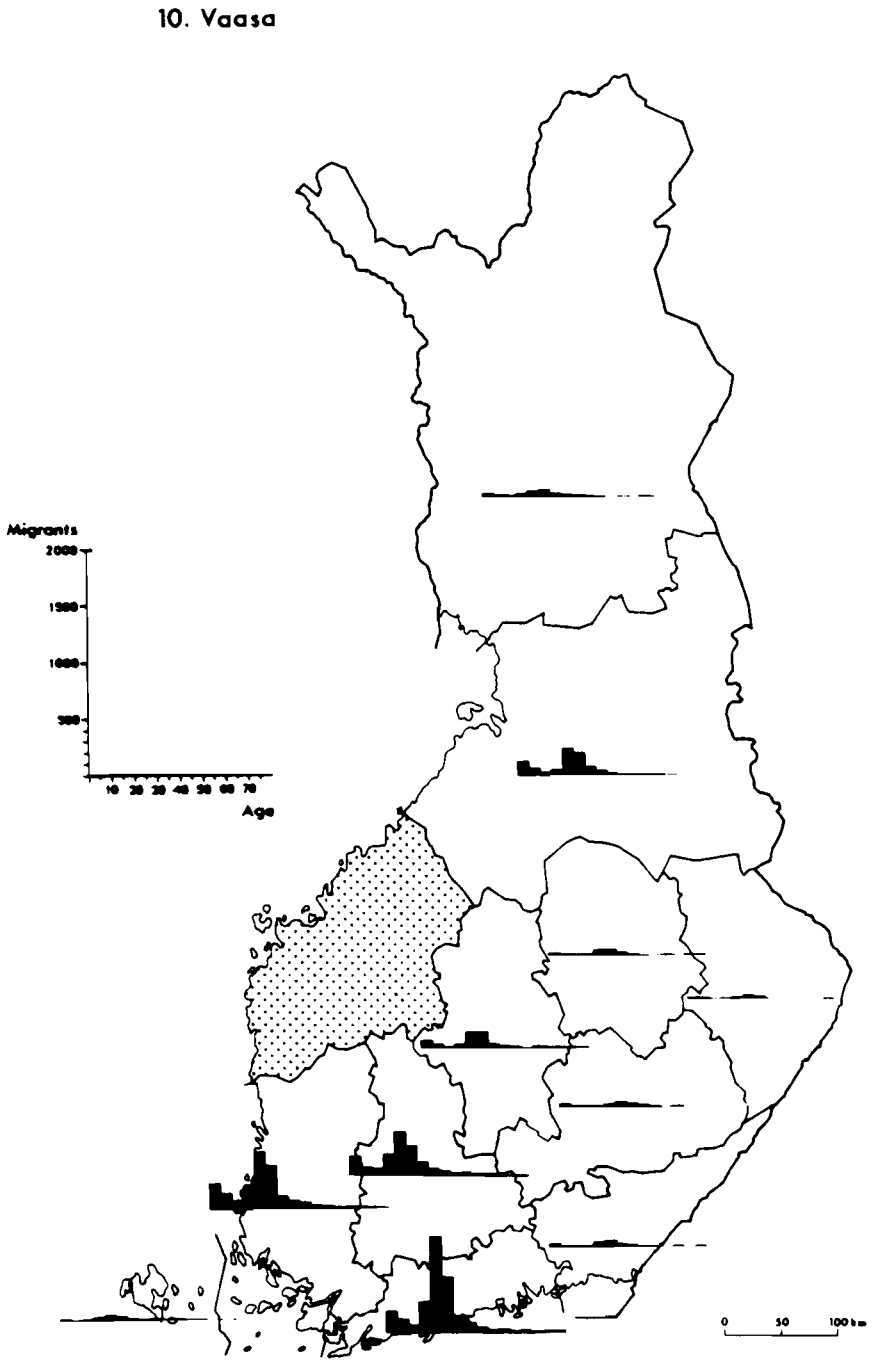
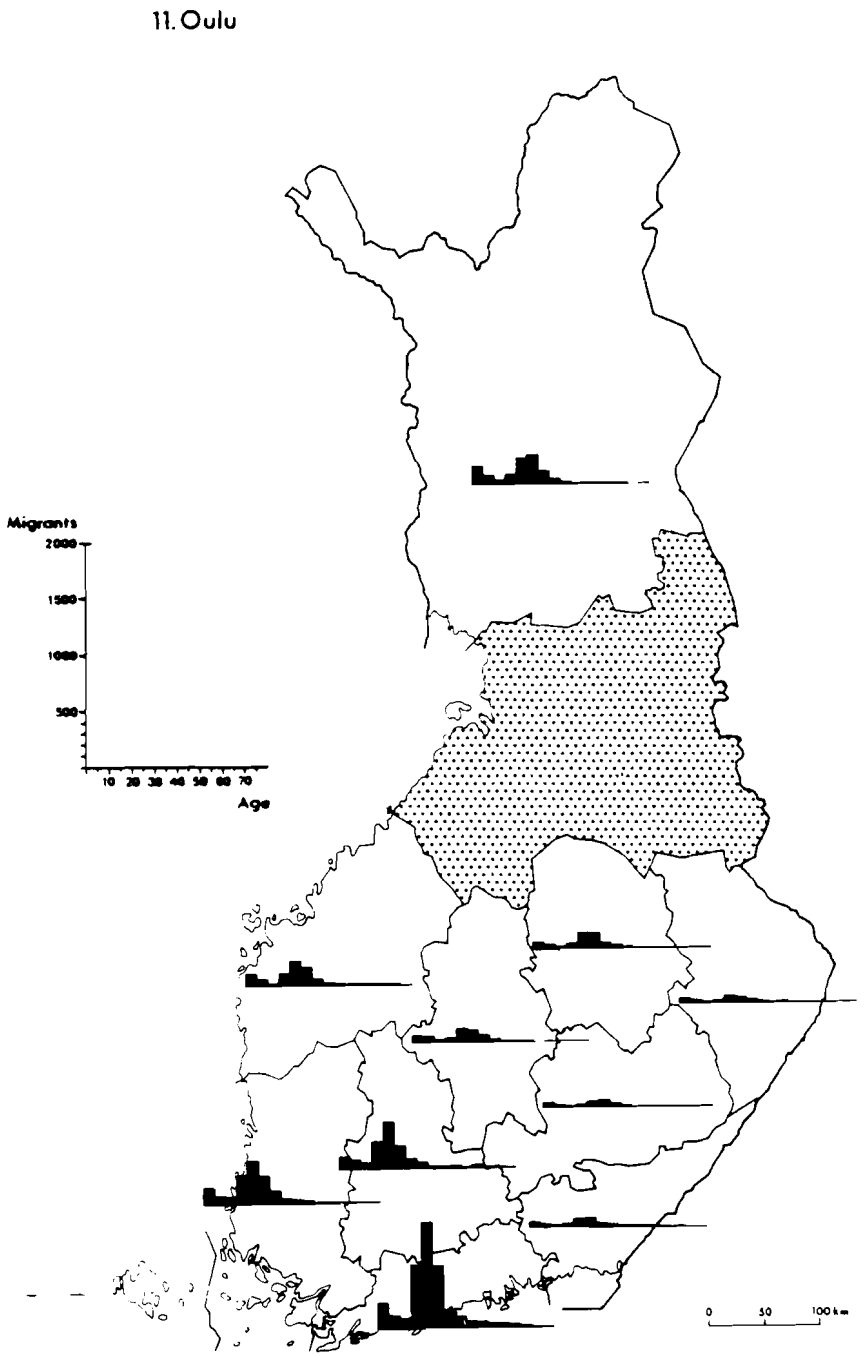


FIGURE 2.10 *Continued*.



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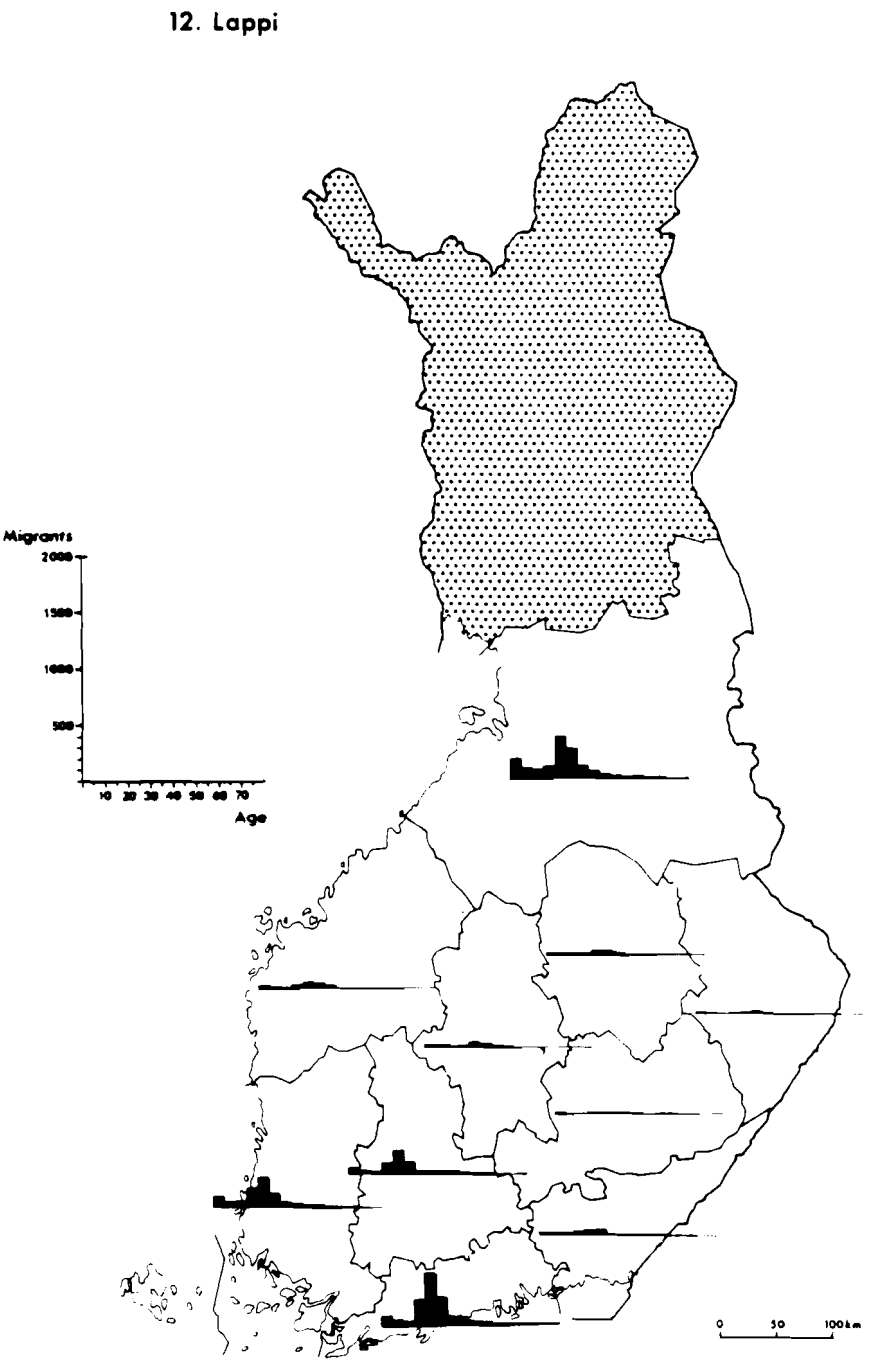

FIGURE 2.10 *Continued*.

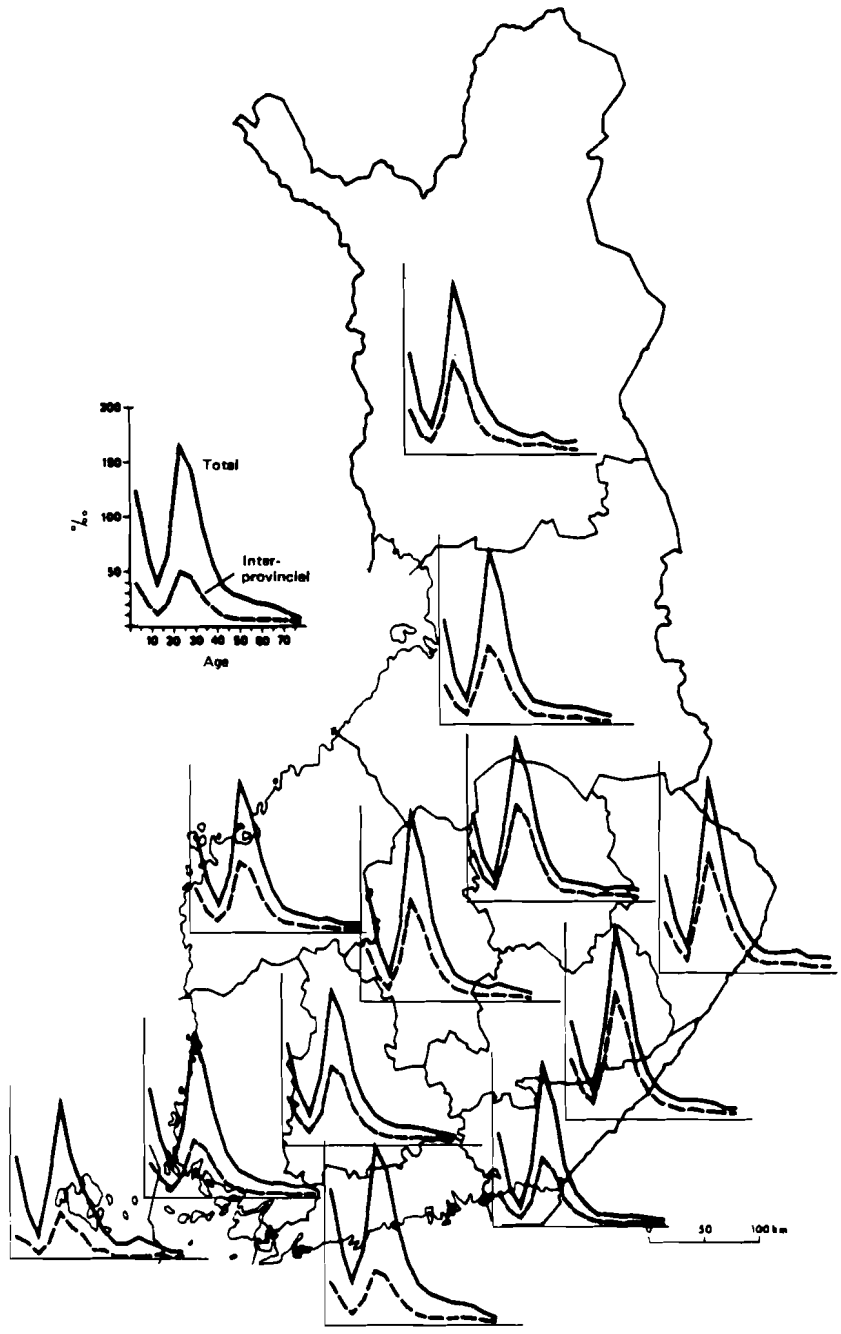

FIGURE 2.11 The total and interprovincial age-specific out-migration rates by province, Finland, 1974.

TABLE 2.8 Total population system, Finland, 1974.

Age	Population		Births		Deaths		Migration		Observed rates		
	Absolute	Percent	Absolute	Percent	Absolute	Percent	Absolute	Percent	Birth	Death	Migration
0	301733.	6.4328	0.	0.0000	839.	1.8780	30439.	11.0275	0.000000	0.002781	0.102881
5	361840.	7.7143	0.	0.0000	145.	0.3246	18821.	6.8185	0.000000	0.000401	0.052015
10	387373.	8.2586	5.	0.0080	132.	0.2955	10716.	3.8822	0.000013	0.000341	0.027663
15	405257.	8.6399	5391.	8.6295	358.	0.8013	27344.	9.9063	0.013303	0.000883	0.067473
20	427498.	9.1141	21600.	34.5755	436.	0.9759	66481.	24.0850	0.050527	0.001020	0.155512
25	436247.	9.3006	22810.	36.5124	517.	1.1572	55377.	20.0622	0.052287	0.001185	0.126940
30	306629.	6.5372	8505.	13.6141	468.	1.0475	23176.	8.3963	0.027737	0.001526	0.075583
35	288847.	6.1581	3284.	5.2568	595.	1.3318	12856.	4.6575	0.011369	0.002260	0.044528
40	279945.	5.9683	802.	1.2836	1005.	2.2495	7639.	2.7675	0.002865	0.003590	0.027288
45	287010.	6.1189	75.	0.1201	1649.	3.6910	6035.	2.1864	0.000261	0.005745	0.021027
50	263173.	5.6107	0.	0.0000	2166.	4.8482	4654.	1.6861	0.000000	0.008230	0.017684
55	226674.	4.8326	0.	0.0000	2865.	6.4128	3591.	1.3010	0.000000	0.012639	0.015842
60	235159.	5.0135	0.	0.0000	4537.	10.1553	3704.	1.3419	0.000000	0.019293	0.015751
65	198413.	4.2301	0.	0.0000	5985.	13.3965	2574.	0.9325	0.000000	0.030164	0.012973
70	139736.	2.9791	0.	0.0000	6652.	14.8894	1419.	0.5141	0.000000	0.047604	0.012155
75	144998.	3.0913	0.	0.0000	16327.	36.5453	1201.	0.4351	0.000000	0.112602	0.008283
Total	4690532.	100.0000	62472.	100.0000	44676.	100.0000	276027.	100.0000	0.158362	0.250065	0.779577
Crude[a]									0.013319	0.009525	0.058848
M. age[b]		34.0376		26.3300		65.0753		24.4435	26.9615	68.8471	26.3224

[a]Crude, Crude rate.
[b]M. age, Mean age.

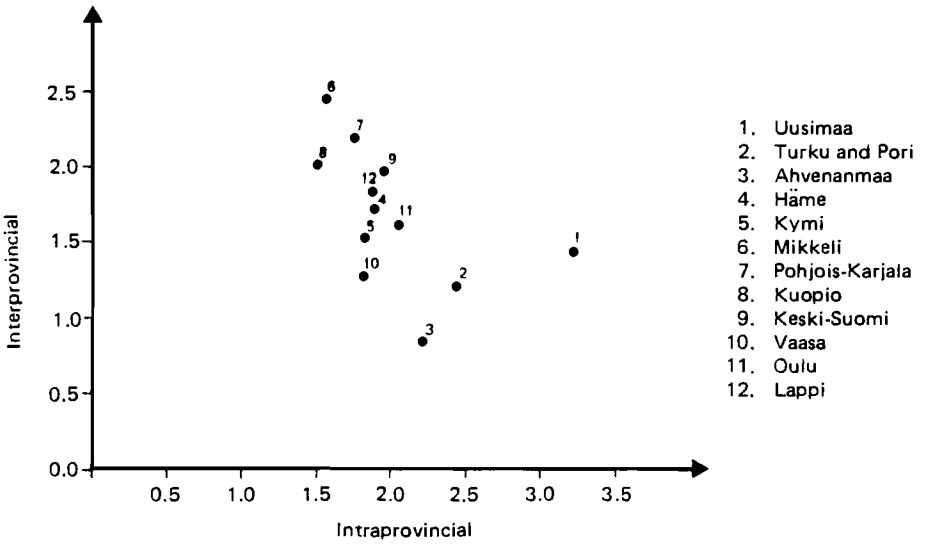

FIGURE 2.12 Gross out-migration rates by province, Finland, 1974.

3. MULTIREGIONAL POPULATION ANALYSIS*

The previous sections gave an overview of recent trends in regional demographic changes in Finland. Regional differences in fertility and mortality and interregional migration flows cause regionally deviating demographic features. In this section these differences are described and their impacts on important demographic characteristics are analyzed. The methodology used is that of multiregional demography. The advantage of this new field of study is that it enables one to consider several regions simultaneously and to trace through the effect of changes in one region on each of the other regions.

The basic parameters of our analysis consist of age- and region-specific rates of mortality, fertility, and migration. These schedules of age-specific rates are computed from the data presented in the previous section and are given in Appendix B. Note that the schedules are independent of the observed age structure and regional distribution of the population. They are pure representations of the age effects of the components of demographic change. A description and analysis of these age effects on demographic characteristics is the objective of this part of the paper. Three sections are distinguished. In the first, the multiregional life table is discussed and the important summary measure of the life expectancy matrix is computed.

*This section was written with Frans Willekens.

The second section confronts the hypothetical life table population with observed fertility and migration rates, and derives a number of important statistics describing the fertility and migration experience in the multiregional population system. In addition, the long-run impact of current demographic behavior is explained by introducing the concept of multiregional stable population. The final section presents the short-, medium-, and long-run impacts of the currently observed schedules of mortality, fertility, and migration and of the age and regional composition of the population. It is important to note that in the present study Finland is treated as a closed system. The population dynamics between Finland and other countries is not included.

3.1 The Multiregional Life Table

The multiregional life table is a collection of statistics describing the mortality and migration experiences of a set of regional birth cohorts. A regional birth cohort is a group of people, e.g., 100,000, born at the same moment in time and in the same region. If these cohorts are subjected to the observed schedules or age-specific rates of mortality and migration as they age, a hypothetical population would evolve with the interesting feature that it is independent of the age and regional structure of the observed population. This hypothetical population will be denoted as the life table population.

The methodology of multiregional life table construction is described in Rogers (1975a, Chapter 5) and the computer program is given in Willekens and Rogers (1978). The first step in constructing a life table is to compute age-specific transition probabilities from the observed rates. By way of illustration, the transition probabilities of 20-year-old persons are given in Table 3.1. For example, the probability that a person living in the province of Uusimaa at age 20 will be alive at age 25 is 99.5%. The probability that he will still be in Uusimaa is 78.6%. Hence, there is a 20.9% chance that he will move to other provinces. In other words, of 100 20-year-old persons in Uusimaa, about 21 will be in other provinces 5 years later, i.e., by age 25. In Turku and Pori the average will be 3, in Häme 5, in Kymi 2, etc. The probability of dying is obtained as a residual, namely, unity minus the probability of survival. It not only depends on the death rate in Uusimaa, but also on the death rates in the other provinces to which a person of age 20 might migrate. The remarkably low probability of dying in Ahvenanmaa is largely due to the fact that in 1974, no deaths of 20- to 24-year-old persons were counted in this small province. The

TABLE 3.1 Transition probabilities of 20-year-old persons, Finland, 12 provinces.

Province of destination	Province of origin											
	Uusimaa	Turkpor	Ahvenan	Häme	Kymi	Mikkeli	Poh.Kar	Kuopio	Keski	Vaasa	Oulu	Lappi
Uusimaa	0.78579	0.07554	0.06598	0.12325	0.13625	0.17266	0.20189	0.15560	0.13929	0.09778	0.10652	0.10773
Turkpor	0.03288	0.76843	0.04722	0.06412	0.02031	0.02540	0.03052	0.03050	0.05053	0.05700	0.04467	0.05841
Ahvenan	0.00199	0.00253	0.81260	0.00052	0.00033	0.00027	0.00052	0.00057	0.00064	0.00483	0.00096	0.00027
Häme	0.04727	0.06092	0.07299	0.69886	0.04206	0.06994	0.06067	0.04151	0.07794	0.04375	0.04675	0.04861
Kymi	0.01991	0.00711	0.00330	0.01430	0.72057	0.04990	0.03461	0.01745	0.01477	0.00633	0.00963	0.00991
Mikkeli	0.01373	0.00587	0.00087	0.01196	0.02033	0.55459	0.02034	0.03360	0.01934	0.00362	0.00614	0.00550
Poh.Kar	0.01653	0.00442	0.00086	0.00857	0.01139	0.01703	0.57875	0.02093	0.00635	0.00278	0.00683	0.00334
Kuopio	0.01845	0.00930	0.00323	0.01258	0.01060	0.04661	0.02543	0.63566	0.01923	0.00672	0.01510	0.01024
Keski	0.01355	0.01213	0.00332	0.01934	0.01122	0.02944	0.01238	0.02254	0.62206	0.01535	0.01322	0.00992
Vaasa	0.01229	0.01846	0.03569	0.01505	0.00623	0.00626	0.00605	0.00846	0.02155	0.72557	0.02414	0.01326
Oulu	0.02343	0.02070	0.01260	0.01829	0.01057	0.01682	0.01732	0.02241	0.01691	0.02618	0.69750	0.07491
Lappi	0.00935	0.00935	0.00088	0.00901	0.00457	0.00549	0.00630	0.00471	0.00694	0.00595	0.02332	0.64985
Total probability of survival	0.99517	0.99477	0.99955	0.99585	0.99442	0.99443	0.99476	0.99395	0.99494	0.99586	0.99478	0.99195
Probability of dying	0.00483	0.00523	0.00045	0.00415	0.00558	0.00557	0.00524	0.00605	0.00506	0.00414	0.00522	0.00805

observed zero death rate, applied to a birth cohort, implies that no one dies in Ahvenanmaa between those ages. Hence, all deaths of Ahvenanmaa-born people between these ages occur in other regions. This can also be seen from the life history of the birth cohorts of Ahvenanmaa.

The complete *life history* of all the birth cohorts may be obtained by consecutive application of the age-specific transition probabilities. For instance, from the 100,000 babies born in Uusimaa (see Appendix C1), a total of

$$100{,}000 \times 0.80798 = 80{,}798$$

will still be there at age 5. Some, namely

$$100{,}000 \times 0.02884 = 2{,}884\ ,$$

will migrate to the province of Turku and Pori.

$$100{,}000 \times 0.00069 = 69$$

will move to Ahvenanmaa, and so on. The number of deaths is equal to

$$100{,}000 \times 0.01319 = 1{,}319\ .$$

This procedure distributes the survivors of the birth cohort of Uusimaa over the various regions. An analogous procedure yields the regional distribution of this cohort at age 10. For instance, of the 80,798 people in Uusimaa at age 5,

$$80{,}798 \times 0.89565 = 72{,}367$$

will still be there at age 10, and

$$80{,}798 \times 0.01801 = 1{,}455$$

will be in the province of Turku and Pori. Similarly, we may follow the life history of those 2,884 migrants in Turku and Pori.

The life histories of the people born in the various provinces may be aggregated to give the exact age of the expected number of survivors, their places of birth, and their places of residence. From Appendixes C1 and C2 we can calculate that, of the 100,000 babies born in Uusimaa, 4,340 are living in Turku and Pori at age 10. Some ($2{,}884 \times 0.91520 = 2{,}639$) have

moved to the province before age 5 and have stayed there. Some (80,798 × 0.01801 = 1,455) moved directly to Turku and Pori from Uusimaa, and the rest have first moved to other provinces before coming to Turku and Pori.

These results may also be interpreted as probabilities. If divided by the radix or size of the birth cohort, they denote the probabilities of being in the various regions at a certain age when born in a specific region. For example, the probability that a person born in Uusimaa will be in Turku and Pori at age 20 is 0.06045. In other words, 6.0% of the babies born in Uusimaa will be in Turku and Pori when they are 20 years old (Table 3.2). The distribution of the birth cohort of Uusimaa at age 75 is also interesting. About half (50.6%) will still be alive. Only 18.8% will be in the region of birth. The results for Lappi are striking. Of the babies born in this region, only 8.2% will live there when they reach age 75, but 41.2% will be living in other parts of Finland, with most in Uusimaa (10.7%) and Turku and Pori (7.4%).

Thus far, life table statistics have been presented that may be interpreted as probabilities, both conditional probabilities and unconditional probabilities. Probabilities allow a detailed investigation of interprovincial transitions at various ages. However, these probabilities may also be used to derive measures of the average duration of stay in each region by persons of various ages.

It is convenient to express the duration of residence per unit birth cohort, i.e. cohort of a single person. Table 3.3 presents the number of years lived in each region per unit birth cohort. It gives the average length of stay in each region between ages 20–25 per unit birth cohort of the various regions. For example, a person born in Uusimaa, having reached age 20, may expect to live for an average of 4.89 years within the next 5 years. Of this, 2.92 years are spent in Uusimaa, 0.35 in Turku and Pori, and so on.

In addition to the duration of residence interpretation, Table 3.3 may also be given a number-of-people interpretation (Willekens and Rogers, 1978). For example, if the birth cohort is unity, there are 4.89 people in age group 20–24 who were born in Uusimaa. The column elements give the regions of residence of these Uusimaa-born people. Hence, Table 3.3 gives the age and regional distribution of the *life table population*. The distribution is expressed in terms of unit born (birth cohort of a single person). It may be converted to the more conventional expression in terms of percentage distribution by introducing the ratios of birth cohorts. However Willekens and Rogers (1978) have shown that the expression in terms of unit born provides a better measure, since it gives the relative composition of *any* stationary population.

TABLE 3.2 Probabilities of survival from birth to exact age 20 by province, Finland, 12 provinces.

Province of residence at age 20	Province of birth											
	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
uusimaa	0.63071	0.08991	0.06660	0.13295	0.13584	0.15117	0.17238	0.14473	0.13249	0.07951	0.10592	0.09466
turkpor	0.06045	0.67139	0.06085	0.08760	0.03601	0.04186	0.04944	0.04321	0.06135	0.07566	0.06179	0.07428
ahvenan	0.00218	0.00280	0.75553	0.00096	0.00092	0.00042	0.00041	0.00039	0.00073	0.00434	0.00086	0.00040
hame	0.08552	0.08132	0.02152	0.58592	0.06667	0.09334	0.07048	0.06857	0.09836	0.05648	0.05618	0.05331
kymi	0.03633	0.01506	0.00723	0.02620	0.61255	0.06684	0.05376	0.02926	0.01858	0.00993	0.01692	0.01833
mikkeli	0.02064	0.00958	0.00446	0.02020	0.03445	0.46685	0.03119	0.04028	0.02601	0.00865	0.01209	0.00927
poh.kar	0.02060	0.00839	0.00350	0.01470	0.01739	0.02909	0.49457	0.02799	0.01143	0.00493	0.01060	0.00662
kuopio	0.02429	0.01300	0.00637	0.01716	0.01701	0.05589	0.03908	0.52343	0.02596	0.00884	0.01900	0.01420
keski	0.02313	0.01681	0.01983	0.02776	0.01438	0.03107	0.01396	0.02887	0.53383	0.01766	0.01953	0.01252
vaasa	0.02592	0.02967	0.03014	0.02577	0.01330	0.01365	0.01123	0.01500	0.02773	0.67025	0.03435	0.02308
oulu	0.03778	0.02858	0.00844	0.03833	0.01969	0.02148	0.02626	0.04304	0.02925	0.03120	0.60582	0.09048
lappi	0.01190	0.01229	0.00153	0.00910	0.00705	0.00741	0.01088	0.01302	0.01162	0.01008	0.03591	0.58040
total	0.97947	0.97881	0.98598	0.97865	0.97526	0.97908	0.97363	0.97778	0.97733	0.97752	0.97896	0.97757

TABLE 3.3 Number of years spent in each province between ages 20 and 25 per unit birth cohort, Finland, 12 provinces.

Province of residence	Province of birth											
	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
uusimaa	2.92272	0.59629	0.46564	0.84903	0.88827	0.99421	1.11484	0.94927	0.87053	0.58144	0.71193	0.66265
turkpor	0.35223	3.00338	0.37649	0.58918	0.22403	0.26136	0.29741	0.27254	0.37977	0.45539	0.37513	0.44762
ahvenan	0.01408	0.01799	3.42488	0.00686	0.00596	0.00381	0.00409	0.00402	0.00583	0.02885	0.00688	0.00379
hame	0.47332	0.47559	0.14415	2.54073	0.38698	0.53051	0.42576	0.39758	0.56559	0.34678	0.35075	0.34104
kymi	0.19964	0.08867	0.04505	0.14872	2.65255	0.36434	0.29317	0.16918	0.11682	0.06419	0.10113	0.10651
mikkeli	0.11236	0.05661	0.02525	0.10757	0.17571	1.03462	0.16246	0.21346	0.13984	0.04820	0.06724	0.05460
poh.kar	0.11434	0.04858	0.02073	0.08074	0.09658	0.14924	1.96691	0.14973	0.06562	0.03146	0.06128	0.04042
kuopio	0.14049	0.08026	0.04007	0.10389	0.10194	0.30019	0.20974	2.16108	0.14858	0.05852	0.11362	0.08710
keski	0.12822	0.10004	0.09428	0.15394	0.08979	0.17860	0.09022	0.16309	2.18243	0.10794	0.11235	0.07929
vaasa	0.14305	0.16886	0.20507	0.14637	0.07871	0.08221	0.07105	0.09092	0.16260	2.90356	0.19629	0.13416
oulu	0.21337	0.17195	0.07164	0.17555	0.11060	0.13586	0.15704	0.23415	0.16967	0.19154	2.59521	0.50850
lappi	0.07149	0.07331	0.01298	0.05954	0.04413	0.04747	0.06287	0.07036	0.06710	0.05898	0.19023	2.40555
total	4.88532	4.88156	4.92623	4.88212	4.86325	4.98241	4.85556	4.87528	4.87439	4.87684	4.88206	4.87123

The duration of residence interpretation shown in Table 3.3 leads to the question of how long a person born in a certain region is expected to live in the various regions beyond a given age, say x. The number of years lived beyond age x is obtained by adding the number of years lived in each age group above age x. For example, a person born in Uusimaa may, at time of birth, expect to live 52.46 years beyond age 20. Of this, an average of 22.78 years will be spent in Uusimaa, 5.91 years in Turku and Pori, and 23.77 years in the other provinces. Note that this expected remaining lifetime is expressed at time of birth. It is the lifetime beyond a given age x which a newly-born baby can expect, and it takes into account persons that will die before reaching age x.

A conditional measure of the number of years lived beyond age x is the *life expectancy*. It is conditional in the sense that it applies to persons who have already reached age x. Since the life expectancy is expressed per unit *survivor* of age x, it exceeds the remaining lifetime measures. The expectation of life at age 20 is given in Table 3.4. The life expectancy is decomposed according to the region where this life is expected to be lived. For instance, for a person born in Uusimaa, of the total 53.27 years of his life, 23.23 years are expected to be spent in Uusimaa, 6.04 in Turku and Pori, and 24.04 years in the other provinces of Finland.

The most important life table statistic is the life expectancy at birth (Table 3.5). Note that the total life expectancy of a given birth cohort not only depends on the mortality schedule of the province of birth, but also on the mortality schedules of the other provinces to which the members of the birth cohort may migrate. Therefore, the total life expectancy computed in multiregional demography differs from the life expectancy derived for a closed system (Appendix C3). The latter case implies the assumption that a person never leaves his region of birth, and is subject, therefore, to the mortality pattern of that region during his whole lifetime.

Multiregional life tables are not only useful in their own right, but also provide the necessary input to multiregional demographic growth models. The proportion of people in a given age group and region surviving to the next age group is derived from the life table. Recall that Table 3.3 may be interpreted to represent the relative number of people in each region and age group in the life table or stationary population. Table 3.6 shows that the total *survivorship proportion* of 20- to 24-year-old persons living in Uusimaa is 0.995, i.e., 99.5% will survive to be 25--29 years old 5 years later. About 79.0% will remain in Uusimaa, 3.2% will be in Turku and Pori 5 years later, and 17.3% will be living in the other provinces. The matrices of survivorship proportions constitute the building blocks of the multiregional demographic growth operator or generalized Leslie matrix.

TABLE 3.4 Life expectancy at age 20, by province of birth and province of future residence, Finland.

Province of future residence	Province of birth											
	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
uusimaa	23.23336	10.27800	8.41303	12.89496	13.55202	14.22162	14.97573	13.61839	12.92807	9.97255	11.20285	10.87282
turkpor	6.00265	22.32141	6.12534	7.66880	4.65829	5.10005	5.36742	5.16242	6.35614	7.11457	6.22721	6.82818
ahvenan	0.22305	0.28386	26.25124	0.13925	0.12019	0.10291	0.11068	0.10605	0.12503	0.43972	0.13906	0.10216
hame	7.06714	7.13525	3.16311	17.16420	6.32284	7.50067	6.70545	6.32859	7.86420	5.84127	5.82480	5.87787
kymi	3.03572	1.85744	1.03433	2.54658	16.49322	4.49577	3.85277	2.85089	2.35764	1.59265	2.05238	2.07467
mikkeli	1.65478	1.11070	0.57479	1.59863	2.22156	8.65647	2.15074	2.55303	1.91532	1.02930	1.27251	1.13046
poh.kar	1.53410	0.90690	0.49774	1.24569	1.47240	1.88449	9.85863	1.99063	1.18281	0.75794	1.09769	0.91528
kuopio	2.07226	1.43511	0.95963	1.72316	1.80499	3.40427	2.77266	11.58064	2.20027	1.24943	1.92544	1.60426
keski	1.97962	1.71643	1.17666	2.20372	1.70539	2.49449	1.75080	2.40052	11.67996	1.86607	1.88836	1.57746
vaasa	2.35572	2.68171	3.59971	2.43471	1.64753	1.74622	1.69181	1.87612	2.67336	19.55807	3.02327	2.37955
oulu	3.00163	2.65535	1.40347	2.68921	2.13346	2.45731	2.65027	3.28795	2.76212	3.00823	15.84544	6.32201
lappi	1.11334	1.11442	0.39819	1.02884	0.82295	0.92426	1.06670	1.16043	1.11056	1.03489	2.42392	13.14678
total	53.27337	53.49657	53.59724	53.33776	52.95483	52.98854	52.95367	52.91565	53.15547	53.46467	52.92294	52.83151

TABLE 3.5 Expectations of life at birth, by province of birth and province of future residence, Finland.

a. absolute numbers

	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
uusimaa	37.9706	11.1198	9.1060	14.2016	14.8458	15.3814	16.0535	14.6668	14.0279	10.5681	11.9423	11.5368
turkpor	6.6462	37.8072	6.7577	8.6272	4.9704	5.4649	5.7494	5.4995	6.9317	7.8696	6.7462	7.4783
ahvenan	0.2401	0.3054	43.0064	0.1437	0.1267	0.1035	0.1103	0.1062	0.1259	0.4663	0.1460	0.1025
hame	8.0381	7.9794	3.4383	31.5641	6.9524	8.4351	7.2872	6.9843	8.8904	6.3440	6.2634	6.3072
kymi	3.4574	2.0163	1.1084	2.8179	31.2388	5.2654	4.4486	3.1389	2.5250	1.6815	2.2244	2.2459
mikkeli	1.8878	1.2066	0.5917	1.8556	2.6396	22.1824	2.5246	3.0719	2.2504	1.1286	1.4157	1.2301
poh.kar	1.7656	0.9878	0.5332	1.4082	1.6776	2.2972	23.8981	2.3761	1.3204	0.8004	1.2279	0.9824
kuopio	2.3531	1.5769	1.0141	1.9170	1.9906	4.0344	3.3108	25.6746	2.5370	1.3404	2.1430	1.7642
keski	2.2588	1.8917	1.3107	2.5372	1.8655	2.8875	1.8814	2.7492	25.7442	2.0741	2.1200	1.7119
vaasa	2.6453	3.0122	3.9170	2.7247	1.7841	1.8825	1.7832	2.0233	2.9614	35.1588	3.3869	2.5962
oulu	3.4195	2.9422	1.4678	2.9968	2.3302	2.6787	2.9507	3.8237	3.8896	3.3892	31.0022	7.5076
lappi	1.2320	1.2416	0.4053	1.1174	0.8962	1.0005	1.1960	1.3292	1.2442	1.1340	2.9053	27.9091
total	71.9066	72.0871	72.6564	71.9113	71.3178	71.6135	71.1938	71.4437	71.6481	71.9551	71.5234	71.3642
eigenvalue	71.800995											
eigenvector												
- right	1.000000	0.609332	0.026520	0.569276	0.236648	0.125406	0.106147	0.157398	0.164342	0.244567	0.266606	0.104017
- left	1.000000	1.005728	1.029427	1.000737	0.986596	0.993215	0.984980	0.989769	0.995009	1.002980	0.991548	0.988110

b. migration levels

	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
uusimaa	0.528055	0.154256	0.125330	0.197487	0.208164	0.214783	0.225490	0.205292	0.195789	0.146871	0.166970	0.161661
turkpor	0.092428	0.524465	0.093009	0.119970	0.069693	0.076311	0.080757	0.076976	0.096747	0.109369	0.094321	0.104678
ahvenan	0.003339	0.004236	0.591915	0.001998	0.001776	0.001445	0.001550	0.001486	0.001757	0.006480	0.002042	0.001436
hame	0.111786	0.110691	0.047322	0.438931	0.097485	0.117787	0.102357	0.097760	0.124085	0.088166	0.087572	0.088380
kymi	0.048082	0.027970	0.015255	0.039186	0.438022	0.073525	0.062486	0.043935	0.035241	0.023369	0.031101	0.031471
mikkeli	0.026254	0.016739	0.008144	0.025804	0.037012	0.309752	0.035461	0.042998	0.031409	0.015684	0.019794	0.017237
poh.kar	0.024555	0.013703	0.007339	0.019583	0.023523	0.032077	0.335676	0.033258	0.018429	0.011124	0.017168	0.013766
kuopio	0.032724	0.021875	0.013957	0.026658	0.027911	0.056336	0.046504	0.359369	0.035409	0.018629	0.029962	0.024721
keski	0.031301	0.026242	0.018039	0.035282	0.026158	0.040320	0.026427	0.038481	0.359314	0.028825	0.029641	0.023989
vaasa	0.036789	0.041785	0.053911	0.037898	0.025016	0.026288	0.025048	0.028320	0.041332	0.488621	0.047354	0.036380
oulu	0.047555	0.040815	0.020202	0.041673	0.032673	0.037405	0.041446	0.053521	0.043122	0.047102	0.433455	0.105201
lappi	0.017133	0.017224	0.005579	0.015538	0.012567	0.013971	0.016800	0.018604	0.017366	0.015760	0.040621	0.391080
total	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

TABLE 3.6 Matrix of survivorship proportions of 20 to 24-year-old persons, Finland, 12 provinces.

Province of destination	Province of origin											
	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
uusimaa	0.78984	0.07257	0.05754	0.11558	0.12391	0.15233	0.16620	0.13428	0.12127	0.08300	0.08250	0.09263
turkpor	0.03212	0.77956	0.04154	0.05943	0.02072	0.02356	0.02742	0.02703	0.04357	0.05294	0.04019	0.04907
ahvenan	0.00157	0.00229	0.83481	0.00044	0.00036	0.00023	0.00040	0.00042	0.00039	0.00422	0.00067	0.00015
hame	0.04747	0.05497	0.01076	0.71089	0.04004	0.06481	0.05358	0.03941	0.06933	0.03919	0.03931	0.04171
kymi	0.02124	0.00819	0.00329	0.01575	0.73108	0.04835	0.03349	0.01822	0.01467	0.00717	0.01051	0.01135
mikkeli	0.01326	0.00623	0.00081	0.01221	0.02113	0.58495	0.02236	0.03257	0.02104	0.00458	0.00730	0.00580
poh.kar	0.01517	0.00447	0.00152	0.00881	0.01163	0.01829	0.61770	0.02286	0.00780	0.00312	0.00685	0.00421
kuopio	0.01683	0.00871	0.00460	0.01158	0.01074	0.04336	0.02810	0.65321	0.01932	0.00666	0.01619	0.01011
keski	0.01389	0.01194	0.00487	0.01883	0.01215	0.02878	0.01175	0.02345	0.65001	0.01644	0.01381	0.00995
vaasa	0.01286	0.01790	0.02867	0.01549	0.00672	0.00682	0.00679	0.00929	0.02089	0.74600	0.02331	0.01328
oulu	0.02186	0.01906	0.00842	0.01785	0.01100	0.01688	0.01832	0.02503	0.01884	0.02558	0.71612	0.07379
lappi	0.00867	0.00884	0.00071	0.00824	0.00421	0.00597	0.00715	0.00755	0.00811	0.00669	0.02717	0.67963
total	0.99478	0.99473	0.99753	0.99511	0.99368	0.99433	0.99317	0.99331	0.99524	0.99559	0.99395	0.99170

3.2 Mobility and Fertility Analysis

The multiregional life table provides a framework for studying internal migration in combination with regional differences in mortality. The matrices of life expectancies contain the expected duration of residence in each province for each regional cohort. Another measure of migration intensity is the *net migraproduction rate (NMR) matrix* (Rogers, 1975b), given in Table 3.7. The NMR matrix represents the number of crossings of provincial boundaries a person is expected to make during his lifetime. The columns denote the province of birth and the rows represent the provinces of out-migration. For example, a person born in Uusimaa will change his residence on the average of 4.09 times during his life (this includes intraprovincial migration). He will migrate within Uusimaa an average of 2.70 times, and from Turku and Pori to Uusimaa 0.26 times, and so on.

The relative importance of each province as a region of origin is given by the matrix of net allocations. Of the total number of interprovincial migrations by a Uusimaa-born person, 65% will be out of Uusimaa, 6% out of Turku and Pori, 8% out of Häme, and so on.

The multiregional life table and the NMR matrix summarize in different ways the migration and mortality behavior of a multiregional population system. The life table yields duration measures whereas the NMR matrix is a frequency measure which gives the number of events, i.e., interprovincial migrations. A convenient way to summarize the age schedules of the three components of demographic change (mortality, migration, and fertility) is the *net rate of reproduction (NRR) matrix*. It is the multiregional analogue of the net rate of reproduction. The NRR matrix for Finland is given in Table 3.8. The elements denote the number of children a person is expected to have during his lifetime by place of birth of the parent and place of birth of the children. For example, a person born in Uusimaa will have on the average 0.76 children. Of this total, 0.40 will be born in Uusimaa, 0.06 in Turku and Pori, and 0.30 in other provinces. The number of children born in the various regions to a Uusimaa-born person depends not only on the migration pattern of the birth cohort of Uusimaa but also on regionally different fertility levels.

3.3 Population Projection Towards Stability

The multiregional life table describes the migration and mortality histories of members of a regional birth cohort as they age. The life table statistics are independent of the observed age composition and regional distribution

TABLE 3.7 Net migraproduction rate matrix, Finland, 12 provinces.

a. absolute numbers

	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
uusimaa	2.696547	0.585470	0.470662	0.777759	0.815497	0.859373	0.912480	0.817784	0.774081	0.559833	0.644652	0.616211
turkpor	0.261320	2.155440	0.273501	0.357399	0.182470	0.204806	0.220309	0.207991	0.276256	0.323614	0.268598	0.307060
ahvenan	0.008775	0.011343	2.194300	0.004800	0.004237	0.003152	0.003381	0.003274	0.004113	0.017633	0.004989	0.003119
hame	0.329026	0.327614	0.125051	1.805928	0.276279	0.353110	0.294093	0.280022	0.375155	0.250374	0.246869	0.245853
kymi	0.133312	0.069776	0.037187	0.104177	1.728878	0.219930	0.181508	0.116969	0.088891	0.055531	0.077681	0.079074
mikkeli	0.088539	0.051580	0.023254	0.086931	0.130894	1.589437	0.123649	0.156280	0.109764	0.046931	0.061110	0.051533
poh.kar	0.084727	0.042034	0.021034	0.064217	0.077216	0.112322	1.570946	0.114954	0.057677	0.031692	0.053170	0.039623
kuopio	0.096943	0.060892	0.036059	0.075999	0.077060	0.182470	0.142748	1.504328	0.105011	0.049063	0.084568	0.067471
keski	0.100918	0.081995	0.062348	0.117312	0.079116	0.136173	0.078896	0.126984	1.731420	0.091062	0.092627	0.070856
vaasa	0.088636	0.103427	0.128199	0.091786	0.054858	0.057561	0.052468	0.062765	0.100459	1.755689	0.117545	0.084886
oulu	0.150663	0.126186	0.058623	0.128291	0.094613	0.108944	0.123098	0.168883	0.129998	0.145683	1.856518	0.347727
lappi	0.054006	0.054909	0.014667	0.047596	0.037105	0.041157	0.051096	0.057331	0.053469	0.047791	0.135773	1.708831
total	4.093413	3.670666	3.444885	3.662194	3.558222	3.788341	3.754672	3.617564	3.806294	3.374896	3.644101	3.622243
eigenvalue	3.822133											
eigenvector												
- right	1.000000	0.361436	0.011915	0.345904	0.131672	0.091349	0.078106	0.095119	0.116552	0.106404	0.174867	0.067969
- left	1.000000	0.798154	0.668113	0.815353	0.784396	0.867312	0.860660	0.807985	0.868844	0.685876	0.793183	0.783023

b. net migraproduction allocations

	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
uusimaa	0.658753	0.159500	0.136626	0.212375	0.229187	0.226847	0.243025	0.226059	0.203369	0.165882	0.176903	0.170119
turkpor	0.063839	0.587207	0.079393	0.097591	0.051281	0.054062	0.058676	0.057495	0.072579	0.095889	0.073708	0.084771
ahvenan	0.002144	0.003090	0.636973	0.001311	0.001191	0.000832	0.000900	0.000905	0.001081	0.005225	0.001369	0.000861
hame	0.080379	0.089252	0.036300	0.493128	0.077645	0.093210	0.078327	0.077406	0.098562	0.074187	0.067745	0.067873
kymi	0.032567	0.019009	0.010795	0.028447	0.485883	0.058030	0.048342	0.032334	0.023354	0.016454	0.021317	0.021830
mikkeli	0.021630	0.014052	0.006750	0.023738	0.036786	0.398443	0.032932	0.043200	0.028838	0.013906	0.016770	0.014227
poh.kar	0.020698	0.011451	0.006106	0.017535	0.021701	0.029649	0.418398	0.031777	0.015153	0.009390	0.014591	0.010939
kuopio	0.023683	0.016589	0.010468	0.020752	0.021657	0.048166	0.038019	0.415840	0.027589	0.014538	0.023207	0.018627
keski	0.024654	0.022338	0.018099	0.032033	0.022235	0.035945	0.021013	0.035102	0.454883	0.026982	0.025418	0.019561
vaasa	0.021653	0.028177	0.037214	0.025063	0.015417	0.015194	0.013974	0.017350	0.026393	0.520220	0.032256	0.023435
oulu	0.036806	0.034377	0.017017	0.035031	0.026590	0.028758	0.032785	0.046684	0.034153	0.043167	0.509458	0.095990
lappi	0.013193	0.014959	0.004258	0.012997	0.010428	0.010864	0.013609	0.015848	0.014048	0.014161	0.037258	0.471760

TABLE 3.8 Net reproduction rate matrix, Finland, 12 provinces.

a. absolute numbers

	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
uusimaa	0.402127	0.114211	0.091235	0.153859	0.161752	0.176298	0.190679	0.168132	0.156351	0.112258	0.130717	0.124372
turkpor	0.062279	0.400887	0.067082	0.086627	0.043048	0.049019	0.053501	0.050389	0.067298	0.079368	0.066126	0.076230
ahvenan	0.002595	0.003388	0.488407	0.001423	0.001211	0.000908	0.000984	0.000957	0.001233	0.005374	0.001443	0.000898
hame	0.078532	0.079809	0.028514	0.323852	0.066513	0.086672	0.072575	0.067871	0.092083	0.060860	0.061047	0.060259
kymi	0.032921	0.016662	0.008944	0.025761	0.322086	0.055839	0.045692	0.029214	0.021937	0.013226	0.018775	0.019329
mikkeli	0.019035	0.011110	0.005104	0.018276	0.027806	0.201711	0.026462	0.033481	0.023413	0.009764	0.012035	0.010886
poh.kar	0.019881	0.009788	0.004935	0.014875	0.017800	0.025199	0.230905	0.026193	0.013334	0.007393	0.012123	0.009093
kuopio	0.024674	0.015477	0.009246	0.019314	0.019433	0.046898	0.035162	0.255968	0.026322	0.012440	0.021503	0.017034
keski	0.023817	0.019664	0.015631	0.027717	0.018885	0.032325	0.018994	0.030103	0.267647	0.021759	0.021890	0.016895
vaasa	0.029939	0.035270	0.044872	0.031109	0.018481	0.019578	0.017934	0.021438	0.034551	0.430721	0.040340	0.029220
oulu	0.046556	0.039598	0.019858	0.040010	0.029294	0.034051	0.037667	0.051160	0.039998	0.045083	0.402462	0.106177
lappi	0.014337	0.014579	0.003792	0.012680	0.009593	0.010740	0.013105	0.014534	0.013920	0.012473	0.034994	0.316433
total	0.756692	0.760443	0.786821	0.755502	0.735894	0.739236	0.743661	0.749441	0.758088	0.810720	0.824256	0.786827
eigenvalue	0.767968											
eigenvector												
- right	1.000000	0.559774	0.029714	0.513938	0.197016	0.107524	0.099515	0.145425	0.160483	0.304323	0.392965	0.122630
- left	1.000000	1.011950	1.104317	0.997215	0.944509	0.959517	0.967705	0.984021	1.002690	1.153072	1.175526	1.090296

b. net reproduction allocations

	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
uusimaa	0.531428	0.150191	0.115954	0.203651	0.219804	0.238487	0.256406	0.224344	0.206244	0.138467	0.158588	0.158067
turkpor	0.082304	0.527176	0.085257	0.114662	0.058487	0.066310	0.071942	0.067236	0.088774	0.097898	0.080225	0.096882
ahvenan	0.003430	0.004455	0.620735	0.001884	0.001645	0.001228	0.001323	0.001277	0.001627	0.006628	0.001751	0.001141
hame	0.103784	0.104950	0.036240	0.428658	0.090384	0.117245	0.097592	0.090563	0.121467	0.075070	0.074063	0.076585
kymi	0.043506	0.021911	0.011367	0.034098	0.437680	0.075536	0.061442	0.038981	0.028937	0.016314	0.022778	0.024566
mikkeli	0.025155	0.014610	0.006486	0.024190	0.037786	0.272864	0.035584	0.044675	0.030885	0.012044	0.015571	0.013836
poh.kar	0.026273	0.012871	0.006272	0.019690	0.024189	0.034088	0.310498	0.034950	0.017589	0.009120	0.014708	0.011557
kuopio	0.032607	0.020352	0.011752	0.025564	0.026408	0.063441	0.047283	0.341545	0.034721	0.015345	0.026088	0.021649
keski	0.031475	0.025859	0.019867	0.036687	0.025662	0.043728	0.025542	0.040168	0.353055	0.026839	0.026557	0.021472
vaasa	0.039565	0.046381	0.057029	0.041177	0.025114	0.026484	0.024116	0.028605	0.045577	0.531281	0.048941	0.037137
oulu	0.061526	0.052072	0.024222	0.052958	0.039807	0.046062	0.050651	0.068265	0.052762	0.055609	0.488273	0.134944
lappi	0.018948	0.019172	0.004819	0.016783	0.013035	0.014529	0.017622	0.019393	0.018363	0.015386	0.042455	0.402164
total	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

of the population but are dependent on the prevailing schedule of mortality and migration. Analogously, the NMR and NRR matrices are not affected by the age and regional population structures. The short- and medium-term impacts of the population structure is best studied by projecting the multiregional population with constant demographic schedules.

The projection is performed using the discrete model of multiregional demographic growth (Rogers, 1975a, Chapter 4). If the regional age schedules of mortality, fertility, and internal migration remain at the 1974 level, then the total population of Finland will continue to grow until it reaches a maximum of 4.89 million in 1989. Thereafter it will decline as the "baby boom" age groups leave the reproductive period. The changing age structure of the population, caused by low fertility, results in a drop of the crude birthrate from 13.3% in 1974 to 10.3% in 2004 and a rise in the death rate from 9.5% to 13.6%. Regional population growth will become more uneven as the share of the national population in the southern provinces increases (Table 3.9). As the population ages, the migration intensity will level off, but the basic tendency of negative net out-migration in the northern and central provinces will prevail. This phenomenon, combined with negative natural increases in most provinces, shapes the future distribution.

The stable growth rate of Finland's population is negative, as we could expect from the NRR matrix (Table 3.8). The share of Uusimaa in the national population rises to a significant 28% at stability (23% in 1974). Another important observation is the increase in mean age. The overall mean age changes from 34 years in 1977 to 43 years at stability. No great regional differences occur. The analysis show, however, that a considerable shift in the population structure may be expected both in terms of age and regional distribution. The main pattern will be one of growing older and further movement to the south.

4. POPULATION DISTRIBUTION POLICY

The first stage in the development of the Finnish population was settlement based on agriculture. Among the last major events of this stage was the resettlement of displaced Karelians. With the advance of industrialization, the population began to move to urban centers. Substantial migratory movement has been toward southern Finland. This last stage is thus characterized by a concentration of the population in southern Finland.

Efforts have been made to guide the settlement and population trends by various regional policy measures. The aim has been to secure the

TABLE 3.9 Multiregional population projection.

year 1974

a. population

age	finland	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	301733.	70913.	43095.	1511.	41448.	20644.	12099.	10289.	15446.	14043.	28090.	29286.	13349.
5	361840.	88222.	51061.	1708.	48765.	25847.	16031.	13467.	19740.	18419.	33898.	35129.	17553.
10	387373.	76355.	52685.	1530.	50527.	28059.	18905.	17075.	23034.	21230.	35720.	40665.	21508.
15	405257.	77792.	55214.	1526.	53797.	29496.	20199.	18986.	24432.	22209.	37525.	42233.	21848.
20	427498.	98805.	62305.	1811.	61530.	30606.	18295.	15969.	22976.	21505.	37210.	38093.	18313.
25	436247.	123312.	64002.	2060.	63103.	30402.	16177.	13600.	20008.	20609.	34563.	33026.	15297.
30	386629.	85652.	43431.	1472.	43028.	21026.	12040.	9704.	14453.	14631.	24649.	24099.	11636.
35	288847.	71762.	41056.	1213.	40186.	21110.	12656.	10100.	14826.	14412.	24314.	23925.	12471.
40	279945.	64661.	41282.	1140.	39007.	21302.	13023.	10499.	15133.	14366.	24190.	23401.	11925.
45	287010.	61825.	43470.	1230.	40413.	22133.	13565.	11276.	16184.	15050.	26094.	23010.	11960.
50	263173.	56140.	40380.	1201.	37444.	19002.	12524.	10237.	14375.	13945.	25662.	21054.	10249.
55	226674.	48954.	34055.	1269.	32489.	17563.	10780.	9043.	12211.	11814.	22330.	17337.	8029.
60	235159.	51021.	37081.	1300.	34271.	18629.	11417.	9627.	12626.	12124.	22210.	17209.	7636.
65	198413.	43391.	32624.	1035.	29467.	16005.	9963.	7750.	10637.	10060.	18237.	13170.	5986.
70	139736.	30166.	23537.	801.	20704.	11404.	7151.	5252.	7412.	6950.	13300.	8903.	4140.
75	144990.	32514.	24794.	1106.	20790.	10909.	7367.	4900.	7027.	6639.	14235.	9585.	4252.
total	4690532.	1073485.	691672.	22009.	657049.	345905.	212200.	177070.	251320.	238014.	423043.	400053.	196232.

b. percentage distribution

age	finland	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	6.43	6.61	6.23	6.87	6.31	5.97	5.70	5.70	6.15	6.22	6.03	7.29	6.00
5	7.71	7.47	7.38	7.76	7.42	7.47	7.55	7.57	7.05	7.71	8.01	8.76	8.95
10	8.26	7.11	7.62	6.95	7.69	8.11	8.91	9.60	9.17	8.89	8.44	10.14	11.00
15	8.64	7.25	7.98	6.93	8.19	8.53	9.52	10.67	9.72	9.30	8.87	10.54	11.13
20	9.11	9.20	9.01	8.23	9.36	8.87	8.62	8.90	9.14	9.00	8.80	9.50	9.33
25	9.30	11.49	9.25	9.36	9.62	8.79	7.62	7.65	7.96	8.63	8.17	8.24	7.80
30	6.54	7.98	6.20	6.69	6.55	6.31	5.60	5.46	5.75	6.13	5.03	6.01	5.93
35	6.16	6.60	6.05	5.51	6.12	6.10	5.96	5.60	5.90	6.03	5.75	5.97	6.36
40	5.97	6.02	5.97	5.22	5.94	6.16	6.14	5.90	6.02	6.02	5.72	5.04	6.00
45	6.12	5.76	6.20	5.59	6.15	6.40	6.39	6.34	6.44	6.30	6.17	5.94	6.09
50	5.61	5.23	5.04	5.02	5.70	5.75	5.90	5.76	5.72	5.04	6.07	5.25	5.22
55	4.03	4.56	5.04	5.77	4.94	5.00	5.00	5.00	4.06	4.95	5.20	4.33	4.09
60	5.01	4.75	5.36	5.94	5.22	5.30	5.30	5.41	5.02	5.00	5.25	4.29	3.09
65	4.23	4.04	4.72	4.70	4.40	4.65	4.70	4.36	4.23	4.21	4.31	3.29	3.05
70	2.90	2.01	3.40	3.64	3.15	3.30	3.37	2.95	2.95	2.91	3.15	2.22	2.11
75	3.09	3.03	3.50	5.03	3.16	3.15	3.47	2.00	3.11	2.70	3.36	2.39	2.17
total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
m ag[a]	34.0376	33.9597	35.2040	36.1660	34.5854	34.0939	34.9367	33.9075	33.0004	33.0694	34.3145	31.4597	30.9900
sha[b]	100.0000	22.0002	14.7461	0.4692	14.0000	7.3762	4.5240	3.7921	5.3500	5.0914	9.0191	0.5460	4.1036

[a] m ag, mean age.
[b] sha, share.

TABLE 3.9 *Continued.*

year 1979

a. population

age	finland	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuoplo	keski	vaasa	oulu	lappi
0	314219.	76154.	44738.	1459.	43123.	20548.	12146.	10873.	15360.	15483.	28923.	32142.	13260.
5	299337.	68729.	43724.	1509.	41852.	20562.	12172.	10355.	15304.	14932.	28126.	29101.	12969.
10	361177.	79459.	51753.	1727.	49294.	25862.	15930.	13415.	19640.	18462.	33515.	34975.	17145.
15	386190.	80883.	53869.	1641.	52077.	27732.	17770.	15875.	21813.	20325.	34807.	39109.	20288.
20	403329.	93690.	57084.	1770.	55937.	28063.	17094.	15702.	21855.	20222.	34265.	38699.	18941.
25	425140.	113022.	62938.	2062.	61261.	29047.	15914.	14026.	20972.	20200.	33383.	35963.	16345.
30	433311.	123644.	64055.	2098.	62719.	29986.	15956.	13556.	19676.	20611.	33117.	32920.	15051.
35	383906.	83489.	43839.	1429.	43385.	21627.	12045.	9648.	14490.	14606.	24176.	23854.	11398.
40	284799.	70394.	42010.	1195.	40162.	20839.	12408.	9886.	14648.	14133.	23752.	23439.	11931.
45	273504.	63354.	40944.	1134.	38525.	20730.	12572.	10245.	14709.	13969.	23546.	22598.	11178.
50	277177.	59965.	42464.	1237.	39549.	21266.	12882.	10783.	15401.	14565.	25268.	22660.	11137.
55	249862.	53320.	38753.	1256.	36126.	18935.	11708.	9496.	13503.	13240.	24520.	19616.	9389.
60	209415.	45031.	32667.	1186.	30595.	16286.	9906.	8198.	11177.	10791.	20807.	15657.	7114.
65	208113.	44840.	33371.	1170.	30893.	16418.	10044.	8397.	11103.	10634.	19810.	14899.	6533.
70	163948.	35893.	27385.	863.	24816.	13184.	7996.	6305.	8741.	8199.	15099.	10654.	4814.
75	219292.	51793.	37746.	1388.	33569.	16481.	9473.	7370.	10868.	10041.	20230.	13445.	6887.
total	4812718.	1143582.	717339.	23133.	683883.	347486.	206016.	174132.	249259.	240421.	423345.	409733.	194390.

b. percentage distribution

age	finland	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuoplo	keski	vaasa	oulu	lappi
0	6.53	6.66	6.24	6.31	6.31	5.91	5.90	6.24	6.16	6.44	6.83	7.84	6.83
5	6.22	6.01	6.10	6.52	6.12	5.92	5.91	5.95	6.14	6.21	6.64	7.10	6.67
10	7.50	6.95	7.21	7.47	7.21	7.44	7.73	7.70	7.88	7.68	7.92	8.54	8.82
15	8.02	7.07	7.51	7.10	7.61	7.98	8.63	9.12	8.75	8.45	8.22	9.55	10.44
20	8.38	8.19	7.96	7.69	8.18	8.08	8.30	9.02	8.77	8.41	8.09	9.44	9.74
25	8.83	9.88	8.77	8.91	8.96	8.36	7.72	8.05	8.41	8.41	7.89	8.78	8.41
30	9.00	10.81	8.93	9.07	9.17	8.61	7.75	7.79	7.89	8.57	7.82	8.03	7.74
35	6.31	7.29	6.11	6.18	6.34	6.22	5.85	5.58	5.81	6.08	5.71	5.82	5.86
40	5.92	6.16	5.86	5.17	5.87	6.00	6.02	5.68	5.88	5.88	5.61	5.72	6.14
45	5.68	5.54	5.71	4.90	5.63	5.97	6.10	5.88	5.90	5.81	5.56	5.52	5.75
50	5.76	5.24	5.92	5.35	5.78	6.12	6.25	6.19	6.18	6.06	5.97	5.53	5.73
55	5.19	4.66	5.40	5.43	5.28	5.45	5.68	5.45	5.42	5.51	5.79	4.79	4.83
60	4.35	3.94	4.55	5.13	4.47	4.69	4.81	4.71	4.48	4.49	4.91	3.82	3.66
65	4.32	3.92	4.65	5.06	4.52	4.72	4.88	4.82	4.45	4.42	4.68	3.64	3.36
70	3.41	3.14	3.82	3.73	3.63	3.79	3.88	3.62	3.51	3.41	3.57	2.60	2.48
75	4.56	4.53	5.26	6.00	4.91	4.74	4.60	4.23	4.36	4.18	4.78	3.28	3.54
total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
m ag[a]	35.4437	35.1085	36.4725	36.6935	36.0389	36.4392	36.4498	35.7093	35.5531	35.4397	35.7811	32.7779	33.0418
sha[b]	100.0000	23.7617	14.9051	0.4807	14.2099	7.2202	4.2806	3.6182	5.1792	4.9955	8.7964	8.5135	4.0391
lam[c]	1.026049	1.065299	1.037108	1.051052	1.040840	1.004340	0.970856	0.970985	0.991800	1.006730	1.000713	1.022152	0.990612
r[d]	0.005143	0.012651	0.007287	0.009958	0.008006	0.000866	-0.005916	-0.004248	-0.001647	0.001342	0.000143	0.004382	-0.001887

[a] m ag, mean age.
[b] sha, share.
[c] lam, stable growth ratio (λ).
[d] r, stable growth rate $r = \frac{1}{5} \ln \lambda$.

year 1984

a. population

age	finland	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	314744.	76753.	44745.	1525.	42940.	20108.	11881.	10850.	15381.	15414.	28411.	33215.	13521.
5	311726.	73426.	45423.	1468.	43574.	20629.	12307.	10913.	15357.	15574.	28297.	31761.	12998.
10	298793.	67865.	44218.	1522.	42160.	20634.	12192.	10378.	15299.	15005.	27820.	28945.	12755.
15	360080.	82511.	52604.	1824.	50485.	25560.	15130.	12693.	18720.	17794.	32657.	33842.	16260.
20	384355.	94082.	55385.	1864.	53857.	26398.	15282.	13495.	19737.	18649.	31904.	36040.	17663.
25	401096.	106966.	58093.	1997.	56358.	26776.	14912.	13620.	19927.	19005.	30897.	35951.	16593.
30	422263.	115025.	62860.	2088.	60781.	28645.	15664.	13761.	20258.	20188.	32055.	35070.	15868.
35	429477.	120116.	64349.	2037.	62981.	29757.	16129.	13489.	19826.	20584.	32644.	32680.	14884.
40	299658.	81211.	44045.	1405.	43288.	21388.	11928.	9514.	14390.	14377.	23698.	23427.	10988.
45	278245.	68699.	41679.	1180.	39652.	20316.	12025.	9686.	14264.	13763.	23139.	22654.	11188.
50	264142.	61236.	40022.	1142.	37721.	19935.	11953.	9817.	14024.	13537.	22831.	21511.	10412.
55	263142.	56929.	40758.	1217.	38158.	20246.	12059.	10005.	14459.	13832.	24175.	21105.	10199.
60	230834.	49070.	36313.	1177.	34006.	17569.	10764.	8620.	12357.	12088.	22851.	17709.	8312.
65	185339.	39584.	29405.	1061.	27574.	14358.	8722.	7159.	9829.	9467.	18546.	13552.	6082.
70	171946.	37104.	28025.	975.	26010.	13463.	8070.	6824.	9126.	8666.	16397.	12033.	5252.
75	257437.	61584.	43934.	1500.	40183.	19069.	10626.	8840.	12814.	11829.	22968.	16078.	8012.
total	4873276.	1192162.	731860.	23981.	699728.	344850.	199643.	169665.	245767.	239772.	419289.	415573.	190985.

b. percentage distribution

age	finland	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	6.46	6.44	6.11	6.36	6.14	5.83	5.95	6.39	6.26	6.43	6.78	7.99	7.08
5	6.40	6.16	6.21	6.12	6.23	5.98	6.16	6.43	6.25	6.50	6.75	7.64	6.81
10	6.13	5.69	6.04	6.35	6.03	5.98	6.11	6.12	6.23	6.26	6.64	6.97	6.68
15	7.39	6.92	7.19	7.61	7.21	7.41	7.58	7.48	7.62	7.42	7.79	8.14	8.51
20	7.89	7.89	7.57	7.77	7.70	7.65	7.65	7.95	8.03	7.78	7.61	8.67	9.25
25	8.23	8.97	7.94	8.33	8.05	7.76	7.47	8.03	8.11	7.93	7.37	8.65	8.69
30	8.66	9.65	8.59	8.71	8.69	8.31	7.85	8.11	8.24	8.42	7.64	8.44	8.31
35	8.81	10.08	8.79	8.50	9.00	8.63	8.00	7.95	8.07	8.50	7.79	7.86	7.79
40	6.15	6.81	6.02	5.86	6.19	6.20	5.97	5.61	5.86	6.00	5.65	5.64	5.75
45	5.71	5.76	5.69	4.92	5.67	5.89	6.02	5.71	5.80	5.74	5.52	5.45	5.86
50	5.42	5.14	5.47	4.76	5.39	5.78	5.99	5.79	5.71	5.65	5.45	5.18	5.45
55	5.40	4.78	5.57	5.07	5.45	5.87	6.04	5.90	5.88	5.77	5.77	5.08	5.34
60	4.74	4.12	4.96	4.91	4.86	5.09	5.39	5.08	5.03	5.04	5.45	4.26	4.35
65	3.80	3.32	4.02	4.42	3.94	4.16	4.37	4.22	4.00	3.95	4.42	3.26	3.18
70	3.53	3.11	3.83	4.06	3.72	3.90	4.04	4.02	3.71	3.61	3.91	2.90	2.75
75	5.28	5.17	6.00	6.25	5.74	5.53	5.32	5.21	5.21	4.93	5.48	3.87	4.19
total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
m ag[b]	36.3151	35.8513	37.1836	36.8879	36.9110	37.3800	37.4473	36.8318	36.6754	36.4298	36.6803	33.6757	34.3797
sha[c]	100.0000	24.4633	15.0178	0.4921	14.3585	7.0764	4.0967	3.4815	5.0432	4.9201	8.6039	8.5276	3.9190
lam[d]	1.012583	1.042480	1.020243	1.036658	1.023169	0.992413	0.969869	0.974347	0.985990	0.997299	0.990421	1.014253	0.982487
r[d]	0.002501	0.008321	0.004008	0.007200	0.004581	-0.001523	-0.006284	-0.005197	-0.002822	-0.000541	-0.001925	0.002831	-0.003534

[a] m ag, mean age.
[b] sha, share.
[c] lam, stable growth ratio (λ).
[d] r, stable growth rate $r = \frac{1}{5} \ln \lambda$.

TABLE 3.9 *Continued.*

year 1989

a. population

age	finland	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	302488.	74967.	43305.	1568.	41384.	18979.	11884.	10899.	14494.	14596.	27014.	32183.	12815.
5	312248.	73911.	45439.	1528.	43433.	20262.	12095.	10895.	15378.	15522.	27865.	32692.	13230.
10	311159.	72331.	45952.	1487.	43911.	20774.	12362.	10926.	15408.	15653.	28047.	31483.	12824.
15	297890.	70060.	44807.	1600.	42986.	20435.	11674.	9889.	14647.	14491.	27114.	28000.	12185.
20	358376.	92736.	53519.	2006.	51609.	24333.	13270.	11192.	17202.	16548.	29917.	31570.	14476.
25	382233.	105032.	56103.	2050.	54061.	25237.	13597.	12093.	18251.	17693.	28911.	33659.	15546.
30	398373.	108728.	58253.	2013.	56240.	26540.	14706.	13266.	19237.	18999.	29768.	34704.	15919.
35	418512.	112364.	63069.	2023.	61026.	28541.	15818.	13610.	20235.	20149.	31619.	34471.	15587.
40	423485.	116004.	64487.	2002.	62697.	29482.	16062.	13312.	19733.	20272.	32078.	32141.	14415.
45	292771.	78867.	43722.	1383.	42697.	20876.	11631.	9370.	14051.	14025.	23123.	22681.	10344.
50	268740.	66200.	40753.	1188.	38816.	19564.	11463.	9309.	13622.	13360.	22457.	21576.	10424.
55	250775.	57980.	38434.	1126.	36412.	18996.	11203.	9123.	13187.	12870.	21871.	20035.	9537.
60	243078.	52371.	38198.	1142.	35920.	18779.	11101.	9083.	13226.	12629.	22555.	19049.	9025.
65	204294.	43150.	32681.	1053.	30637.	15497.	9481.	7539.	10863.	10600.	20370.	15323.	7099.
70	153136.	32761.	24700.	884.	23211.	11777.	7012.	5824.	8077.	7715.	15344.	10943.	4887.
75	269925.	63690.	44987.	1688.	42898.	19488.	10750.	9559.	13380.	12498.	24926.	18125.	8736.
total	4887482.	1221961.	738411.	24748.	707137.	339561.	193310.	165098.	240993.	237619.	412977.	418634.	187050.

b. percentage distribution

age	finland	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	6.19	6.13	5.86	6.34	5.85	5.59	5.73	6.12	6.01	6.14	6.54	7.69	6.85
5	6.39	6.05	6.15	6.17	6.14	5.97	6.26	6.60	6.38	6.53	6.75	7.81	7.07
10	6.37	5.92	6.22	6.01	6.21	6.12	6.40	6.62	6.39	6.59	6.79	7.52	6.86
15	6.09	5.73	6.07	6.47	6.08	6.02	6.04	5.99	6.08	6.10	6.57	6.69	6.51
20	7.33	7.59	7.25	8.11	7.30	7.17	6.86	6.78	7.14	6.96	7.24	7.54	7.74
25	7.82	8.60	7.60	8.28	7.65	7.43	7.03	7.32	7.57	7.45	7.00	8.04	8.31
30	8.15	8.90	7.89	8.13	7.95	7.82	7.61	8.04	7.98	8.00	7.21	8.29	8.51
35	8.56	9.20	8.54	8.18	8.63	8.41	8.18	8.24	8.40	8.48	7.66	8.23	8.33
40	8.66	9.56	8.73	8.09	8.87	8.68	8.31	8.06	8.19	8.53	7.77	7.68	7.71
45	5.99	6.45	5.92	5.59	6.04	6.15	6.02	5.68	5.83	5.90	5.60	5.42	5.53
50	5.50	5.42	5.52	4.80	5.49	5.76	5.93	5.64	5.65	5.62	5.44	5.15	5.57
55	5.13	4.74	5.21	4.55	5.15	5.59	5.80	5.53	5.47	5.42	5.30	4.79	5.10
60	4.97	4.29	5.17	4.62	5.08	5.53	5.74	5.50	5.49	5.31	5.46	4.55	4.02
65	4.18	3.53	4.43	4.26	4.33	4.56	4.90	4.57	4.51	4.46	4.93	3.66	3.80
70	3.13	2.68	3.35	3.57	3.28	3.47	3.63	3.53	3.35	3.25	3.72	2.61	2.61
75	5.52	5.21	6.09	6.82	5.95	5.74	5.56	5.79	5.55	5.26	6.04	4.33	4.67
total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
m ag[a]	37.0035	36.5080	37.7169	37.1881	37.5841	38.1050	38.1631	37.5933	37.4925	37.1855	37.4111	34.4374	35.4673
sha[b]	100.0000	25.0019	15.1082	0.5062	14.4683	6.9476	3.9552	3.3778	4.9300	4.8618	8.4497	8.5654	3.8271
lam[c]	1.002915	1.024996	1.008958	1.031688	1.010588	0.984662	0.968278	0.973034	0.980573	0.991019	0.984946	1.007366	0.979193
r[d]	0.000582	0.004938	0.001782	0.006239	0.002106	-0.003091	-0.006447	-0.005467	-0.003924	-0.001804	-0.003034	0.001468	-0.004161

[a] m ag, mean age.
[b] sha, share.
[c] lam, stable growth ratio (λ).
[d] r, stable growth rate $r = \frac{1}{5} \ln \lambda$.

year 1994

a. population

age	finland	uusimaa	turkpor	ahvenan	hame	kyml	mikkell	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	281073.	71136.	40754.	1558.	38743.	17345.	9973.	9027.	13071.	13335.	24979.	29719.	11432.
5	300891.	71997.	43940.	1562.	41846.	19179.	11348.	10288.	14537.	14740.	26536.	31637.	12567.
10	311680.	72766.	45973.	1544.	43790.	20439.	12173.	10910.	15429.	15610.	27647.	32353.	13045.
15	310228.	74433.	46578.	1572.	44776.	20632.	11873.	10403.	14801.	15116.	27393.	30354.	12291.
20	296485.	77925.	45329.	1744.	43601.	19533.	10397.	8847.	13605.	13522.	24847.	26098.	11037.
25	356411.	101168.	53723.	2145.	51329.	23300.	12081.	10436.	16198.	15949.	27090.	29867.	13125.
30	379645.	105931.	56131.	2047.	53887.	25070.	13562.	11985.	17769.	17786.	27946.	32586.	14946.
35	394831.	106161.	58568.	1948.	56618.	26507.	14862.	13079.	19206.	18971.	29411.	33951.	15550.
40	412661.	109582.	63161.	1986.	60748.	28303.	15739.	13391.	20063.	19831.	31076.	33741.	15039.
45	413772.	113334.	63914.	1971.	61756.	28806.	15713.	13117.	19289.	19780.	31341.	31148.	13603.
50	282803.	75729.	42771.	1388.	41770.	20123.	11132.	9039.	13452.	13638.	22471.	21628.	9661.
55	255163.	62545.	39145.	1172.	37466.	18669.	10769.	8671.	12826.	12718.	21532.	20100.	9551.
60	231656.	53212.	36043.	1058.	34293.	17636.	10329.	8295.	12078.	11758.	20425.	18084.	8442.
65	215108.	46038.	34382.	1023.	32360.	16560.	9792.	7946.	11621.	11075.	20126.	16478.	7706.
70	168797.	35723.	27447.	878.	25781.	12716.	7627.	6140.	8924.	8636.	16854.	12371.	5700.
75	240435.	56247.	39658.	1529.	37552.	17056.	9351.	8173.	11840.	11126.	23306.	16477.	8120.
total	4850831.	1233928.	737516.	25124.	706320.	331876.	186720.	159661.	234709.	233591.	402980.	416591.	181815.

b. percentage distribution

age	finland	uusimaa	turkpor	ahvenan	hame	kymi	mikkell	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	5.79	5.76	5.53	6.20	5.49	5.23	5.34	5.65	5.57	5.71	6.20	7.13	6.29
5	6.19	5.83	5.96	6.22	5.92	5.78	6.08	6.39	6.19	6.31	6.58	7.59	6.91
10	6.43	5.90	6.23	6.14	6.20	6.16	6.52	6.83	6.57	6.68	6.86	7.77	7.18
15	6.40	6.03	6.32	6.26	6.34	6.22	6.36	6.52	6.31	6.47	6.80	7.29	6.76
20	6.11	6.32	6.15	6.94	6.17	5.89	5.57	5.54	5.80	5.79	6.17	6.26	6.07
25	7.35	8.20	7.28	8.54	7.27	7.02	6.47	6.54	6.90	6.83	6.72	7.17	7.22
30	7.83	8.58	7.61	8.15	7.63	7.55	7.26	7.51	7.57	7.61	6.93	7.82	8.22
35	8.14	8.60	7.94	7.75	8.02	7.99	7.96	8.19	8.18	8.12	7.30	8.15	8.55
40	8.51	8.88	8.56	7.90	8.60	8.53	8.43	8.39	8.55	8.49	7.71	8.10	8.27
45	8.53	9.18	8.67	7.84	8.74	8.68	8.42	8.22	8.22	8.47	7.78	7.48	7.48
50	5.83	6.14	5.80	5.52	5.91	6.06	5.96	5.66	5.73	5.84	5.58	5.19	5.31
55	5.26	5.07	5.31	4.66	5.30	5.63	5.77	5.43	5.46	5.44	5.34	4.82	5.25
60	4.78	4.31	4.89	4.21	4.86	5.31	5.53	5.20	5.15	5.03	5.07	4.34	4.64
65	4.43	3.73	4.66	4.07	4.58	4.99	5.24	4.98	4.95	4.74	4.99	3.96	4.24
70	3.48	2.90	3.72	3.50	3.65	3.83	4.08	3.85	3.80	3.70	4.18	2.97	3.14
75	4.96	4.56	5.38	6.09	5.32	5.14	5.01	5.12	5.04	4.76	5.78	3.96	4.47
total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
m ag[a]	37.6175	37.1855	38.2262	37.2501	38.1956	38.7425	38.7601	38.0948	38.1724	37.8281	37.9475	35.0681	36.3618
sha[b]	100.0000	25.4175	15.2039	0.5179	14.5608	6.8416	3.8492	3.2914	4.8385	4.8155	8.3075	8.5880	3.7481
lam[c]	0.992501	1.009793	0.998789	1.015484	0.998845	0.977367	0.965989	0.967113	0.973926	0.983049	0.975793	0.995120	0.972014
r[d]	-0.001585	0.001949	-0.000242	0.003073	-0.000231	-0.004579	-0.006937	-0.006688	-0.005284	-0.001419	-0.004901	-0.000978	-0.005677

[a] m ag, mean age.
[b] sha, share.
[c] lam, stable growth ratio (λ).
[d] r, stable growth rate $r = \frac{1}{5} \ln \lambda$.

TABLE 3.9 *Continued.*

year 1999

a. population

age	finland	uusimaa	turkpor	ahvenan	hame	kyml	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	259479.	66597.	38114.	1495.	36100.	15734.	8932.	8098.	11720.	12164.	22963.	27415.	10146.
5	270848.	68093.	41287.	1545.	39139.	17577.	10277.	9183.	13176.	13513.	24561.	29225.	11271.
10	299546.	70796.	44439.	1573.	42185.	19373.	11448.	10238.	14605.	14844.	26348.	31293.	12402.
15	310740.	74835.	46609.	1626.	44676.	20328.	11712.	10391.	14819.	15080.	27031.	31139.	12494.
20	308759.	82269.	47134.	1733.	45417.	19827.	10633.	9290.	13850.	14097.	25211.	28084.	11213.
25	294865.	84418.	45258.	1849.	43068.	18822.	9638.	8374.	12977.	13080.	22501.	24648.	10232.
30	354010.	101207.	53503.	2117.	50979.	23193.	12204.	10550.	15935.	16171.	26170.	29140.	12842.
35	376277.	103138.	56374.	1975.	54223.	25068.	13776.	11905.	17813.	17807.	27658.	31924.	14614.
40	389301.	103513.	58716.	1910.	56442.	26319.	14793.	12850.	19038.	18672.	28929.	33159.	14960.
45	403183.	106530.	62580.	1952.	59834.	27668.	15388.	13170.	19572.	19347.	30370.	32606.	14166.
50	399709.	108751.	62457.	1977.	60352.	27790.	15070.	12657.	18484.	19237.	30488.	29722.	12724.
55	268559.	71333.	41101.	1365.	40300.	19222.	10497.	8445.	12691.	13003.	21575.	20160.	8867.
60	235728.	57287.	36723.	1102.	35286.	17356.	9958.	7901.	11760.	11628.	20124.	18148.	8456.
65	205008.	46687.	32462.	949.	30912.	15562.	9124.	7268.	10628.	10318.	18243.	15646.	7210.
70	177724.	38103.	28877.	854.	27230.	13586.	7884.	6473.	9543.	9024.	16664.	13302.	6184.
75	265073.	61364.	44056.	1525.	41686.	18431.	10176.	8634.	13076.	12445.	25603.	18620.	9456.
total	4826808.	1244921.	739692.	25547.	707830.	325857.	181510.	155428.	229687.	230431.	394438.	414229.	177240.

b. percentage distribution

age	finland	uusimaa	turkpor	ahvenan	hame	kyml	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	5.38	5.35	5.15	5.85	5.10	4.83	4.92	5.21	5.10	5.28	5.82	6.62	5.72
5	5.78	5.47	5.58	6.05	5.53	5.39	5.66	5.91	5.74	5.86	6.23	7.06	6.36
10	6.21	5.69	6.01	6.16	5.96	5.95	6.31	6.59	6.36	6.44	6.68	7.55	7.00
15	6.44	6.01	6.30	6.36	6.31	6.24	6.45	6.69	6.45	6.54	6.85	7.52	7.05
20	6.40	6.61	6.37	6.78	6.42	6.08	5.86	5.98	6.03	6.12	6.39	6.78	6.33
25	6.11	6.78	6.12	7.24	6.08	5.78	5.31	5.39	5.65	5.68	5.70	5.95	5.77
30	7.33	8.13	7.23	8.29	7.20	7.12	6.72	6.79	6.94	7.02	6.63	7.03	7.25
35	7.80	8.28	7.62	7.73	7.66	7.69	7.59	7.66	7.76	7.73	7.01	7.71	8.25
40	8.07	8.31	7.94	7.48	7.97	8.08	8.15	8.27	8.29	8.10	7.33	8.01	8.44
45	8.35	8.56	8.46	7.64	8.45	8.49	8.48	8.47	8.52	8.40	7.70	7.87	7.99
50	8.28	8.74	8.44	7.74	8.53	8.53	8.30	8.14	8.05	8.35	7.73	7.18	7.18
55	5.56	5.73	5.56	5.34	5.69	5.90	5.78	5.43	5.53	5.64	5.47	4.87	5.00
60	4.88	4.60	4.96	4.31	4.99	5.33	5.49	5.08	5.12	5.05	5.10	4.38	4.77
65	4.25	3.75	4.39	3.72	4.37	4.78	5.03	4.68	4.63	4.48	4.63	3.78	4.07
70	3.68	3.06	3.90	3.34	3.85	4.17	4.34	4.16	4.15	3.92	4.22	3.21	3.49
75	5.49	4.93	5.96	5.97	5.89	5.66	5.61	5.55	5.69	5.40	6.49	4.49	5.34
total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
m ag[a]	38.6832	38.3331	39.2578	37.7882	39.2931	39.8097	39.7656	39.0675	39.2748	38.8989	38.0208	36.0986	37.6881
sha[b]	100.0000	25.7918	15.3247	0.5293	14.6646	6.7510	3.7605	3.2201	4.7586	4.7748	8.1718	8.5818	3.6720
lam[c]	0.995048	1.008909	1.002950	1.016838	1.002130	0.981864	0.972097	0.973489	0.978602	0.986474	0.978801	0.994330	0.974836
r[d]	-0.000993	0.001774	0.000589	0.003348	0.000427	-0.003660	-0.005660	-0.005374	-0.004326	-0.002724	-0.004285	-0.001137	-0.005097

[a] m ag, mean age.
[b] sha, share.
[c] lam, stable growth ratio (λ).
[d] r, stable growth rate $r = \frac{1}{5} \ln \lambda$.

year 2004

a. population

age	finland	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	246676.	63774.	36591.	1453.	34574.	14739.	8308.	7544.	10911.	11478.	21670.	26235.	9406.
5	257426.	63610.	38550.	1479.	36415.	15990.	9261.	8282.	11875.	12357.	22599.	26949.	10060.
10	278343.	66857.	41726.	1552.	39438.	17778.	10394.	9245.	13266.	13630.	24397.	28911.	11149.
15	298644.	72663.	45030.	1648.	43023.	19286.	11042.	9777.	14046.	14356.	25777.	30107.	11890.
20	309277.	82609.	47181.	1779.	45357.	19585.	10527.	9286.	13868.	14074.	24935.	28698.	11378.
25	307073.	88668.	47076.	1855.	44865.	19237.	9920.	8771.	13328.	13627.	22958.	26287.	10490.
30	292883.	84255.	44938.	1818.	42635.	18827.	9834.	8527.	12860.	13289.	21732.	24029.	10140.
35	350879.	98249.	53612.	2034.	51211.	23217.	12468.	10567.	16060.	16253.	25895.	28654.	12659.
40	371011.	100421.	56484.	1934.	54039.	24902.	13749.	11740.	17691.	17551.	27230.	31201.	14068.
45	380343.	100621.	58215.	1876.	55643.	25750.	14466.	12626.	18570.	18210.	28287.	32002.	14070.
50	389455.	102369.	61137.	1956.	58473.	26705.	14754.	12690.	18721.	18811.	29551.	31050.	13236.
55	379610.	102386.	59972.	1944.	58176.	26567.	14237.	11828.	17451.	18343.	29301.	27714.	11692.
60	248143.	65169.	38582.	1281.	37941.	17889.	9752.	7715.	11653.	11897.	20185.	18213.	7866.
65	208639.	50180.	33085.	989.	31809.	15332.	8821.	6938.	10360.	10212.	17985.	15706.	7223.
70	169411.	38582.	27276.	793.	26020.	12775.	7354.	5930.	8740.	8411.	15113.	12630.	5788.
75	279200.	65412.	46358.	1487.	44028.	19686.	10536.	9104.	13976.	13009.	25342.	20012.	10250.
total	4767013.	1245824.	735813.	25879.	703645.	318266.	175421.	150569.	223367.	225508.	382957.	408398.	171366.

b. percentage distribution

age	finland	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	5.17	5.12	4.97	5.61	4.91	4.63	4.74	5.01	4.89	5.09	5.66	6.42	5.49
5	5.40	5.11	5.24	5.72	5.18	5.02	5.28	5.50	5.32	5.48	5.90	6.60	5.87
10	5.84	5.37	5.67	6.00	5.60	5.59	5.93	6.14	5.94	6.04	6.37	7.08	6.51
15	6.26	5.83	6.12	6.37	6.11	6.06	6.29	6.49	6.29	6.37	6.73	7.37	6.94
20	6.49	6.63	6.41	6.88	6.45	6.15	6.00	6.17	6.21	6.24	6.51	7.03	6.64
25	6.44	7.12	6.40	7.17	6.38	6.04	5.65	5.83	5.96	6.04	5.99	6.44	6.12
30	6.14	6.76	6.11	7.02	6.06	5.92	5.61	5.66	5.76	5.89	5.67	5.88	5.92
35	7.36	7.89	7.29	7.86	7.28	7.29	7.11	7.02	7.19	7.21	6.76	7.02	7.39
40	7.78	8.06	7.68	7.47	7.68	7.82	7.84	7.80	7.92	7.78	7.11	7.64	8.21
45	7.98	8.08	7.91	7.25	7.91	8.09	8.25	8.39	8.31	8.08	7.39	7.84	8.21
50	8.17	8.22	8.31	7.56	8.31	8.39	8.41	8.43	8.38	8.34	7.72	7.60	7.72
55	7.96	8.22	8.15	7.51	8.27	8.35	8.12	7.86	7.81	8.13	7.65	6.79	6.82
60	5.21	5.23	5.24	4.95	5.39	5.62	5.56	5.12	5.22	5.28	5.27	4.46	4.59
65	4.38	4.03	4.50	3.82	4.52	4.82	5.03	4.61	4.64	4.53	4.70	3.85	4.21
70	3.55	3.10	3.71	3.06	3.70	4.01	4.19	3.94	3.91	3.73	3.95	3.09	3.38
75	5.86	5.25	6.30	5.75	6.26	6.19	6.01	6.05	6.26	5.77	6.62	4.90	5.98
total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
m ag[a]	39.6377	39.4111	40.1679	38.4395	40.2723	40.7980	40.6418	39.9957	40.2524	39.8221	39.4869	37.0103	38.6412
sha[b]	100.0000	26.1343	15.4355	0.5429	14.7607	6.6764	3.6799	3.1586	4.6857	4.7306	8.0335	8.5672	3.5948
lam[c]	0.987612	1.000726	0.994756	1.013009	0.994088	0.976705	0.966454	0.968738	0.972484	0.978635	0.970894	0.985924	0.966858
r[d]	-0.002493	0.000145	-0.001052	0.002585	-0.001186	-0.004714	-0.006824	-0.006352	-0.005580	-0.004319	-0.005908	-0.002835	-0.006741

tolerance level for eigenvalue 0.1000e-06
number of iterations to reach stability 89

[a] m ag, mean age.
[b] sha, share.
[c] lam, stable growth ratio (λ).
[d] r, stable growth rate $r = \frac{1}{5} \ln \lambda$.

TABLE 3.9 *Continued.*

a. stable equivalent to original population

age	finland	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	337704.	90295.	52109.	2693.	48043.	18713.	18582.	9678.	13928.	15218.	28328.	36511.	11607.
5	351793.	89980.	54979.	2740.	50713.	20286.	11742.	10561.	15070.	16365.	29502.	37508.	12338.
10	368698.	92402.	58116.	2850.	53542.	21724.	12593.	11263.	16073.	17419.	30885.	38879.	12951.
15	385964.	98624.	61479.	3047.	57098.	22871.	12918.	11446.	16397.	17781.	31844.	39243.	13216.
20	403353.	111039.	64577.	3267.	60372.	23489.	12534.	11085.	16533.	17623.	31120.	37851.	13062.
25	421207.	124422.	66954.	3429.	62246.	24511.	12710.	11339.	17176.	18122.	30170.	36819.	13307.
30	439292.	129317.	69388.	3449.	64539.	26208.	13919.	12270.	18229.	19473.	30972.	37257.	14183.
35	457182.	131315.	72673.	3445.	67897.	27978.	15137.	13024.	19529.	20646.	32365.	38267.	14906.
40	473333.	133788.	76166.	3510.	70864.	29163.	16019.	13602.	20520.	21463.	33558.	39246.	15234.
45	485591.	136097.	79081.	3584.	73228.	30278.	16571.	14141.	21122.	22049.	34520.	39783.	15137.
50	492568.	136958.	81009.	3726.	75096.	30797.	16762.	14376.	21297.	22571.	35331.	39750.	14893.
55	491207.	135275.	81566.	3794.	75971.	31033.	16697.	14141.	21151.	22636.	35725.	38828.	14389.
60	476652.	129608.	80248.	3711.	75024.	30459.	16484.	13599.	20439.	21770.	35186.	36763.	13441.
65	443199.	118835.	75826.	3478.	70943.	28377.	15423.	12685.	18986.	20116.	33124.	33374.	12114.
70	385046.	102731.	66845.	3039.	62659.	24574.	13188.	10878.	16491.	17255.	28873.	28272.	10250.
75	641144.	183153.	112665.	5493.	106241.	37805.	18792.	16268.	25621.	26237.	46327.	44547.	17993.
total	7053920.	1944641.	1153680.	55256.	1074476.	428547.	231983.	200285.	298561.	316743.	527831.	602899.	219020.

b. percentage distribution

age	finland	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	4.79	4.64	4.52	4.87	4.47	4.37	4.56	4.83	4.66	4.80	5.37	6.06	5.30
5	4.99	4.63	4.77	4.96	4.72	4.73	5.06	5.27	5.05	5.17	5.59	6.22	5.63
10	5.23	4.75	5.04	5.16	4.98	5.07	5.43	5.62	5.38	5.50	5.85	6.45	5.91
15	5.47	5.07	5.33	5.51	5.31	5.34	5.57	5.72	5.49	5.61	6.03	6.51	6.03
20	5.72	5.75	5.60	5.91	5.62	5.48	5.48	5.53	5.54	5.56	5.90	6.28	5.96
25	5.97	6.40	5.80	6.21	5.79	5.72	5.48	5.66	5.75	5.72	5.72	6.11	6.08
30	6.23	6.65	6.01	6.24	6.01	6.13	6.00	6.13	6.11	6.15	5.87	6.18	6.48
35	6.49	6.75	6.30	6.24	6.32	6.53	6.53	6.58	6.54	6.52	6.13	6.35	6.81
40	6.71	6.88	6.60	6.35	6.60	6.85	6.91	6.79	6.87	6.78	6.36	6.51	6.96
45	6.88	7.00	6.85	6.49	6.82	7.07	7.14	7.06	7.07	6.96	6.54	6.60	6.91
50	6.98	7.04	7.02	6.74	6.99	7.19	7.23	7.18	7.13	7.13	6.69	6.59	6.80
55	6.96	6.96	7.07	6.87	7.07	7.24	7.20	7.06	7.00	7.15	6.77	6.44	6.57
60	6.76	6.66	6.96	6.72	6.98	7.11	7.07	6.79	6.85	6.87	6.67	6.10	6.14
65	6.28	6.11	6.57	6.29	6.60	6.62	6.65	6.29	6.36	6.35	6.28	5.54	5.53
70	5.46	5.28	5.79	5.50	5.83	5.73	5.68	5.43	5.52	5.45	5.47	4.69	4.68
75	9.09	9.42	9.77	9.94	9.89	8.82	8.10	8.12	8.58	8.28	8.78	7.39	8.22
total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
m ag[a]	42.7455	43.0569	43.5714	42.9143	43.6843	43.3905	42.8297	42.2451	42.7206	42.4334	41.8301	39.7829	40.9346
sha[b]	100.0000	27.5682	16.3552	0.7833	15.2323	6.0753	3.2887	2.8393	4.2326	4.4903	7.4828	8.5470	3.1049
lam[c]	0.952411	0.952411	0.952411	0.952430	0.952411	0.952411	0.952411	0.952411	0.952411	0.952411	0.952411	0.952411	0.952411

[a] m ag, mean age.
[b] sha, share.
[c] lam, stable growth ratio (λ).

opportunities for permanent employment, a rising level of income, and the availability of important services. Balanced development of the industrial and social structures of the regions has also been strived for. To achieve such goals, both direct and indirect methods have been used in guiding settlement and population. The regional policy measures concerning the agricultural population have been mainly direct. The regional policy measures affecting the population related to industrialization and urbanization have been mainly indirect.

4.1 Population Distribution Policy Based on Agriculture

The year 1918 saw the enactment of the tenant farmers' liberation law, which enabled small tenant farmers to gain title to their leaseholds. Between 1919 and 1934, no less than 64,000 small tenant farms and leaseholds were redeemed and became independent, in addition 53,000 cottages were purchased by their tenants. The emancipation of the tenant farmers solved only part of the problems of the rural area. The landless population was still numerous. The settlement laws of 1922 were passed to facilitate the acquisition of land by the landless. The most important of these laws was Lex Kallio. Because the law departed from earlier practice by providing for the expropriation of privately-held land, it was considered quite radical.

During World War II, Finnish settlement policy was driven into altogether new channels. At the end of the Winter War, some 40,000 farming families displaced from territory ceded to the USSR had to be resettled. For this purpose the so-called Rapid Resettlement Act was passed (1940). It was followed by the Land Procurement Acts (1945). These laws constituted a large-scale reform. Land was procured for displaced farmers and also for other population groups, such as war veterans. On the basis of the land procurement laws, about 135,000 farmsteads were established between 1954 and 1969. The implementation of the provisions of the land procurement laws was systematic, following clear-cut guidelines. Thus the displaced population from the Karelia area was resettled in southern and central Finland. The refugees from the northern regions that were ceded to the USSR were resettled mainly in the areas of northern Finland. In the north, state-owned forests were set aside for the most part to carve out new homesteads, whereas in southern and central Finland, land was expropriated for the most part from privately-owned estates.

In 1958 a Land Procurement Act was passed based mainly on the need to improve the basic conditions in the management of farms and to promote land settlement. It was used to encourage settlers to move to, for

example, the backwoods of the far north. Its enactment led to the formation of some 16,500 farmsteads or other holdings, of which nearly 11,000 involved the addition of land to enlarge existing farms. The implementation of this law terminated at the end of the 1960s.

As early as the 1950s, Finland's agricultural production exceeded domestic consumption. This situation generated the demand for the curtailment of production, which meant withdrawing some of the fields from cultivation. When the field withdrawal plan began to be carried out in 1969, as many as 13,400 farms made the agreement the very first year and ceased agricultural production in return for compensation from the state. The number kept growing until the end of 1973 when 39,800 farms had stopped cultivating fields. This meant the withdrawal from cultivation of 9% of the total acreage under plow.

The "packaging" of fields has been most common in areas where the natural conditions are least favorable. For example, in the northern Bothnian region (Pohjois-Pohjanmaa) about 20% of the arable land has been withdrawn, whereas in southwestern Finland the figure is only 1.5%, and in the province of Uusimaa, on the southern coast, 3.5%. Thus the law has been of some, though slight, significance in combating overproduction. It has given elderly farmers, for example, a chance to retire.

4.2 The First Development Area Laws, 1966–1969

The effects of legislation governing regional policy on the population have been mainly indirect. Regional policy has been closely bound with numerous segments of social policy. The regional policy measures taken have dealt closely with employment and manpower policy.

It might be said that Finnish regional policy at first only concerned itself with areas lagging behind in progress. Even before the enactment of the first development area laws in 1966, a number of separate, uncoordinated measures favoring the development areas had been taken. Among these were the extra wages paid to civil servants, extra grants-in-aid distributed to communities in distress, subsidies to help cover the costs of introducing electricity, loans to small industry, assumption of surety by the state, and the investment of public funds to maintain employment in development areas.

The first laws relating to the development areas were enacted in 1966 and remained in effect until 1969 (Suomen asetuskokoelma n:o 243/66). The laws aspired "to raise production and the standard of living as well as to secure employment opportunities in those parts of the country where

economic development has lagged substantially behind that of the rest of the country." For the first time, the laws stated precisely what sections of the country were lagging essentially behind the rest: Development Area Zones I and II were formed. The first zone, defined as the most underdeveloped, contained northern and eastern Finland, and the second zone mainly central Finland. The most important features of the laws were tax relief and investment credit to industrial enterprises. A total of 3,404 new jobs were created between 1966 and 1969 in the projects receiving investment credit, 2,567 in Development Zone I and 836 in Development Zone II. During the same period, 8,028 new jobs were created in the projects receiving tax relief, 6,478 in Development Zone I and 1,550 in Development Zone II.

4.3 Measures of Regional Policy Taken in the 1970–1974 Period

The first development area laws were not, however, sufficient. They were unable to compensate for the advantages of the concentration of production. It was endeavored to take this into account in the enactment of new development area laws in the 1970–1974 period (Suomen asetuskokoelma n:o 876/69). In principle, it was aspired to "raise production and the standard of living as well as to secure employment and income" by using largely the same methods as earlier. The procedures were selective and involved, giving direct support to the promotion of the sources of livelihood and vocational training. The boundaries of the development areas were changed to some extent by diminishing Zone I and correspondingly expanding Zone II.

In 1971, the Development Area Fund was established to help support the development areas in various ways. The most important of its functions was the granting of credit to enterprises operating in the development areas. In all, 36,000 new jobs were created by the measures taken by the Fund. For the most part, the beneficiaries were small- and medium-sized enterprises dependent on the employment of manpower.

After the enactment of the second group of development area laws, lively public discussion arose on the subject of so-called growth-center policy. A clear measure of growth-center policy was the appropriation of funds in 1973 for the building of the first industrial villages. By 1976, nine industrial villages had been established.

4.4 Regional Laws Enacted for the Years 1975–1979

During the time of the second development area laws, people began to talk more about "regional policy" instead of development area policy. This is reflected by the regional laws currently in force, which were enacted for the years 1975–1979 (Suomen asetuskokoelma n:o 451/75). The law governing the promotion of regional development defines the means and ends of regional policy as follows: "Efforts should be made by supporting productive activity as well as by guiding the location of enterprises and public services to secure for the population of the country as a whole opportunities for employment, a rising income level and the availability of important services."

As a change from the earlier system, it is now possible to set aside for containment in the development area zones, as areas qualifying for extra support, such communes "where the securing of places of permanent employment is particularly difficult." Such areas are eligible for relatively generous aid (Figure 4.1). Olavi Änkö, from the Office of the Council of State, has described the main features of the measures of regional policy now being applied in Finland as follows (Änkö, 1978, pp. 37–38):

> In order to apply regional policy measures, two zones have been established: a strongly supported development zone I and a moderately supported development zone II. In addition the most problematic communities of zone I and the archipelago can be designated as additional-support areas, and on the other hand problem communities outside the developing regions can be decreed areas where certain supportive measures can be applied.
>
> Aid can be granted for investments that either create new jobs or boost the production of processing or tourist industries. Investment aid covers part of the capital expenditure investments, aid for starting new operations covers part of the wage expenses for the first 2 or 3 years and training aid covers part of the cost of special training for the workers. Certain upper and lower limits have been placed on this aid depending on the zone, and within these limits the size of the aid will be determined on the basis of developmental needs and other investment factors of the locality in question. This aid is granted by the Ministry of Commerce and Industry. The Regional Development Fund Ltd. also shares in the financing. This Fund grants loans for investments either with

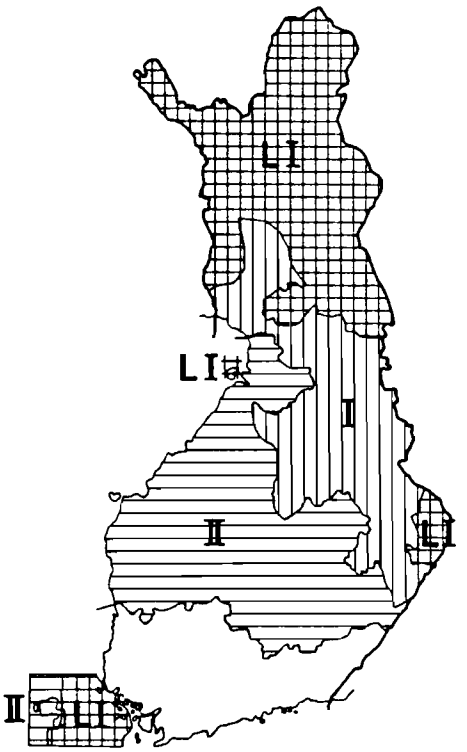

FIGURE 4.1 The development zones of Finland in 1976. I = strongly supported development zone; II = moderately supported development zone; LI = additional support areas of zone I.

or without warranties and also supports marketing etc. to some extent. In addition the Government Investment Fund, which finances large enterprises in the whole country, takes regional aspects into account when making its decisions. Certain minor tax policy measures are also applied to investments. In order to place investments in the best way from a regional policy standpoint, the government and the commercial and industrial organizations have agreed on special information and negotiation procedures.

To help industry already in operation there is a transport aid for developing regions. Aid is granted for the transport of products processed in these regions according to a graduated scale based on the length and method of transportation. On the basis of labor and market conditions the Ministry of Labor

may in special cases grant support to enterprises in order to maintain jobs during a recession.

A regional gradation of price supports, among others, is used in agriculture. During the past year a graduated scale has also been introduced for interest and repayment terms on loans used to improve farms, depending on which development zone they are situated in.

4.5 The Problems of Sparsely Settled Areas

The biggest population drain has been suffered by sparsely inhabited rural areas located beyond the commuting range of urban agglomerations. The age structure of sparsely settled areas has become distorted as younger people have moved away. The erosion of the population base lowers the previously depressed service level. The overall picture of many sparsely settled areas is dismal.

It is the view of many researchers that the population drain on sparsely settled areas has been influenced by many government measures and the cultivation of negative popular opinion about the settlement of areas that are off the beaten track. This is understandable in light of the fact that the guiding principle has been centralization.

Further certain measures of agricultural policy have also encouraged the abandonment of sparsely settled areas. The aforementioned field withdrawal system, which took effect in 1969, has influenced this trend. There are many deserted farmhouses, outbuildings, and schoolhouses in rural parts of the country. The "packaging" of fields is believed to have given a strong boost to the migratory movement from sparsely settled areas to Sweden in the 1969–1971 period.

In recent years, sparsely settled areas have begun to be viewed more and more as special cases, to be given particular attention in regional policy making. The archipelago of Finland belongs to the category of sparsely settled areas, and plans are underway to establish a national park there. In order to secure the livelihood of the islanders while taking into account the considerations of environmental protection, that archipelago must, it is emphasized, begin to be dealt with separately.

4.6 The Helsinki Area

At the same time as the problem of sparsely settled areas has been the scantiness and continuous shrinkage of the population, the Helsinki area

has been characterized by, in the opinion of many, excessive concentrations of production and population. The detrimental effects of such concentrations have been, among other things, rising real estate prices, a shortage of housing, and congested traffic.

Although the rapid growth of Helsinki had obvious harmful effects, no steps were taken to check its expansion during the period of vigorous growth in the 1960s. Planning of the entire area, mostly through the joint efforts of Helsinki and its communes, has become an important issue. This cooperative action has not, however, been sufficient from the standpoint of the overall planning of the region.

The KASTE Commission (1976) appointed to investigate the Helsinki district, submitted its estimate of the effects of alternative measures until 1985. Among other things, the commission made an estimation of the effects of regional policy supporting measures (guidance in the planning of locations and decentralization) on the number of available jobs. Since 1976, however, very little has been done in carrying out the containment policy for the Helsinki region. Only certain state offices have been decentralized and certain other decentralization projects are underway. There is a natural reason for this. Population statistics from recent years show that the population growth of the cities has ceased. In 1976 the migratory gain of the cities was only 14 persons, whereas as recently as 1967–1971 it averaged 22,000 persons. Helsinki has been experiencing a migratory deficit since 1969, but in recent years the population growth of its administratively independent suburbs has also slowed down. Correspondingly, the population drain on many rural communities has halted. This most recent trend, which is a familiar phenomenon in many industrialized countries, has made checking the growth of the region of the national capital by regional policy measures less urgent in Finland.

5. CONCLUSION

This report is one of the national case studies in the comparative migration and settlement study organized by the Human Settlements and Services Area at IIASA. The first objective was to present an overview of spatial dynamics of population and policies to Finland. Another objective was to apply the new techniques of multiregional population analysis to data of the 12 provinces.

Multiregional population analysis enables one to consider several regions simultaneously and a large number of population characteristics. It has many advantages over purely demographic and geographical analysis

because it brings together the points of view of demographic and geographic research.

The multiregional life tables and the mobility and fertility analysis offer a useful basis for the analysis of the regional population dynamics in Finland. The multiregional population projection can be a very important tool in population distribution policy. In this first attempt to apply the multiregional population analysis to Finnish data not all the possibilities of this kind of analysis were discussed. The emphasis was more on the introduction of the new procedure in a generally understandable form. Also the relationship between multiregional population analysis and population distribution policy needs more attention in future research.

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Appendix A

OBSERVED NUMBER OF POPULATION, BIRTHS, DEATHS, AND MIGRANTS BY AGE AND PROVINCE

observed population characteristics

province uusimaa

age	population	births	deaths	migration from uusimaa to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	70913.	0.	107.	5991.	454.	11.	753.	313.	176.	178.	211.	192.	206.	325.	87.
5	80222.	0.	26.	3921.	306.	11.	451.	207.	90.	102.	131.	144.	131.	152.	42.
10	76355.	2.	19.	2165.	161.	2.	240.	97.	66.	44.	64.	60.	65.	71.	23.
15	77792.	1019.	67.	3695.	216.	19.	400.	155.	141.	101.	145.	109.	104.	260.	87.
20	98805.	4792.	95.	11333.	722.	46.	1118.	472.	353.	441.	459.	326.	279.	560.	227.
25	123312.	6409.	135.	12343.	879.	27.	1438.	663.	347.	359.	420.	398.	370.	544.	196.
30	85652.	2413.	114.	5760.	429.	8.	620.	285.	139.	124.	195.	177.	156.	220.	70.
35	71762.	637.	123.	3012.	241.	5.	321.	131.	72.	53.	94.	90.	100.	99.	37.
40	64661.	121.	253.	1794.	106.	6.	181.	62.	52.	41.	33.	35.	42.	54.	18.
45	61825.	8.	354.	1315.	96.	2.	136.	64.	32.	21.	35.	23.	20.	49.	7.
50	56140.	0.	427.	1015.	56.	5.	135.	30.	24.	25.	30.	46.	33.	18.	6.
55	48954.	0.	628.	749.	54.	5.	100.	51.	25.	15.	19.	13.	17.	18.	3.
60	51021.	0.	982.	686.	72.	1.	131.	31.	30.	15.	14.	17.	19.	24.	3.
65	43391.	0.	1275.	479.	52.	4.	95.	32.	22.	12.	26.	11.	15.	12.	4.
70	30166.	0.	1343.	213.	23.	0.	47.	13.	10.	10.	12.	8.	5.	5.	2.
75	32514.	0.	3386.	159.	16.	1.	38.	16.	6.	4.	5.	3.	4.	3.	3.
total	1073485.	15401.	9414.	54630.	3883.	153.	6204.	2622.	1593.	1625.	1893.	1652.	1566.	2414.	815.

province turkpor

age	population	births	deaths	migration from turkpor to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	43095.	0.	111.	388.	2920.	8.	385.	73.	41.	29.	63.	74.	154.	129.	56.
5	51061.	0.	23.	260.	1819.	9.	258.	34.	21.	26.	40.	53.	82.	69.	38.
10	52605.	1.	18.	136.	1051.	3.	133.	20.	13.	13.	15.	24.	39.	26.	10.
15	55214.	795.	52.	304.	2332.	16.	348.	27.	32.	30.	41.	63.	101.	136.	58.
20	62305.	3235.	66.	1041.	6045.	37.	946.	87.	81.	57.	131.	181.	277.	304.	142.
25	64002.	3187.	65.	1030.	4691.	29.	716.	121.	90.	57.	112.	163.	245.	238.	112.
30	43431.	1051.	53.	348.	1962.	7.	342.	60.	35.	27.	47.	59.	110.	89.	37.
35	41856.	401.	94.	176.	1178.	2.	144.	38.	16.	19.	22.	37.	41.	40.	19.
40	41282.	93.	112.	107.	711.	0.	95.	10.	9.	7.	16.	19.	22.	24.	9.
45	43470.	16.	193.	79.	627.	2.	89.	16.	5.	6.	5.	16.	14.	17.	5.
50	40300.	0.	324.	58.	454.	2.	41.	8.	1.	2.	2.	9.	13.	8.	2.
55	34855.	0.	374.	44.	313.	2.	55.	6.	2.	1.	4.	7.	10.	3.	6.
60	37081.	0.	630.	42.	342.	0.	59.	5.	1.	5.	3.	9.	12.	4.	4.
65	32624.	0.	920.	19.	259.	0.	39.	6.	4.	2.	1.	4.	5.	4.	1.
70	23537.	0.	1048.	23.	157.	0.	38.	3.	1.	1.	3.	0.	1.	2.	0.
75	24794.	0.	2710.	36.	124.	2.	17.	2.	1.	0.	3.	4.	3.	2.	1.
total	691672.	8779.	6801.	4091.	24985.	119.	3705.	516.	353.	282.	508.	722.	1129.	1095.	500.

province ahvenan

age	population	births	deaths	migration from ahvenan to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	1511.	0.	3.	8.	9.	109.	5.	1.	0.	0.	1.	1.	4.	1.	0.
5	1708.	0.	0.	11.	7.	50.	1.	0.	0.	1.	0.	2.	3.	0.	0.
10	1530.	0.	0.	2.	0.	25.	0.	1.	0.	0.	0.	0.	3.	0.	0.
15	1526.	22.	1.	5.	8.	85.	0.	0.	1.	0.	1.	5.	2.	1.	0.
20	1811.	100.	0.	27.	20.	182.	4.	1.	0.	0.	1.	1.	16.	5.	0.
25	2060.	111.	2.	22.	16.	131.	3.	1.	0.	1.	3.	3.	9.	1.	0.
30	1472.	32.	4.	13.	9.	61.	2.	0.	0.	0.	2.	0.	5.	1.	0.
35	1213.	14.	2.	4.	2.	43.	0.	0.	0.	0.	0.	0.	3.	0.	0.
40	1148.	4.	6.	4.	1.	19.	0.	0.	0.	0.	0.	0.	3.	0.	0.
45	1230.	0.	8.	0.	1.	15.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50	1281.	0.	6.	1.	0.	15.	0.	0.	0.	0.	0.	0.	1.	0.	0.
55	1269.	0.	20.	1.	0.	22.	0.	0.	0.	0.	0.	0.	1.	0.	0.
60	1308.	0.	21.	0.	0.	16.	0.	0.	0.	0.	0.	0.	2.	0.	0.
65	1035.	0.	30.	2.	1.	7.	1.	0.	0.	0.	0.	0.	0.	0.	0.
70	801.	0.	36.	0.	0.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75	1106.	0.	116.	0.	1.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.
total	22009.	283.	255.	100.	75.	790.	16.	4.	1.	2.	8.	12.	52.	9.	0.

province hame

age	population	births	deaths	migration from uusimaa	turkpor	ahvenan	hame to hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	41440.	0.	117.	598.	429.	0.	2062.	105.	126.	74.	89.	150.	136.	126.	33.
5	48765.	0.	16.	399.	282.	3.	1291.	86.	65.	33.	43.	102.	61.	75.	27.
10	50527.	0.	15.	231.	130.	2.	770.	48.	23.	25.	17.	42.	24.	51.	14.
15	53797.	750.	44.	552.	330.	2.	1853.	79.	79.	70.	58.	106.	83.	129.	27.
20	61530.	3140.	49.	1844.	984.	4.	4277.	201.	190.	127.	181.	311.	219.	257.	135.
25	63183.	3051.	74.	1630.	798.	5.	3390.	251.	183.	130.	145.	263.	229.	245.	93.
30	43020.	1045.	58.	537.	307.	1.	1397.	104.	100.	54.	56.	115.	81.	93.	30.
35	40186.	426.	73.	249.	184.	0.	914.	55.	48.	27.	30.	69.	33.	44.	15.
40	39007.	89.	145.	184.	104.	0.	610.	23.	26.	17.	13.	30.	24.	23.	9.
45	40413.	6.	230.	113.	85.	0.	504.	13.	19.	15.	13.	19.	16.	17.	10.
50	37444.	0.	290.	114.	60.	0.	361.	18.	10.	7.	4.	16.	15.	10.	3.
55	32489.	0.	362.	74.	53.	0.	342.	16.	15.	3.	4.	12.	11.	5.	2.
60	34271.	0.	636.	82.	53.	0.	290.	17.	15.	6.	6.	10.	10.	8.	7.
65	29467.	0.	855.	49.	28.	0.	210.	13.	12.	6.	6.	13.	5.	7.	6.
70	20704.	0.	948.	30.	23.	0.	127.	5.	4.	5.	3.	6.	1.	0.	3.
75	20790.	0.	2296.	34.	11.	0.	86.	11.	6.	2.	3.	6.	0.	2.	0.
total	657049.	8507.	6208.	6720.	3861.	17.	18484.	1045.	921.	601.	671.	1270.	956.	1100.	414.

APPENDIX A *Continued.*

province kymi

age	population	births	deaths	migration from uusimaa	turkpor	ahvenan	kymi to hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	20644.	0.	67.	316.	63.	1.	142.	1028.	93.	51.	40.	35.	32.	38.	16.
5	25047.	0.	10.	200.	46.	1.	85.	697.	65.	22.	27.	26.	11.	30.	10.
10	28059.	0.	9.	117.	29.	2.	55.	416.	58.	13.	13.	7.	10.	15.	4.
15	29496.	375.	36.	302.	44.	0.	151.	907.	79.	39.	20.	13.	10.	22.	7.
20	30686.	1478.	35.	1018.	123.	1.	302.	2246.	171.	87.	70.	80.	37.	64.	29.
25	30402.	1509.	45.	790.	140.	3.	260.	1655.	166.	83.	77.	92.	43.	75.	21.
30	21826.	533.	42.	291.	70.	0.	118.	742.	64.	42.	39.	31.	19.	30.	11.
35	21118.	100.	49.	127.	35.	0.	63.	472.	44.	10.	21.	14.	13.	15.	14.
40	21302.	46.	74.	88.	18.	0.	41.	283.	30.	9.	6.	8.	2.	5.	1.
45	22133.	3.	150.	70.	15.	1.	47.	227.	23.	7.	7.	3.	1.	3.	0.
50	19802.	0.	165.	53.	12.	1.	24.	193.	14.	6.	7.	1.	2.	5.	2.
55	17563.	0.	229.	24.	9.	0.	20.	135.	17.	3.	2.	1.	4.	2.	0.
60	18629.	0.	370.	41.	5.	0.	12.	149.	14.	7.	7.	2.	2.	1.	1.
65	16085.	0.	530.	18.	4.	0.	10.	91.	9.	9.	1.	1.	1.	2.	0.
70	11404.	0.	564.	18.	3.	0.	4.	49.	5.	5.	1.	3.	0.	0.	0.
75	10909.	0.	1322.	17.	4.	0.	6.	52.	4.	0.	3.	2.	2.	1.	0.
total	345985.	4124.	3705.	3498.	620.	10.	1340.	9342.	856.	401.	341.	319.	189.	308.	116.

province mikkeli

age	population	births	deaths	migration from uusimaa	turkpor	ahvenan	mikkeli to hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	12099.	0.	30.	153.	42.	0.	125.	105.	426.	58.	79.	58.	17.	23.	9.
5	16031.	0.	5.	92.	25.	0.	79.	69.	337.	39.	67.	31.	8.	26.	5.
10	18905.	0.	7.	66.	28.	0.	50.	47.	223.	22.	56.	17.	5.	4.	6.
15	20199.	202.	22.	432.	48.	0.	201.	122.	640.	35.	135.	45.	10.	17.	4.
20	18295.	813.	21.	816.	92.	0.	337.	255.	1092.	85.	251.	153.	19.	69.	21.
25	16177.	866.	17.	483.	72.	1.	223.	104.	731.	81.	158.	107.	23.	60.	23.
30	12048.	330.	20.	124.	39.	0.	87.	73.	336.	47.	70.	47.	5.	24.	5.
35	12656.	134.	20.	72.	21.	0.	61.	54.	226.	20.	56.	17.	4.	11.	6.
40	13023.	55.	45.	47.	11.	0.	46.	29.	156.	10.	39.	9.	5.	3.	4.
45	13565.	2.	86.	49.	4.	0.	19.	31.	124.	14.	35.	10.	1.	6.	1.
50	12524.	0.	129.	27.	7.	0.	18.	14.	111.	8.	22.	9.	1.	3.	0.
55	10780.	0.	151.	28.	2.	0.	14.	18.	95.	7.	18.	14.	0.	2.	0.
60	11417.	0.	234.	21.	5.	0.	14.	10.	107.	10.	15.	5.	0.	3.	3.
65	9963.	0.	334.	15.	4.	0.	11.	9.	80.	5.	15.	6.	2.	1.	1.
70	7151.	0.	401.	6.	2.	0.	13.	5.	35.	1.	8.	5.	0.	1.	1.
75	7367.	0.	952.	8.	2.	0.	13.	4.	38.	2.	7.	3.	1.	2.	0.
total	212200.	2402.	2402.	2439.	404.	1.	1311.	1029.	4757.	444.	1031.	536.	101.	255.	89.

province poh.kar

age	population	births	deaths	migration from uusimaa	turkpor	ahvenan	poh.kar to hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	10289.	0.	36.	123.	34.	0.	65.	71.	39.	437.	73.	16.	11.	37.	15.
5	13467.	0.	8.	81.	42.	0.	45.	45.	40.	297.	36.	7.	4.	18.	10.
10	17075.	1.	14.	59.	26.	0.	29.	26.	20.	199.	10.	2.	2.	6.	5.
15	18986.	233.	11.	578.	81.	0.	144.	84.	47.	579.	47.	18.	9.	20.	6.
20	15969.	708.	17.	856.	106.	1.	247.	146.	91.	1098.	109.	46.	16.	62.	22.
25	13608.	684.	27.	348.	66.	1.	130.	101.	89.	687.	118.	29.	21.	64.	27.
30	9704.	322.	17.	115.	27.	0.	45.	37.	37.	296.	49.	21.	13.	23.	16.
35	10108.	134.	22.	66.	29.	0.	30.	26.	25.	189.	22.	5.	4.	16.	9.
40	10499.	38.	41.	45.	11.	0.	10.	15.	14.	160.	14.	3.	1.	6.	2.
45	11276.	2.	64.	28.	8.	0.	21.	20.	1.	114.	7.	3.	3.	4.	1.
50	10237.	0.	106.	20.	10.	0.	18.	7.	10.	99.	8.	0.	1.	4.	3.
55	9043.	0.	133.	23.	6.	0.	13.	5.	6.	89.	7.	2.	1.	6.	1.
60	9627.	0.	201.	21.	5.	0.	9.	13.	4.	116.	12.	2.	1.	4.	0.
65	7750.	0.	269.	9.	5.	0.	5.	5.	1.	89.	9.	1.	1.	2.	0.
70	5252.	0.	267.	6.	4.	0.	3.	1.	1.	47.	9.	0.	1.	0.	0.
75	4980.	0.	612.	10.	0.	0.	3.	1.	5.	34.	2.	1.	0.	4.	0.
total	177870.	2122.	1845.	2388.	460.	2.	817.	603.	430.	4530.	532.	156.	89.	276.	117.

province kuopio

age	population	births	deaths	migration from uusimaa	turkpor	ahvenan	kuopio to hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	15446.	0.	44.	174.	50.	0.	106.	43.	93.	71.	518.	64.	25.	97.	31.
5	19740.	0.	9.	118.	36.	0.	73.	28.	65.	40.	332.	36.	8.	44.	13.
10	23034.	0.	6.	62.	13.	0.	39.	33.	33.	28.	206.	17.	11.	36.	9.
15	24432.	264.	23.	500.	96.	0.	136.	40.	92.	43.	878.	53.	14.	61.	10.
20	22976.	1078.	29.	894.	154.	2.	217.	90.	228.	134.	1409.	138.	40.	125.	21.
25	20008.	1045.	31.	502.	93.	1.	170.	86.	153.	129.	855.	121.	44.	142.	58.
30	14453.	422.	25.	152.	49.	0.	57.	39.	74.	46.	381.	62.	17.	62.	22.
35	14826.	177.	49.	62.	24.	0.	43.	19.	39.	33.	238.	16.	9.	25.	10.
40	15133.	39.	58.	38.	14.	0.	21.	11.	21.	19.	146.	9.	2.	19.	6.
45	16184.	3.	96.	50.	6.	0.	16.	11.	35.	11.	137.	12.	3.	9.	3.
50	14375.	0.	143.	36.	14.	0.	13.	9.	13.	9.	116.	11.	3.	14.	0.
55	12211.	0.	159.	20.	5.	0.	10.	8.	8.	2.	113.	7.	1.	4.	0.
60	12626.	0.	287.	16.	7.	0.	9.	3.	18.	11.	99.	6.	2.	11.	3.
65	10637.	0.	311.	13.	0.	0.	11.	6.	11.	5.	77.	2.	2.	4.	1.
70	7412.	0.	390.	12.	3.	0.	5.	3.	5.	4.	54.	2.	1.	3.	1.
75	7827.	0.	923.	8.	1.	0.	6.	1.	6.	3.	45.	4.	1.	2.	2.
total	251320.	3028.	2583.	2657.	573.	3.	932.	430.	894.	588.	5604.	560.	183.	658.	190.

APPENDIX A *Continued.*

province keski

age	population	births	deaths	migration from uusimaa	turkpor	ahvenan	keski to hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	14843.	0.	42.	101.	94.	0.	167.	23.	64.	21.	59.	804.	47.	52.	18.
5	18419.	0.	11.	116.	49.	0.	115.	17.	22.	16.	34.	520.	26.	31.	10.
10	21230.	0.	8.	74.	32.	0.	67.	10.	24.	3.	15.	273.	16.	15.	13.
15	22209.	257.	19.	328.	110.	2.	193.	20.	45.	9.	29.	772.	45.	34.	6.
20	21505.	1048.	22.	745.	262.	2.	441.	60.	117.	28.	106.	1696.	118.	81.	34.
25	20609.	1099.	15.	463.	152.	0.	278.	66.	123.	49.	101.	1289.	93.	107.	48.
30	14631.	437.	25.	152.	76.	0.	113.	29.	31.	19.	52.	525.	44.	44.	19.
35	14412.	183.	33.	87.	33.	0.	84.	16.	26.	3.	24.	310.	19.	19.	10.
40	14366.	44.	40.	43.	29.	0.	30.	13.	10.	2.	7.	190.	9.	12.	5.
45	15050.	5.	81.	40.	17.	0.	27.	6.	5.	5.	10.	150.	7.	6.	2.
50	13945.	0.	118.	19.	9.	0.	28.	3.	5.	2.	4.	136.	7.	7.	3.
55	11814.	0.	163.	20.	6.	0.	19.	5.	10.	0.	2.	88.	1.	5.	1.
60	12124.	0.	258.	19.	5.	0.	29.	2.	7.	1.	6.	110.	7.	3.	1.
65	10060.	0.	307.	11.	8.	0.	14.	2.	6.	1.	2.	79.	4.	3.	1.
70	6958.	0.	373.	11.	1.	0.	10.	0.	4.	1.	2.	40.	1.	1.	0.
75	6639.	0.	807.	3.	2.	0.	3.	2.	4.	0.	0.	33.	1.	2.	0.
total	238814.	3073.	2322.	2312.	885.	4.	1626.	282.	503.	160.	453.	7015.	445.	422.	179.

province vaasa

age	population	births	deaths	migration from uusimaa	turkpor	ahvenan	vaasa to hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	28890.	0.	90.	189.	234.	9.	166.	28.	30.	10.	27.	71.	1570.	124.	29.
5	33898.	0.	9.	118.	142.	2.	67.	11.	19.	10.	15.	36.	736.	67.	16.
10	35720.	1.	11.	63.	69.	5.	54.	8.	8.	1.	10.	12.	379.	27.	11.
15	37525.	548.	32.	274.	216.	24.	185.	11.	11.	7.	9.	36.	1252.	50.	26.
20	37210.	2021.	30.	856.	512.	44.	384.	44.	23.	15.	50.	144.	3150.	239.	48.
25	34563.	2072.	31.	495.	384.	27.	262.	54.	43.	25.	49.	145.	2132.	200.	50.
30	24649.	775.	40.	152.	108.	5.	113.	22.	29.	16.	25.	36.	794.	76.	23.
35	24314.	357.	47.	88.	69.	2.	59.	9.	13.	2.	8.	22.	425.	40.	13.
40	24198.	99.	68.	45.	57.	3.	41.	6.	5.	2.	1.	11.	258.	16.	8.
45	26094.	11.	139.	27.	27.	2.	22.	6.	2.	2.	1.	3.	188.	8.	7.
50	25662.	0.	174.	29.	21.	3.	27.	2.	3.	0.	3.	13.	163.	7.	2.
55	22330.	0.	252.	13.	8.	1.	17.	4.	0.	0.	1.	8.	140.	5.	0.
60	22210.	0.	375.	22.	10.	1.	21.	2.	1.	3.	3.	8.	147.	6.	2.
65	18237.	0.	516.	13.	10.	0.	17.	3.	0.	0.	5.	10.	98.	2.	1.
70	13308.	0.	623.	9.	4.	0.	5.	0.	1.	0.	0.	4.	64.	2.	3.
75	14235.	0.	1645.	9.	2.	0.	7.	0.	0.	2.	0.	2.	58.	2.	2.
total	423043.	5884.	4082.	2402.	1873.	128.	1447.	210.	188.	95.	207.	561.	11562.	871.	249.

province oulu

age	population	births	deaths	migration from uusimaa	turkpor	ahvenan	oulu to hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	29206.	0.	79.	235.	156.	3.	120.	52.	45.	41.	67.	66.	116.	1685.	167.
5	35129.	0.	10.	118.	82.	0.	85.	31.	27.	25.	47.	61.	65.	893.	85.
10	40665.	0.	11.	96.	70.	0.	60.	16.	13.	13.	23.	23.	27.	516.	43.
15	42233.	610.	29.	574.	263.	1.	248.	32.	24.	19.	51.	39.	121.	1460.	94.
20	38093.	2237.	40.	960.	397.	7.	426.	77.	50.	60.	143.	123.	232.	3361.	242.
25	33026.	1990.	40.	567.	258.	2.	211.	79.	67.	48.	146.	110.	168.	2247.	269.
30	24099.	805.	44.	164.	121.	1.	88.	34.	33.	29.	55.	63.	66.	901.	118.
35	23925.	461.	49.	107.	50.	0.	57.	27.	17.	10.	33.	25.	29.	492.	49.
40	23401.	129.	99.	62.	39.	0.	21.	10.	11.	7.	16.	12.	25.	286.	24.
45	23010.	10.	164.	55.	32.	0.	22.	8.	6.	10.	12.	17.	17.	266.	18.
50	21054.	0.	194.	36.	16.	0.	25.	13.	4.	2.	7.	6.	17.	215.	10.
55	17337.	0.	271.	35.	10.	0.	12.	0.	5.	5.	12.	0.	13.	166.	9.
60	17209.	0.	365.	25.	9.	0.	24.	6.	6.	6.	9.	6.	14.	159.	11.
65	13178.	0.	444.	17.	8.	0.	8.	4.	4.	4.	5.	3.	9.	107.	4.
70	8903.	0.	448.	5.	3.	0.	5.	1.	4.	2.	5.	3.	1.	65.	1.
75	9585.	0.	1110.	1.	3.	0.	3.	1.	2.	4.	4.	2.	0.	55.	5.
total	400853.	6242.	3413.	3057.	1517.	14.	1415.	399.	318.	293.	635.	559.	920.	12874.	1149.

province lappi

age	population	births	deaths	migration from uusimaa	turkpor	ahvenan	lappi to hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	13349.	0.	33.	99.	94.	0.	60.	22.	15.	10.	21.	17.	30.	186.	688.
5	17553.	0.	10.	60.	46.	0.	37.	16.	7.	4.	10.	17.	16.	101.	422.
10	21588.	0.	14.	43.	50.	0.	31.	10.	4.	2.	12.	4.	14.	87.	279.
15	21848.	316.	22.	234.	172.	0.	107.	23.	10.	6.	11.	10.	37.	114.	705.
20	18313.	950.	32.	472.	263.	0.	215.	39.	21.	9.	42.	41.	54.	378.	1332.
25	15297.	787.	27.	253.	122.	0.	112.	44.	19.	19.	34.	32.	44.	276.	881.
30	11636.	340.	26.	78.	47.	0.	35.	11.	11.	8.	20.	16.	26.	119.	401.
35	12471.	180.	26.	43.	37.	0.	37.	9.	5.	5.	6.	11.	8.	74.	306.
40	11925.	45.	64.	38.	23.	0.	20.	11.	1.	3.	7.	2.	3.	44.	175.
45	11960.	9.	84.	36.	23.	1.	25.	9.	4.	2.	6.	1.	0.	28.	129.
50	10249.	0.	90.	17.	8.	0.	10.	6.	6.	2.	0.	2.	6.	19.	99.
55	8029.	0.	123.	16.	8.	0.	13.	5.	1.	1.	1.	0.	2.	23.	57.
60	7636.	0.	170.	14.	8.	0.	13.	7.	1.	3.	5.	2.	3.	17.	75.
65	5986.	0.	194.	8.	4.	0.	6.	3.	0.	0.	1.	1.	2.	13.	37.
70	4140.	0.	211.	4.	2.	0.	2.	2.	1.	1.	0.	2.	1.	5.	22.
75	4252.	0.	440.	3.	0.	0.	3.	1.	0.	0.	0.	0.	1.	7.	34.
total	196232.	2627.	1566.	1410.	907.	1.	742.	226.	106.	75.	184.	158.	255.	1491.	5642.

Appendix B

AGE-SPECIFIC MORTALITY, FERTILITY, AND MIGRATION RATES

observed rates

death rates

age	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.002637	0.002576	0.001985	0.002823	0.003245	0.002480	0.003499	0.002849	0.002830	0.003115	0.002705	0.002472
5	0.000324	0.000450	0.000000	0.000328	0.000387	0.000312	0.000594	0.000456	0.000597	0.000266	0.000512	0.000570
10	0.000249	0.000342	0.000000	0.000297	0.000321	0.000370	0.000820	0.000260	0.000377	0.000308	0.000271	0.000649
15	0.000861	0.000942	0.000655	0.000818	0.001221	0.001089	0.000579	0.000941	0.000856	0.000853	0.000687	0.001007
20	0.000961	0.001059	0.000000	0.000796	0.001141	0.001148	0.001065	0.001262	0.001023	0.000806	0.001050	0.001747
25	0.001095	0.001016	0.000971	0.001171	0.001480	0.001051	0.001984	0.001549	0.000728	0.000897	0.001453	0.001765
30	0.001331	0.001220	0.002717	0.001348	0.001924	0.001660	0.001752	0.001730	0.001709	0.001623	0.001826	0.002234
35	0.001714	0.002246	0.001649	0.001817	0.002320	0.002212	0.002176	0.003305	0.002290	0.001933	0.002048	0.002085
40	0.003913	0.002713	0.005226	0.003717	0.003474	0.003455	0.003905	0.003833	0.002784	0.002810	0.004231	0.005367
45	0.005726	0.004440	0.006504	0.005691	0.006777	0.006340	0.005676	0.005932	0.005382	0.005327	0.006888	0.007023
50	0.007606	0.008024	0.004684	0.007745	0.008299	0.010300	0.010355	0.009948	0.008462	0.006780	0.009214	0.008781
55	0.012828	0.010730	0.015760	0.011142	0.013039	0.014007	0.014700	0.013021	0.013797	0.011285	0.015631	0.015319
60	0.019247	0.016990	0.016055	0.018558	0.020291	0.020496	0.020879	0.022731	0.021280	0.016884	0.021210	0.022263
65	0.029384	0.028200	0.028986	0.029016	0.032950	0.033524	0.034710	0.029238	0.030517	0.028294	0.033693	0.032409
70	0.044520	0.044526	0.044944	0.045788	0.049456	0.056076	0.050838	0.052617	0.053607	0.046814	0.050320	0.050966
75	0.104140	0.109623	0.104082	0.110438	0.121184	0.129225	0.122892	0.117925	0.121554	0.115560	0.115006	0.103481
gross	1.182682	1.175482	1.175097	1.207464	1.337547	1.418729	1.382150	1.337985	1.338964	1.217779	1.337722	1.298695
crude	0.008770	0.009833	0.011586	0.009448	0.010709	0.011697	0.010373	0.010278	0.009723	0.009649	0.008514	0.007980
m. age[a]	68.6854	69.1628	69.0294	68.9966	68.6965	69.2252	68.4918	68.5554	69.1734	69.3433	68.5430	67.6855

fertility rates

age	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	0.000026	0.000019	0.000000	0.000000	0.000000	0.000000	0.000059	0.000000	0.000000	0.000028	0.000000	0.000000
15	0.013099	0.014399	0.014417	0.013941	0.012714	0.010000	0.012272	0.010806	0.011572	0.014604	0.014444	0.014464
20	0.048500	0.051922	0.055210	0.051032	0.048165	0.044438	0.044336	0.046919	0.048733	0.054313	0.058725	0.051876
25	0.051974	0.049795	0.053883	0.048288	0.049635	0.053533	0.050265	0.052229	0.053326	0.059949	0.060256	0.051448
30	0.028172	0.024199	0.021739	0.024287	0.024420	0.027390	0.033182	0.029198	0.029868	0.031441	0.033404	0.029220
35	0.008877	0.009580	0.011542	0.010601	0.008524	0.010588	0.013257	0.011938	0.012698	0.014683	0.019269	0.014433
40	0.001871	0.002253	0.003484	0.002282	0.002159	0.004223	0.003619	0.002577	0.003063	0.004091	0.005513	0.003774
45	0.000129	0.000368	0.000000	0.000148	0.000136	0.000147	0.000177	0.000185	0.000332	0.000422	0.000420	0.000753
50	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
60	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
65	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
70	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
75	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
gross	0.763240	0.762677	0.801417	0.752895	0.728763	0.751604	0.785835	0.769261	0.797959	0.897653	0.960145	0.829833
crude	0.014347	0.012692	0.012858	0.012947	0.011920	0.011320	0.011930	0.012048	0.012868	0.013909	0.015572	0.013387
m. age[a]	26.7558	26.5433	26.6023	26.6371	26.6388	27.4131	27.5742	27.2731	27.3090	27.2539	27.5663	27.2474

[a] m. age, mean age.

out-migration rates
****

migration from uusimaa to

age	total	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.125464	0.084484	0.006402	0.000155	0.010619	0.004414	0.002482	0.002510	0.002975	0.002708	0.002905	0.004583	0.001227
5	0.070903	0.048877	0.003814	0.000137	0.005622	0.002580	0.001122	0.001271	0.001633	0.001795	0.001633	0.001895	0.000524
10	0.040050	0.028354	0.002109	0.000026	0.003143	0.001270	0.000864	0.000576	0.000838	0.000786	0.000851	0.000930	0.000301
15	0.070856	0.047498	0.002777	0.000244	0.005142	0.001992	0.001813	0.002327	0.001864	0.001401	0.001337	0.003342	0.001118
20	0.165336	0.114701	0.007307	0.000466	0.011315	0.004777	0.003573	0.004463	0.004646	0.003299	0.002824	0.005668	0.002297
25	0.145041	0.100096	0.007128	0.000219	0.011661	0.005377	0.002814	0.002911	0.003406	0.003228	0.003001	0.004412	0.001589
30	0.095538	0.067249	0.005009	0.000093	0.007239	0.003327	0.001623	0.001448	0.002277	0.002067	0.001821	0.002569	0.000817
35	0.059293	0.041972	0.003358	0.000070	0.004473	0.001825	0.001003	0.000739	0.001318	0.001254	0.001393	0.001380	0.000516
40	0.037488	0.027745	0.001639	0.000093	0.002799	0.000959	0.000804	0.000634	0.000510	0.000541	0.000650	0.000835	0.000278
45	0.029114	0.021270	0.001553	0.000032	0.002200	0.001035	0.000518	0.000340	0.000566	0.000372	0.000323	0.000793	0.000113
50	0.025347	0.018080	0.000998	0.000089	0.002405	0.000534	0.000428	0.000445	0.000534	0.000819	0.000588	0.000321	0.000107
55	0.021837	0.015300	0.001103	0.000102	0.002043	0.001042	0.000511	0.000306	0.000388	0.000266	0.000347	0.000368	0.000061
60	0.020599	0.013445	0.001411	0.000020	0.002568	0.000608	0.000745	0.000294	0.000274	0.000333	0.000372	0.000470	0.000059
65	0.017607	0.011039	0.001198	0.000092	0.002189	0.000737	0.000507	0.000277	0.000599	0.000254	0.000346	0.000277	0.000092
70	0.011536	0.007061	0.000762	0.000000	0.001558	0.000431	0.000331	0.000331	0.000398	0.000265	0.000166	0.000166	0.000066
75	0.007935	0.004890	0.000492	0.000031	0.001169	0.000492	0.000185	0.000123	0.000154	0.000092	0.000123	0.000092	0.000092
gross	4.723724	3.260305	0.235306	0.009346	0.380721	0.157010	0.096607	0.094980	0.111864	0.097398	0.093401	0.148492	0.046295
crude	0.073639	0.050890	0.003617	0.000143	0.005779	0.002443	0.001484	0.001514	0.001763	0.001539	0.001459	0.002249	0.000759
m. age[a]	26.6051	26.6097	27.4207	28.9022	28.3044	27.0075	27.6875	24.9344	25.9865	25.4132	25.3212	23.4243	23.7419

migration from turkpor to

age	total	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.100244	0.009003	0.067757	0.000186	0.000934	0.001694	0.000951	0.000673	0.001462	0.001717	0.003574	0.002993	0.001299
5	0.053054	0.005092	0.035624	0.000176	0.000553	0.000666	0.000411	0.000509	0.000783	0.001038	0.001606	0.001351	0.000744
10	0.028148	0.002581	0.019949	0.000057	0.002524	0.000380	0.000247	0.000247	0.000285	0.000456	0.000749	0.000493	0.000190
15	0.063172	0.005506	0.042236	0.000298	0.006303	0.000489	0.000580	0.000543	0.000743	0.001141	0.001829	0.002463	0.001050
20	0.149731	0.016708	0.097023	0.000594	0.015183	0.001396	0.001300	0.000915	0.002103	0.002905	0.004446	0.004879	0.002279
25	0.118889	0.016093	0.073295	0.000453	0.011187	0.001891	0.001406	0.000891	0.001750	0.002547	0.003828	0.003719	0.001750
30	0.071907	0.008013	0.045175	0.000161	0.007875	0.001382	0.000806	0.000622	0.001082	0.001358	0.002533	0.002049	0.000852
35	0.041380	0.004205	0.028144	0.000048	0.003440	0.000908	0.000382	0.000454	0.000526	0.000884	0.000980	0.000956	0.000454
40	0.024926	0.002592	0.017223	0.000000	0.002301	0.000242	0.000218	0.000170	0.000388	0.000460	0.000533	0.000581	0.000218
45	0.020267	0.001817	0.014424	0.000046	0.002047	0.000368	0.000115	0.000138	0.000115	0.000368	0.000322	0.000391	0.000115
50	0.014859	0.001436	0.011243	0.000050	0.001015	0.000198	0.000025	0.000050	0.000050	0.000223	0.000322	0.000198	0.000050
55	0.012997	0.001262	0.008980	0.000057	0.001578	0.000172	0.000057	0.000029	0.000115	0.000201	0.000287	0.000086	0.000172
60	0.013106	0.001133	0.009223	0.000000	0.001591	0.000135	0.000027	0.000135	0.000081	0.000243	0.000324	0.000188	0.000188
65	0.010544	0.000582	0.007939	0.000000	0.001195	0.000184	0.000123	0.000061	0.000031	0.000123	0.000153	0.000123	0.000031
70	0.009729	0.000977	0.006670	0.000000	0.001614	0.000127	0.000042	0.000042	0.000127	0.000000	0.000042	0.000085	0.000000
75	0.007865	0.001452	0.005001	0.000081	0.000686	0.000081	0.000040	0.000000	0.000121	0.000161	0.000121	0.000081	0.000040
gross	3.703696	0.392269	2.449529	0.010991	0.362639	0.051561	0.033655	0.027389	0.048799	0.069123	0.108196	0.102784	0.046762
crude	0.054947	0.005915	0.036123	0.000172	0.005357	0.000746	0.000510	0.000408	0.000734	0.001044	0.001632	0.001583	0.000723
m. age[a]	25.6852	26.3068	25.8385	24.9112	26.5513	26.1144	24.1621	24.4728	23.9817	25.0771	23.1508	22.7388	22.7603

[a] m. age, mean age.

APPENDIX B *Continued.*

	migration from ahvenan to											
age	total	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.091992	0.005295	0.005956	0.072138	0.003309	0.000662	0.000000	0.000000	0.000662	0.000662	0.002647	0.000662	0.000000
5	0.043911	0.006440	0.004098	0.029274	0.000585	0.000000	0.000000	0.000585	0.000000	0.001171	0.001756	0.000000	0.000000
10	0.020261	0.001307	0.000000	0.016340	0.000000	0.000654	0.000000	0.000000	0.000000	0.000000	0.001961	0.000000	0.000000
15	0.070773	0.003277	0.005242	0.055701	0.000000	0.000000	0.000655	0.000000	0.000655	0.003277	0.001311	0.000655	0.000000
20	0.141911	0.014909	0.011044	0.100497	0.002209	0.000552	0.000000	0.000000	0.000552	0.000552	0.008835	0.002761	0.000000
25	0.092233	0.010680	0.007767	0.063592	0.001456	0.000485	0.000000	0.000485	0.001456	0.001456	0.004369	0.000485	0.000000
30	0.063179	0.008832	0.006114	0.041440	0.001359	0.000000	0.000000	0.000000	0.001359	0.000000	0.003397	0.000679	0.000000
35	0.042869	0.003298	0.001649	0.035449	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002473	0.000000	0.000000
40	0.023519	0.003484	0.000871	0.016551	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002613	0.000000	0.000000
45	0.013008	0.000000	0.000813	0.012195	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50	0.013271	0.000781	0.000000	0.011710	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000781	0.000000	0.000000
55	0.018913	0.000788	0.000000	0.017336	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000788	0.000000	0.000000
60	0.013761	0.000000	0.000000	0.012232	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001529	0.000000	0.000000
65	0.010628	0.001932	0.000966	0.006763	0.000966	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
70	0.006242	0.000000	0.000000	0.006242	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
75	0.005425	0.000000	0.000904	0.004521	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
gross	3.359485	0.385108	0.227126	2.509909	0.049422	0.011765	0.003277	0.005355	0.023422	0.035589	0.162299	0.026214	0.000000
crude	0.048571	0.004544	0.003408	0.035894	0.000727	0.000182	0.000045	0.000091	0.000363	0.000545	0.002363	0.000409	0.000000
m. age[a]	25.7384	25.2346	23.5754	26.2625	21.4259	15.1286	17.5000	16.5658	23.4298	16.8941	27.1791	21.1091	0.0000

	migration from hame to											
age	total	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.094769	0.014428	0.010350	0.000000	0.049749	0.002533	0.003040	0.001785	0.002147	0.003619	0.003281	0.003040	0.000796
5	0.050590	0.008182	0.005783	0.000062	0.026474	0.001764	0.001333	0.000677	0.000882	0.002092	0.001251	0.001538	0.000554
10	0.027253	0.004572	0.002573	0.000040	0.015239	0.000950	0.000455	0.000495	0.000336	0.000831	0.000475	0.001009	0.000277
15	0.062606	0.010261	0.006134	0.000037	0.034444	0.001468	0.001468	0.001301	0.001078	0.001970	0.001543	0.002398	0.000502
20	0.141882	0.029969	0.015992	0.000065	0.069511	0.003267	0.003088	0.002064	0.002942	0.005054	0.003559	0.004177	0.002194
25	0.116519	0.025798	0.012630	0.000079	0.053654	0.003973	0.002896	0.002058	0.002295	0.004163	0.003624	0.003878	0.001472
30	0.066817	0.012480	0.007135	0.000023	0.032467	0.002417	0.002324	0.001255	0.001301	0.002673	0.001882	0.002161	0.000697
35	0.041507	0.006196	0.004579	0.000000	0.022744	0.001369	0.001194	0.000672	0.000747	0.001717	0.000821	0.001895	0.000373
40	0.027252	0.004717	0.002666	0.000000	0.015638	0.000590	0.000667	0.000436	0.000333	0.000769	0.000615	0.000590	0.000231
45	0.020389	0.002796	0.002103	0.000000	0.012471	0.000322	0.000470	0.000371	0.000322	0.000470	0.000396	0.000421	0.000247
50	0.016718	0.003045	0.001602	0.000000	0.009641	0.000481	0.000267	0.000187	0.000107	0.000427	0.000481	0.000481	0.000080
55	0.016529	0.002278	0.001631	0.000000	0.010527	0.000492	0.000462	0.000092	0.000123	0.000369	0.000339	0.000154	0.000062
60	0.014706	0.002393	0.001546	0.000000	0.008462	0.000496	0.000438	0.000175	0.000175	0.000292	0.000292	0.000233	0.000204
65	0.012047	0.001663	0.000950	0.000000	0.007127	0.000441	0.000407	0.000204	0.000204	0.000441	0.000170	0.000238	0.000204
70	0.009998	0.001449	0.001111	0.000000	0.006134	0.000241	0.000193	0.000241	0.000145	0.000290	0.000048	0.000000	0.000145
75	0.008129	0.001635	0.000529	0.000000	0.004137	0.000529	0.000289	0.000096	0.000144	0.000289	0.000385	0.000096	0.000000
gross	3.638554	0.659307	0.386579	0.001528	1.892095	0.106663	0.094958	0.060546	0.066405	0.127331	0.095411	0.107548	0.040189
crude	0.054882	0.010228	0.005876	0.000026	0.028132	0.001590	0.001402	0.000915	0.001021	0.001933	0.001455	0.001674	0.000630
m. age[a]	26.4106	26.3424	25.7771	19.6327	26.9739	27.3266	26.3740	25.4706	24.3318	25.0974	24.6680	23.3792	26.2769

[a] m. age, mean age.

age	total	migration from uusimaa	turkpor	kymi to ahvenan	hame	kyml	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.089857	0.015307	0.003052	0.000048	0.006879	0.049797	0.004505	0.002470	0.001938	0.001695	0.001550	0.001841	0.000775
5	0.047201	0.007738	0.001780	0.000039	0.003289	0.026966	0.002515	0.000851	0.001045	0.001006	0.000426	0.001161	0.000307
10	0.026337	0.004170	0.001034	0.000071	0.001960	0.014826	0.002067	0.000463	0.000463	0.000249	0.000356	0.000535	0.000143
15	0.054041	0.010239	0.001492	0.000000	0.005119	0.030750	0.002678	0.001322	0.000678	0.000441	0.000339	0.000746	0.000237
20	0.137783	0.033175	0.004008	0.000033	0.009842	0.073193	0.005573	0.002835	0.002281	0.002687	0.001206	0.002086	0.000945
25	0.111999	0.025985	0.004605	0.000099	0.008552	0.054437	0.005460	0.002730	0.002533	0.003026	0.001414	0.002467	0.000691
30	0.066755	0.013333	0.003207	0.000000	0.005406	0.033996	0.002932	0.001924	0.001787	0.001428	0.000871	0.001375	0.000504
35	0.039587	0.006014	0.001657	0.000000	0.002983	0.022351	0.002084	0.000852	0.000994	0.000663	0.000616	0.000710	0.000663
40	0.023049	0.004131	0.000845	0.000000	0.001925	0.013285	0.001408	0.000422	0.000282	0.000376	0.000094	0.000235	0.000047
45	0.018615	0.003524	0.000670	0.000045	0.002124	0.010256	0.001039	0.000316	0.000316	0.000136	0.000045	0.000136	0.000000
50	0.016095	0.002666	0.000604	0.000050	0.001207	0.009707	0.000704	0.000302	0.000352	0.000050	0.000101	0.000251	0.000101
55	0.012356	0.001367	0.000512	0.000000	0.001139	0.007687	0.000968	0.000171	0.000114	0.000057	0.000228	0.000114	0.000000
60	0.012937	0.002201	0.000268	0.000000	0.000644	0.007998	0.000752	0.000376	0.000376	0.000107	0.000107	0.000054	0.000054
65	0.009077	0.001119	0.000249	0.000000	0.000622	0.005657	0.000560	0.000560	0.000062	0.000062	0.000062	0.000124	0.000000
70	0.007717	0.001578	0.000263	0.000000	0.000351	0.004297	0.000438	0.000438	0.000088	0.000263	0.000000	0.000000	0.000000
75	0.008342	0.001558	0.000367	0.000000	0.000550	0.004767	0.000367	0.000000	0.000275	0.000183	0.000183	0.000092	0.000000
gross	3.408735	0.670528	0.123100	0.001926	0.262953	1.849850	0.170247	0.080171	0.067916	0.061711	0.037988	0.059623	0.022729
crude	0.050118	0.010118	0.001792	0.000029	0.003873	0.027001	0.002474	0.001159	0.000986	0.000922	0.000546	0.000890	0.000335
m. age[a]	26.0128	25.7803	26.5440	24.7586	25.8972	26.2269	26.3905	26.6024	26.0654	24.9560	24.2819	22.9890	22.6375

age	total	migration from mikkeli to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuoplo	keski	vaasa	oulu	lappi
0	0.090503	0.012646	0.003471	0.000000	0.010331	0.008678	0.035210	0.004794	0.006529	0.004794	0.001405	0.001901	0.000744
5	0.048531	0.005739	0.001559	0.000000	0.004928	0.004304	0.021022	0.002433	0.004179	0.001934	0.000499	0.001622	0.000312
10	0.027718	0.003491	0.001481	0.000000	0.002645	0.002486	0.011796	0.001164	0.002962	0.000899	0.000264	0.000212	0.000317
15	0.083618	0.021387	0.002376	0.000000	0.009951	0.006040	0.031685	0.001733	0.006683	0.002228	0.000495	0.000842	0.000198
20	0.174365	0.044602	0.005029	0.000000	0.018420	0.013938	0.059688	0.004646	0.013720	0.008363	0.001039	0.003772	0.001140
25	0.132657	0.029857	0.004451	0.000062	0.013785	0.011374	0.045188	0.005087	0.009767	0.006614	0.001422	0.003709	0.001422
30	0.071132	0.010292	0.003237	0.000000	0.007221	0.006059	0.027888	0.003901	0.005810	0.003901	0.000415	0.001992	0.000415
35	0.043300	0.005689	0.001659	0.000000	0.004828	0.004267	0.017857	0.001580	0.004425	0.001343	0.000316	0.000869	0.000474
40	0.027567	0.003609	0.000845	0.000000	0.003532	0.002227	0.011979	0.000768	0.002995	0.000691	0.000384	0.000230	0.000307
45	0.021673	0.003612	0.000295	0.000000	0.001401	0.002285	0.009141	0.001032	0.002580	0.000737	0.000074	0.000442	0.000074
50	0.017566	0.002156	0.000559	0.000000	0.001437	0.001118	0.008863	0.000639	0.001757	0.000719	0.000080	0.000240	0.000000
55	0.018367	0.002597	0.000186	0.000000	0.001299	0.001670	0.008813	0.000649	0.001670	0.001299	0.000000	0.000186	0.000000
60	0.016905	0.001839	0.000438	0.000000	0.001226	0.000876	0.009372	0.000876	0.001314	0.000438	0.000000	0.000263	0.000263
65	0.014955	0.001506	0.000401	0.000000	0.001104	0.000903	0.008030	0.000502	0.001506	0.000602	0.000201	0.000100	0.000100
70	0.010768	0.000839	0.000280	0.000000	0.001818	0.000699	0.004894	0.000140	0.001119	0.000699	0.000000	0.000140	0.000140
75	0.010859	0.001086	0.000271	0.000000	0.001765	0.000543	0.005158	0.000271	0.000950	0.000407	0.000136	0.000271	0.000000
gross	4.052421	0.754740	0.132693	0.000309	0.428416	0.337340	1.582916	0.150673	0.339828	0.178342	0.033645	0.083950	0.029569
crude	0.058421	0.011494	0.001904	0.000005	0.006178	0.004849	0.022418	0.002092	0.004859	0.002526	0.000476	0.001202	0.000419
m. age[a]	26.8661	25.2677	25.2141	27.5000	26.4401	25.7968	28.1347	25.7413	28.1062	26.6622	23.0512	25.4260	26.6693

[a] m. age, mean age.

APPENDIX B *Continued.*

	migration from poh.kar to											
age	total	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.089513	0.011955	0.003304	0.000000	0.006317	0.006901	0.003790	0.042473	0.007095	0.001555	0.001069	0.003596	0.001458
5	0.046410	0.006015	0.003119	0.000000	0.003342	0.003342	0.002970	0.022054	0.002673	0.000520	0.000297	0.001337	0.000743
10	0.022489	0.003455	0.001523	0.000000	0.001698	0.001523	0.001171	0.011654	0.000586	0.000117	0.000117	0.000351	0.000293
15	0.084957	0.030443	0.004266	0.000000	0.007585	0.004424	0.002476	0.030496	0.002476	0.000948	0.000474	0.001053	0.000316
20	0.175340	0.053604	0.006638	0.000063	0.015467	0.009143	0.005699	0.068758	0.006826	0.002881	0.001002	0.003883	0.001378
25	0.123530	0.025573	0.004850	0.000073	0.009553	0.007422	0.006540	0.050485	0.008671	0.002131	0.001543	0.004703	0.001984
30	0.069971	0.011851	0.002782	0.000000	0.004637	0.003813	0.003813	0.030503	0.005049	0.002164	0.001340	0.002370	0.001649
35	0.041650	0.006529	0.002869	0.000000	0.002968	0.002572	0.002473	0.018698	0.002176	0.000495	0.000396	0.001583	0.000890
40	0.026764	0.004286	0.001048	0.000000	0.000952	0.001429	0.001333	0.015240	0.001333	0.000286	0.000095	0.000571	0.000190
45	0.018624	0.002483	0.000709	0.000000	0.001862	0.001774	0.000089	0.010110	0.000621	0.000266	0.000266	0.000355	0.000089
50	0.017583	0.001954	0.000977	0.000000	0.001758	0.000684	0.000977	0.009671	0.000781	0.000000	0.000098	0.000391	0.000293
55	0.017583	0.002543	0.000663	0.000000	0.001438	0.000553	0.000663	0.009842	0.000774	0.000221	0.000111	0.000663	0.000111
60	0.019425	0.002181	0.000519	0.000000	0.000935	0.001350	0.000415	0.012049	0.001246	0.000208	0.000104	0.000415	0.000000
65	0.016387	0.001161	0.000645	0.000000	0.000645	0.000645	0.000129	0.011484	0.001161	0.000129	0.000129	0.000250	0.000000
70	0.013709	0.001142	0.000762	0.000000	0.000571	0.000190	0.000190	0.008949	0.001714	0.000000	0.000190	0.000000	0.000000
75	0.012048	0.002008	0.000000	0.000000	0.000602	0.000201	0.001004	0.006827	0.000402	0.000201	0.000000	0.000803	0.000000
gross	3.979917	0.835924	0.173376	0.000681	0.301661	0.229824	0.168669	1.796465	0.217926	0.060605	0.036153	0.111667	0.046965
crude	0.058470	0.013426	0.002586	0.000011	0.004593	0.003390	0.002417	0.025468	0.002991	0.000877	0.000500	0.001552	0.000658
m. age[a]	27.2894	25.0764	26.0987	25.1996	25.8825	24.7786	26.4147	29.1867	27.7514	25.8144	26.9959	26.8818	23.9531

	migration from kuopio to											
age	total	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.082351	0.011265	0.003237	0.000000	0.006863	0.002784	0.006021	0.004597	0.033536	0.004143	0.001619	0.006280	0.002087
5	0.040172	0.005978	0.001824	0.000000	0.003698	0.001418	0.003293	0.002026	0.016819	0.001824	0.000405	0.002229	0.000659
10	0.021143	0.002692	0.000564	0.000000	0.001693	0.001433	0.001433	0.001216	0.008943	0.000738	0.000478	0.001563	0.000391
15	0.078708	0.020465	0.003929	0.000000	0.005566	0.001637	0.003766	0.001760	0.035936	0.002169	0.000573	0.002497	0.000409
20	0.150244	0.038910	0.006703	0.000087	0.009445	0.003917	0.009923	0.005832	0.061325	0.006006	0.001741	0.005440	0.000914
25	0.117653	0.025090	0.004648	0.000050	0.008497	0.004298	0.007647	0.006447	0.042733	0.006048	0.002199	0.007097	0.002899
30	0.066491	0.010517	0.003390	0.000000	0.003944	0.002698	0.005120	0.003183	0.026361	0.004290	0.001176	0.004290	0.001522
35	0.034939	0.004182	0.001619	0.000000	0.002900	0.001282	0.002631	0.002226	0.016053	0.001079	0.000607	0.001686	0.000674
40	0.020221	0.002511	0.000925	0.000000	0.001388	0.000727	0.001388	0.001256	0.009648	0.000595	0.000132	0.001256	0.000396
45	0.010104	0.003089	0.000371	0.000000	0.000989	0.000680	0.002163	0.000680	0.008465	0.000741	0.000185	0.000556	0.000185
50	0.016557	0.002504	0.000974	0.000000	0.000904	0.000626	0.000904	0.000626	0.008070	0.000765	0.000209	0.000974	0.000000
55	0.014577	0.001638	0.000409	0.000000	0.000819	0.000655	0.000655	0.000164	0.009254	0.000573	0.000082	0.000320	0.000000
60	0.014652	0.001267	0.000554	0.000000	0.000713	0.000238	0.001426	0.000871	0.007841	0.000475	0.000158	0.000871	0.000238
65	0.013162	0.001222	0.000752	0.000000	0.001034	0.000564	0.001034	0.000470	0.007239	0.000188	0.000188	0.000376	0.000094
70	0.012547	0.001619	0.000405	0.000000	0.000675	0.000405	0.000675	0.000540	0.007285	0.000270	0.000135	0.000405	0.000135
75	0.010093	0.001022	0.000128	0.000000	0.000767	0.000128	0.000767	0.000383	0.005749	0.000511	0.000128	0.000256	0.000256
gross	3.558071	0.669857	0.152163	0.000685	0.249467	0.117448	0.244218	0.161380	1.526289	0.152080	0.050875	0.180514	0.053895
crude	0.052809	0.010572	0.002280	0.000012	0.003708	0.001711	0.003557	0.002340	0.022298	0.002228	0.000728	0.002618	0.000756
m. age[a]	26.9238	25.1267	26.3985	24.3237	25.4491	26.9116	27.3575	26.3682	28.4583	25.8993	25.5702	24.7793	25.3722

[a] m. age, mean age.

age	total	migration from keski to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.103079	0.012194	0.006333	0.000000	0.011251	0.001550	0.004312	0.001415	0.003975	0.054167	0.003166	0.003503	0.001213
5	0.052337	0.006298	0.002660	0.000000	0.006244	0.000923	0.001194	0.000869	0.001846	0.028232	0.001412	0.001681	0.000977
10	0.025530	0.003486	0.001507	0.000000	0.003156	0.000471	0.001130	0.000141	0.000787	0.012859	0.000754	0.000705	0.000612
15	0.071720	0.014769	0.004953	0.000690	0.008690	0.000901	0.002026	0.000405	0.001306	0.034761	0.002026	0.001531	0.000270
20	0.171960	0.034643	0.012183	0.000093	0.020507	0.003162	0.005441	0.001382	0.004929	0.078865	0.005487	0.003767	0.001581
25	0.134359	0.022466	0.007375	0.000000	0.013489	0.003202	0.005968	0.002378	0.004981	0.062545	0.004513	0.005192	0.002329
30	0.075456	0.010389	0.005194	0.000000	0.007723	0.001982	0.002119	0.001299	0.003554	0.035883	0.003007	0.003007	0.001299
35	0.043783	0.006037	0.002290	0.000000	0.005828	0.001110	0.001804	0.000208	0.001665	0.015518	0.001318	0.001318	0.000694
40	0.024920	0.002993	0.002019	0.000000	0.002645	0.000985	0.000696	0.000139	0.000487	0.013226	0.000626	0.000835	0.000348
45	0.018272	0.002658	0.001130	0.000000	0.001794	0.000399	0.000332	0.000332	0.000664	0.009967	0.000465	0.000399	0.000133
50	0.015991	0.001362	0.000645	0.000000	0.002008	0.000215	0.000359	0.000143	0.000287	0.009753	0.000502	0.000502	0.000215
55	0.013289	0.001693	0.000508	0.000000	0.001608	0.000423	0.000846	0.000000	0.000169	0.007449	0.000085	0.000423	0.000085
60	0.015671	0.001567	0.000412	0.000000	0.002392	0.000165	0.000577	0.000082	0.000495	0.009073	0.000577	0.000247	0.000082
65	0.013022	0.001093	0.000795	0.000000	0.001392	0.000199	0.000596	0.000099	0.000199	0.007853	0.000398	0.000298	0.000099
70	0.010284	0.001581	0.000144	0.000000	0.001437	0.000000	0.000575	0.000144	0.000287	0.005749	0.000144	0.000144	0.000000
75	0.007531	0.000452	0.000301	0.000000	0.000452	0.000301	0.000603	0.000000	0.000000	0.004971	0.000151	0.000301	0.000000
gross	3.985667	0.618405	0.242252	0.000915	0.453083	0.079539	0.142895	0.044784	0.127357	1.904305	0.123154	0.119289	0.049688
crude	0.059821	0.009681	0.003706	0.000017	0.006809	0.001181	0.002106	0.000670	0.001897	0.029374	0.001863	0.001767	0.000758
m. age[a]	25.8368	24.9413	24.5341	20.0403	25.8958	27.5216	26.9413	24.0164	24.3948	26.3529	25.2964	25.4086	24.1226

age	total	migration from vaasa to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.006085	0.006542	0.000100	0.000312	0.005746	0.000969	0.001038	0.000346	0.000935	0.002458	0.054344	0.004292	0.001004
5	0.036551	0.003481	0.004189	0.000059	0.001977	0.000325	0.000561	0.000295	0.000443	0.001062	0.021712	0.001977	0.000472
10	0.018113	0.001764	0.001932	0.000140	0.001512	0.000224	0.000224	0.000028	0.000280	0.000336	0.010610	0.000756	0.000308
15	0.055989	0.007302	0.005756	0.000648	0.004930	0.000293	0.000293	0.000187	0.000240	0.000959	0.033364	0.001332	0.000693
20	0.148267	0.023085	0.013760	0.001102	0.010320	0.001102	0.000618	0.000403	0.001344	0.003870	0.084870	0.006423	0.001290
25	0.112085	0.014322	0.011110	0.000781	0.007580	0.001562	0.001244	0.000723	0.001418	0.004195	0.061684	0.005787	0.001678
30	0.056757	0.006167	0.004302	0.000283	0.004584	0.000893	0.001177	0.000649	0.001014	0.001461	0.032212	0.003083	0.000933
35	0.030846	0.003619	0.002838	0.000082	0.002427	0.000370	0.000535	0.000082	0.000329	0.000905	0.017480	0.001645	0.000535
40	0.018721	0.001868	0.002356	0.000124	0.001694	0.000248	0.000207	0.000083	0.000041	0.000455	0.010662	0.000661	0.000331
45	0.011305	0.001035	0.001035	0.000077	0.000843	0.000230	0.000077	0.000077	0.000038	0.000115	0.007205	0.000307	0.000268
50	0.010638	0.001130	0.000010	0.000117	0.001052	0.000078	0.000117	0.000000	0.000117	0.000507	0.006352	0.000273	0.000078
55	0.008822	0.000582	0.000358	0.000045	0.000761	0.000179	0.000000	0.000000	0.000045	0.000358	0.006270	0.000224	0.000000
60	0.010176	0.000991	0.000450	0.000045	0.000946	0.000090	0.000045	0.000135	0.000135	0.000360	0.006619	0.000270	0.000090
65	0.008719	0.000713	0.000548	0.000000	0.000932	0.000165	0.000000	0.000000	0.000274	0.000548	0.005374	0.000110	0.000055
70	0.006913	0.000676	0.000301	0.000000	0.000376	0.000000	0.000075	0.000000	0.000000	0.000301	0.004809	0.000150	0.000225
75	0.005901	0.000632	0.000140	0.000000	0.000492	0.000000	0.000000	0.000140	0.000000	0.000140	0.004074	0.000140	0.000140
gross	3.129441	0.369096	0.290362	0.019031	0.230857	0.034039	0.031049	0.015742	0.033261	0.090147	1.030205	0.137150	0.040508
crude	0.046787	0.005678	0.004427	0.000303	0.003420	0.000496	0.000444	0.000225	0.000489	0.001326	0.027331	0.002059	0.000589
m. age[a]	25.0790	25.3175	23.2666	24.2672	26.2812	26.1212	23.8267	27.4171	25.1214	26.7961	25.1703	23.3247	26.5452

[a] m. age, mean age.

APPENDIX B *Continued.*

age	migration from oulu to: total	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.094261	0.008046	0.005341	0.000103	0.004189	0.001700	0.001541	0.001404	0.002294	0.002260	0.003972	0.057694	0.005718
5	0.043241	0.003359	0.002334	0.000000	0.002420	0.000882	0.000769	0.000712	0.001338	0.001736	0.001850	0.025421	0.002420
10	0.022132	0.002361	0.001721	0.000000	0.001475	0.000393	0.000320	0.000320	0.000566	0.000566	0.000664	0.012689	0.001057
15	0.069282	0.013591	0.006227	0.000024	0.005872	0.000758	0.000568	0.000450	0.001208	0.000923	0.002865	0.034570	0.002226
20	0.159557	0.025201	0.010422	0.000184	0.011183	0.002021	0.001313	0.001575	0.003754	0.003229	0.006090	0.088231	0.006353
25	0.126325	0.017168	0.007812	0.000061	0.006389	0.002392	0.002029	0.001453	0.004421	0.003331	0.005087	0.068037	0.008145
30	0.069422	0.006805	0.005021	0.000041	0.003652	0.001411	0.001369	0.001203	0.002282	0.002614	0.002739	0.037387	0.004896
35	0.037785	0.004472	0.002090	0.000000	0.002382	0.001129	0.000711	0.000752	0.001379	0.001045	0.001212	0.020564	0.002048
40	0.021922	0.002649	0.001667	0.000000	0.000897	0.000427	0.000470	0.000299	0.000684	0.000513	0.0010\	0.012222	0.001026
45	0.019446	0.002310	0.001344	0.000000	0.000924	0.000336	0.000252	0.000420	0.000504	0.000714	0.000714	0.011172	0.000756
50	0.016671	0.001710	0.000768	0.000000	0.001187	0.000617	0.000198	0.000095	0.000332	0.000285	0.000807	0.010212	0.000475
55	0.015862	0.002019	0.000577	0.000000	0.000692	0.000461	0.000288	0.000288	0.000692	0.000000	0.000750	0.009575	0.000519
60	0.015980	0.001453	0.000523	0.000000	0.001395	0.000349	0.000349	0.000349	0.000523	0.000349	0.000814	0.009239	0.000639
65	0.013128	0.001290	0.000607	0.000000	0.000607	0.000304	0.000304	0.000304	0.000379	0.000228	0.000683	0.008120	0.000304
70	0.010671	0.000562	0.000337	0.000000	0.000562	0.000112	0.000449	0.000225	0.000562	0.000337	0.000112	0.007301	0.000112
75	0.000346	0.000104	0.000313	0.000000	0.000313	0.000104	0.000209	0.000417	0.000417	0.000209	0.000000	0.005738	0.000522
gross	3.720154	0.465508	0.235482	0.002061	0.220297	0.067390	0.055646	0.051330	0.106676	0.091689	0.147138	2.090860	0.186079
crude	0.057752	0.007626	0.003704	0.000035	0.003530	0.000995	0.000793	0.000731	0.001584	0.001395	0.002295	0.032117	0.002866
m. age[a]	26.5233	25.7306	25.1041	18.9702	26.3798	28.2136	29.6123	30.0594	28.9435	26.1059	25.9465	26.7289	25.8102

age	migration from lappi to: total	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.093041	0.007416	0.007042	0.000000	0.004495	0.001648	0.001124	0.000749	0.001573	0.001274	0.002247	0.013934	0.051539
5	0.042386	0.003410	0.002621	0.000000	0.002108	0.000912	0.000399	0.000228	0.001025	0.000968	0.000912	0.005754	0.024041
10	0.025199	0.001992	0.002316	0.000000	0.001436	0.000834	0.000185	0.000093	0.000556	0.000185	0.000649	0.004030	0.012924
15	0.065406	0.010718	0.007873	0.000000	0.004897	0.001053	0.000458	0.000275	0.000503	0.000458	0.001694	0.005218	0.032268
20	0.156501	0.025774	0.014361	0.000000	0.011740	0.002130	0.001147	0.000491	0.002293	0.002239	0.002949	0.020641	0.072735
25	0.120024	0.016539	0.007975	0.000000	0.007322	0.002876	0.001242	0.001242	0.002223	0.002092	0.002876	0.018043	0.057593
30	0.066346	0.006703	0.004039	0.000000	0.003008	0.000945	0.000945	0.000688	0.001719	0.001375	0.002234	0.010227	0.034462
35	0.043381	0.003448	0.002967	0.000000	0.002967	0.000722	0.000401	0.000481	0.000481	0.000882	0.000641	0.005934	0.024537
40	0.028092	0.003187	0.001929	0.000000	0.002348	0.000922	0.000084	0.000252	0.000587	0.000168	0.000252	0.003690	0.014675
45	0.022742	0.003010	0.001923	0.000084	0.002090	0.000753	0.000334	0.000167	0.000502	0.000084	0.000669	0.002341	0.010786
50	0.017855	0.001659	0.000781	0.000000	0.001756	0.000585	0.000585	0.000195	0.000000	0.000195	0.000585	0.001854	0.009659
55	0.015818	0.001993	0.000996	0.000000	0.001619	0.000623	0.000125	0.000125	0.000125	0.000000	0.000249	0.002865	0.007099
60	0.019382	0.001833	0.001048	0.000000	0.001702	0.000917	0.000131	0.000393	0.000655	0.000262	0.000393	0.002226	0.009822
65	0.012529	0.001336	0.000668	0.000000	0.001002	0.000501	0.000000	0.000000	0.000167	0.000167	0.000334	0.002172	0.006181
70	0.010145	0.000966	0.000483	0.000000	0.000483	0.000483	0.000242	0.000242	0.000000	0.000483	0.000242	0.001208	0.005314
75	0.011524	0.000706	0.000000	0.000000	0.000706	0.000235	0.000000	0.000000	0.000000	0.000000	0.000235	0.001646	0.007996
gross	3.751855	0.453455	0.285108	0.000418	0.248400	0.080692	0.037007	0.027696	0.062045	0.054157	0.085803	0.508907	1.908167
crude	0.057101	0.007226	0.004622	0.000005	0.003781	0.001152	0.000540	0.000382	0.000938	0.000805	0.001299	0.007598	0.028752
m. age[a]	27.2157	26.9929	24.6602	47.5000	29.2546	31.6307	27.6824	30.7354	25.9610	26.8161	26.9621	27.1770	27.2476

[a]m. age, mean age.

Appendix C

SAMPLE OF MULTIREGIONAL LIFE TABLE OUTPUT

C1 Death and Migration Probabilities; Option 3
C2 Complete Life History of Uusimaa Birth Cohorts
C3 Life Expectancies by Province of Birth and Province of Residence

APPENDIX C1 Death and Migration Probabilities; Option 3.

province uusimaa
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age	death	migration from uusimaa to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.013191	0.807977	0.028840	0.000694	0.045047	0.019003	0.010830	0.010765	0.012880	0.011837	0.013136	0.020173	0.005628
5	0.001643	0.895650	0.018011	0.000641	0.025812	0.011941	0.005290	0.005865	0.007588	0.008339	0.007712	0.008957	0.002552
10	0.001258	0.942470	0.010227	0.000131	0.015020	0.006099	0.004124	0.002779	0.004025	0.003768	0.004122	0.004514	0.001463
15	0.004299	0.889246	0.013525	0.001133	0.023882	0.009269	0.007889	0.009860	0.008275	0.006360	0.006304	0.014917	0.005041
20	0.004834	0.785788	0.032885	0.001988	0.047268	0.019908	0.013725	0.016528	0.018451	0.013553	0.012292	0.023426	0.009354
25	0.005534	0.799981	0.031760	0.000997	0.048261	0.022532	0.011678	0.011912	0.014186	0.013720	0.013249	0.019093	0.007097
30	0.006713	0.865148	0.023038	0.000426	0.032254	0.014860	0.007396	0.006526	0.010165	0.009354	0.008502	0.011746	0.003872
35	0.008626	0.910149	0.015898	0.000329	0.020800	0.008544	0.004699	0.003453	0.006122	0.005843	0.006560	0.006517	0.002461
40	0.019328	0.934371	0.007896	0.000436	0.013194	0.004561	0.003781	0.002994	0.002452	0.002584	0.003112	0.003971	0.001318
45	0.028228	0.934609	0.007414	0.000155	0.010395	0.004870	0.002435	0.001618	0.002675	0.001777	0.001557	0.003726	0.000541
50	0.037382	0.928478	0.004749	0.000424	0.011251	0.002518	0.001995	0.002069	0.002485	0.003838	0.002784	0.001522	0.000503
55	0.062114	0.907775	0.005128	0.000468	0.009402	0.004790	0.002331	0.001394	0.001791	0.001230	0.001620	0.001677	0.000282
60	0.091804	0.876306	0.006348	0.000088	0.011403	0.002711	0.003291	0.001309	0.001226	0.001482	0.001683	0.002080	0.000269
65	0.136917	0.835143	0.005142	0.000391	0.009301	0.003125	0.002135	0.001170	0.002545	0.001086	0.001481	0.001171	0.000393
70	0.200462	0.781805	0.003058	0.000000	0.006200	0.001704	0.001288	0.001305	0.001561	0.001041	0.000660	0.000655	0.000262
75	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

province turkpor
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age	death	migration from turkpor to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.012879	0.040107	0.841185	0.000841	0.038656	0.007983	0.004667	0.003379	0.006756	0.007876	0.015986	0.013817	0.005868
5	0.002234	0.023952	0.915197	0.000827	0.023384	0.003369	0.002082	0.002470	0.003784	0.004990	0.007643	0.006531	0.003536
10	0.001704	0.012510	0.958384	0.000280	0.012156	0.001898	0.001228	0.001219	0.001411	0.002221	0.003610	0.002446	0.000934
15	0.004674	0.026692	0.897407	0.001356	0.028794	0.002538	0.002735	0.002538	0.003475	0.005257	0.008522	0.011237	0.004775
20	0.005228	0.075543	0.768428	0.002531	0.060921	0.007110	0.005873	0.004418	0.009304	0.012126	0.018462	0.020704	0.009351
25	0.005149	0.071070	0.795392	0.001976	0.046614	0.009204	0.006406	0.004385	0.007945	0.011146	0.016544	0.016503	0.007666
30	0.006178	0.036968	0.870879	0.000727	0.034999	0.006629	0.003934	0.003026	0.005134	0.006373	0.011606	0.009558	0.003990
35	0.011123	0.019883	0.925960	0.000229	0.016178	0.004378	0.001896	0.002159	0.002567	0.004182	0.004687	0.004590	0.002169
40	0.013569	0.012435	0.949415	0.000004	0.010945	0.001211	0.001077	0.000839	0.001868	0.002214	0.002578	0.002805	0.001043
45	0.022054	0.008693	0.949980	0.000222	0.009732	0.001770	0.000568	0.000673	0.000571	0.001761	0.001557	0.001872	0.000549
50	0.039321	0.006786	0.943493	0.000239	0.004814	0.000947	0.000130	0.000241	0.000244	0.001066	0.001541	0.000942	0.000236
55	0.052323	0.005866	0.928939	0.000267	0.007340	0.000824	0.000282	0.000138	0.000540	0.000936	0.001351	0.000409	0.000786
60	0.081581	0.005109	0.900860	0.000000	0.007167	0.000623	0.000141	0.000608	0.000370	0.001090	0.001476	0.000494	0.000481
65	0.131762	0.002510	0.857009	0.000001	0.005136	0.000795	0.000527	0.000265	0.000140	0.000531	0.000665	0.000525	0.000133
70	0.200374	0.003916	0.787396	0.000000	0.006434	0.000511	0.000172	0.000174	0.000505	0.000008	0.000172	0.000337	0.000003
75	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

province ahvenan
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age	death	migration from uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.010056	0.024246	0.027066	0.896485	0.015517	0.003352	0.000440	0.000324	0.003199	0.003284	0.012131	0.003620	0.000279
5	0.000068	0.029926	0.019389	0.929418	0.003439	0.000273	0.000158	0.002797	0.000212	0.005539	0.008390	0.000286	0.000106
10	0.000014	0.006360	0.000087	0.980587	0.000100	0.003169	0.000034	0.000013	0.000023	0.000022	0.009539	0.000037	0.000013
15	0.003314	0.016243	0.024390	0.924378	0.001080	0.000205	0.002984	0.000158	0.003055	0.014573	0.006217	0.003261	0.000142
20	0.000451	0.065985	0.047222	0.812597	0.012991	0.003301	0.000873	0.000858	0.003231	0.003319	0.035686	0.012604	0.000880
25	0.004883	0.048051	0.034183	0.862246	0.008677	0.002998	0.000738	0.002485	0.006436	0.006644	0.018865	0.003257	0.000537
30	0.013160	0.039951	0.027782	0.884791	0.007317	0.000526	0.000365	0.000275	0.006159	0.000456	0.015437	0.003540	0.000240
35	0.008234	0.015582	0.007973	0.955669	0.000303	0.000098	0.000061	0.000039	0.000070	0.000090	0.011719	0.000118	0.000044
40	0.025640	0.016435	0.004258	0.940836	0.000186	0.000049	0.000041	0.000030	0.000026	0.000040	0.012376	0.000060	0.000023
45	0.031980	0.000017	0.003892	0.964072	0.000019	0.000004	0.000001	0.000001	0.000001	0.000004	0.000003	0.000004	0.000001
50	0.023195	0.003716	0.000017	0.969256	0.000031	0.000006	0.000005	0.000004	0.000006	0.000012	0.003745	0.000005	0.000002
55	0.075750	0.003607	0.000013	0.916920	0.000024	0.000011	0.000004	0.000003	0.000004	0.000005	0.003653	0.000005	0.000001
60	0.077192	0.000016	0.000008	0.915783	0.000016	0.000002	0.000001	0.000002	0.000002	0.000006	0.006967	0.000004	0.000001
65	0.135136	0.008214	0.004177	0.848216	0.004168	0.000020	0.000015	0.000008	0.000014	0.000010	0.000010	0.000009	0.000004
70	0.202020	0.000000	0.000000	0.797980	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
75	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

province hame
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age	death	migration from uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.013978	0.061309	0.044539	0.000058	0.790158	0.011603	0.012854	0.007911	0.009669	0.015335	0.014682	0.014028	0.003877
5	0.001662	0.037482	0.026727	0.000305	0.886059	0.008330	0.006155	0.003258	0.004298	0.009635	0.006030	0.007375	0.002684
10	0.001487	0.021791	0.012419	0.000195	0.940643	0.004597	0.002226	0.002393	0.001677	0.003981	0.002355	0.004885	0.001351
15	0.004103	0.047500	0.028031	0.000228	0.866709	0.006932	0.006451	0.005701	0.004984	0.008746	0.007225	0.010953	0.002437
20	0.004153	0.123248	0.064121	0.000523	0.698857	0.014295	0.011965	0.008567	0.012577	0.019338	0.015055	0.018292	0.009008
25	0.005828	0.106907	0.052235	0.000467	0.730078	0.017273	0.011829	0.008788	0.010196	0.016988	0.015629	0.017126	0.006654
30	0.006777	0.055525	0.031932	0.000130	0.838468	0.011091	0.010175	0.005720	0.006204	0.011806	0.008782	0.010036	0.003353
35	0.009102	0.028826	0.021398	0.000008	0.902951	0.006507	0.005523	0.003149	0.003624	0.007891	0.003975	0.005228	0.001818
40	0.018385	0.022202	0.012677	0.000006	0.926494	0.002850	0.003146	0.002078	0.001631	0.003637	0.002955	0.002840	0.001100
45	0.028042	0.013216	0.009998	0.000003	0.934362	0.001570	0.002287	0.001761	0.001543	0.002232	0.001899	0.002011	0.001156
50	0.038017	0.014231	0.007562	0.000005	0.928677	0.002269	0.001255	0.000884	0.000524	0.002027	0.001915	0.002255	0.000380
55	0.054291	0.010479	0.007582	0.000004	0.917909	0.002304	0.002115	0.000432	0.000588	0.001708	0.001586	0.000717	0.000284
60	0.088715	0.010628	0.006968	0.000001	0.883349	0.002225	0.001955	0.000789	0.000791	0.001303	0.001328	0.001051	0.000898
65	0.135334	0.007065	0.004099	0.000002	0.843657	0.001886	0.001722	0.000865	0.000884	0.001877	0.000738	0.001012	0.000859
70	0.205469	0.005766	0.004430	0.000000	0.779199	0.000958	0.000753	0.000950	0.000576	0.001132	0.000195	0.000006	0.000567
75	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

APPENDIX C1 *Continued.*

province kymi

age	death	migration from kymi to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.015873	0.065237	0.015088	0.000246	0.030727	0.806192	0.018702	0.010767	0.008957	0.007888	0.007512	0.009116	0.003696
5	0.001931	0.035704	0.008839	0.000196	0.015651	0.902442	0.011429	0.004065	0.005060	0.004868	0.002241	0.005667	0.001908
10	0.001602	0.019957	0.005153	0.000346	0.009529	0.942709	0.009722	0.002266	0.002315	0.001268	0.001779	0.002638	0.000715
15	0.005987	0.047599	0.007612	0.000039	0.023727	0.885086	0.011500	0.005862	0.003377	0.002278	0.001845	0.003853	0.001236
20	0.005582	0.136249	0.020309	0.000331	0.042059	0.720566	0.020327	0.011394	0.010598	0.011216	0.006231	0.010567	0.004571
25	0.007175	0.108607	0.021908	0.000507	0.037205	0.745453	0.020982	0.011395	0.011234	0.013018	0.007127	0.011739	0.003650
30	0.009403	0.059264	0.015352	0.000023	0.024727	0.841430	0.012747	0.008538	0.008236	0.006698	0.004301	0.006703	0.002498
35	0.011473	0.028035	0.008152	0.000006	0.014165	0.907121	0.009482	0.003975	0.004764	0.003203	0.003011	0.003498	0.003112
40	0.017241	0.019578	0.004164	0.000005	0.009210	0.936041	0.006577	0.002028	0.001410	0.001818	0.000506	0.001174	0.000249
45	0.033217	0.016576	0.003310	0.000216	0.010031	0.927169	0.004823	0.001511	0.001532	0.000674	0.000243	0.000684	0.000015
50	0.040650	0.012491	0.002897	0.000242	0.005722	0.929208	0.003267	0.001416	0.001659	0.000276	0.000503	0.001195	0.000473
55	0.063108	0.006316	0.002410	0.000002	0.005290	0.915259	0.004394	0.000788	0.000550	0.000285	0.001067	0.000529	0.000004
60	0.096523	0.009763	0.001253	0.000001	0.002938	0.881369	0.003331	0.001670	0.001670	0.000489	0.000494	0.000258	0.000240
65	0.152143	0.004735	0.001085	0.000001	0.002666	0.833330	0.002339	0.002341	0.000285	0.000272	0.000272	0.000527	0.000003
70	0.220022	0.006229	0.001057	0.000000	0.001416	0.766498	0.001684	0.001707	0.000356	0.001022	0.000004	0.000004	0.000002
75	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

province mikkeli

age	death	migration from mikkeli to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.012560	0.054965	0.017008	0.000039	0.043946	0.035720	0.749324	0.019690	0.026628	0.019852	0.007017	0.009598	0.003653
5	0.001592	0.026964	0.007925	0.000018	0.022766	0.019606	0.870470	0.010997	0.018799	0.008944	0.002569	0.007743	0.001606
10	0.001043	0.016786	0.007239	0.000006	0.012684	0.011768	0.921917	0.005533	0.013885	0.004286	0.001350	0.001169	0.001533
15	0.005321	0.093333	0.011864	0.000074	0.043383	0.025959	0.766920	0.007540	0.027258	0.009711	0.002719	0.004714	0.001205
20	0.005573	0.172664	0.025399	0.000272	0.069937	0.049904	0.554592	0.017028	0.046614	0.029442	0.006258	0.016823	0.005494
25	0.005410	0.121659	0.021912	0.000365	0.055370	0.043619	0.640412	0.019262	0.035895	0.025438	0.007472	0.016668	0.006518
30	0.008220	0.046817	0.015550	0.000020	0.032020	0.026080	0.799225	0.016548	0.024525	0.016841	0.002550	0.009374	0.002231
35	0.011003	0.026571	0.008220	0.000006	0.022254	0.019372	0.871095	0.007201	0.019867	0.006213	0.001677	0.004241	0.002279
40	0.017170	0.017149	0.004206	0.000004	0.016519	0.010404	0.909273	0.003630	0.013863	0.003277	0.001858	0.001202	0.001446
45	0.031147	0.016980	0.001527	0.000003	0.006693	0.010609	0.910013	0.004813	0.011911	0.003460	0.000383	0.002105	0.000356
50	0.050032	0.010093	0.002685	0.000003	0.006746	0.005190	0.909343	0.002947	0.008044	0.003354	0.000406	0.001146	0.000011
55	0.067554	0.011834	0.000930	0.000003	0.006012	0.007610	0.888810	0.002920	0.007563	0.005872	0.000025	0.000862	0.000006
60	0.097460	0.008172	0.002014	0.000000	0.005496	0.003888	0.869089	0.003849	0.005745	0.001935	0.000023	0.001183	0.001147
65	0.154437	0.006336	0.001744	0.000001	0.004693	0.003790	0.816362	0.002092	0.006304	0.002525	0.000860	0.000434	0.000421
70	0.245531	0.003299	0.001113	0.000000	0.007036	0.002686	0.731810	0.000547	0.004242	0.002655	0.000005	0.000541	0.000535
75	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

province poh.kar
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age	death	migration from uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.016976	0.052013	0.016000	0.000038	0.028349	0.029023	0.016036	0.776790	0.028978	0.007391	0.005561	0.016319	0.006527
5	0.002907	0.028073	0.014790	0.000020	0.015856	0.015427	0.013419	0.882888	0.012258	0.002726	0.001653	0.006476	0.003509
10	0.004024	0.016605	0.007445	0.000004	0.008278	0.007312	0.005566	0.943449	0.002859	0.000633	0.000636	0.001773	0.001415
15	0.003084	0.129249	0.019566	0.000098	0.033771	0.019295	0.010498	0.759015	0.010692	0.004572	0.002695	0.005705	0.001762
20	0.005243	0.201892	0.030516	0.000520	0.060671	0.034607	0.020338	0.578746	0.025426	0.012377	0.006047	0.017317	0.006299
25	0.009283	0.106753	0.022935	0.000406	0.040663	0.030129	0.024591	0.686003	0.032746	0.010021	0.007714	0.020212	0.008545
30	0.008636	0.052976	0.013576	0.000022	0.021492	0.016950	0.016348	0.813862	0.021561	0.009833	0.006393	0.011022	0.007328
35	0.010808	0.030260	0.013622	0.000007	0.014113	0.011925	0.011156	0.882009	0.010023	0.002478	0.002032	0.007431	0.004135
40	0.019305	0.020237	0.005094	0.000005	0.004708	0.006760	0.006227	0.925794	0.006287	0.001398	0.000511	0.002752	0.000914
45	0.028003	0.011793	0.003461	0.000003	0.008842	0.008303	0.000473	0.931518	0.002923	0.001278	0.001283	0.001697	0.000424
50	0.050292	0.009164	0.004619	0.000003	0.008217	0.003200	0.004490	0.912683	0.003610	0.000046	0.000488	0.001836	0.001352
55	0.070761	0.011593	0.003102	0.000003	0.006630	0.002568	0.003004	0.893742	0.003536	0.001028	0.000531	0.003001	0.000502
60	0.099144	0.009652	0.002370	0.000001	0.004214	0.005961	0.001866	0.868082	0.005444	0.000930	0.000483	0.001841	0.000012
65	0.159464	0.004890	0.002759	0.000001	0.002759	0.002711	0.000558	0.819797	0.004868	0.000550	0.000555	0.001081	0.000005
70	0.225421	0.004511	0.003009	0.000000	0.002271	0.000752	0.000739	0.755948	0.006579	0.000010	0.000749	0.000009	0.000004
75	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

province kuopio
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age	death	migration from uusimaa	turkpor	kuopio to ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.014111	0.049218	0.015945	0.000039	0.030554	0.012851	0.024398	0.018996	0.772794	0.017436	0.007879	0.026988	0.008790
5	0.002263	0.027883	0.009044	0.000017	0.017436	0.006900	0.014821	0.009262	0.888103	0.008484	0.002155	0.010474	0.003159
10	0.001317	0.013052	0.002929	0.000004	0.008252	0.006888	0.006781	0.005792	0.939703	0.003544	0.002347	0.007499	0.001890
15	0.004665	0.090206	0.018323	0.000075	0.025756	0.007840	0.015610	0.007638	0.803792	0.009527	0.003063	0.011412	0.002093
20	0.006055	0.155597	0.030501	0.000575	0.041514	0.017446	0.033685	0.020927	0.635662	0.022543	0.008458	0.022409	0.004708
25	0.007456	0.104832	0.022340	0.000315	0.037096	0.018906	0.028216	0.024331	0.681747	0.023661	0.010252	0.028905	0.011945
30	0.008540	0.047405	0.016133	0.000022	0.018727	0.012357	0.021523	0.013669	0.811643	0.018446	0.005758	0.018906	0.006871
35	0.016107	0.019812	0.007948	0.000005	0.013750	0.006162	0.011879	0.010064	0.895216	0.005039	0.002954	0.007887	0.003177
40	0.018965	0.012053	0.004530	0.000003	0.006686	0.003508	0.006472	0.005884	0.930584	0.002830	0.000685	0.005933	0.001867
45	0.029226	0.014602	0.001862	0.000002	0.004781	0.003270	0.009978	0.003209	0.925166	0.003497	0.000903	0.002637	0.000868
50	0.048386	0.011676	0.004601	0.000004	0.004315	0.002934	0.004159	0.002888	0.911935	0.003570	0.001011	0.004508	0.000014
55	0.063044	0.007547	0.001935	0.000002	0.003832	0.003041	0.002986	0.000755	0.912328	0.002632	0.000394	0.001499	0.000005
60	0.107343	0.005639	0.002506	0.000000	0.003227	0.001085	0.006229	0.003813	0.862493	0.002089	0.000723	0.003815	0.001038
65	0.136331	0.005211	0.003248	0.000001	0.004441	0.002405	0.004333	0.001981	0.838436	0.000811	0.000814	0.001588	0.000400
70	0.232306	0.006335	0.001606	0.000000	0.002669	0.001575	0.002563	0.002079	0.747210	0.001041	0.000530	0.001564	0.000520
75	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

APPENDIX C1 *Continued.*

province keski
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age	death	migration from keski to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.014009	0.052817	0.028630	0.000047	0.047613	0.007774	0.017806	0.006564	0.016788	0.772298	0.014191	0.015928	0.005534
5	0.002921	0.029300	0.012907	0.000021	0.028564	0.004605	0.005587	0.004103	0.008538	0.884105	0.006727	0.008047	0.004576
10	0.001873	0.016751	0.007409	0.000005	0.015097	0.002367	0.005347	0.000742	0.003423	0.936922	0.003666	0.003479	0.002918
15	0.004277	0.066298	0.022870	0.000469	0.038754	0.004542	0.008701	0.002186	0.005968	0.827795	0.009276	0.007389	0.001475
20	0.005064	0.139293	0.050534	0.000639	0.077935	0.014166	0.019345	0.006346	0.019233	0.622056	0.021546	0.016907	0.006937
25	0.003995	0.095428	0.032796	0.000141	0.054743	0.014697	0.022451	0.010077	0.019533	0.695356	0.018864	0.022077	0.009842
30	0.008418	0.046850	0.023788	0.000029	0.034131	0.009258	0.009409	0.005923	0.015343	0.813833	0.013500	0.013624	0.005894
35	0.011318	0.028087	0.011097	0.000007	0.026794	0.005362	0.008202	0.001123	0.007715	0.884596	0.006206	0.006245	0.003247
40	0.013939	0.014316	0.009696	0.000004	0.012531	0.004317	0.003290	0.000708	0.002345	0.930210	0.003013	0.003987	0.001643
45	0.026583	0.012593	0.005440	0.000002	0.008524	0.001925	0.001584	0.001584	0.003134	0.933866	0.002227	0.001908	0.000630
50	0.041410	0.006462	0.003097	0.000003	0.009414	0.001035	0.001673	0.000679	0.001345	0.929137	0.002384	0.002358	0.001003
55	0.066607	0.007789	0.002393	0.000002	0.007422	0.001980	0.003835	0.000016	0.000801	0.906432	0.000409	0.001928	0.000386
60	0.100878	0.006971	0.001906	0.000001	0.010601	0.000758	0.002555	0.000382	0.002176	0.869712	0.002586	0.001105	0.000369
65	0.141743	0.004655	0.003425	0.000001	0.005938	0.000861	0.002502	0.000427	0.000861	0.836202	0.001703	0.001260	0.000422
70	0.236121	0.006180	0.000589	0.000000	0.005618	0.000014	0.002183	0.000561	0.001112	0.746498	0.000563	0.000557	0.000004
75	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

province vaasa
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age	death	migration from vaasa to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.015308	0.029930	0.035933	0.001391	0.025832	0.004896	0.004886	0.001964	0.004578	0.010767	0.840719	0.019082	0.004715
5	0.001354	0.016605	0.019747	0.000290	0.009646	0.001743	0.002689	0.001484	0.002230	0.005058	0.927472	0.009365	0.002316
10	0.001539	0.008616	0.009406	0.000683	0.007366	0.001141	0.001106	0.000172	0.001381	0.001648	0.961756	0.003693	0.001493
15	0.004258	0.034144	0.026619	0.002949	0.022822	0.001642	0.001530	0.001074	0.001335	0.004479	0.889518	0.006396	0.003234
20	0.004142	0.097783	0.056997	0.004825	0.043754	0.006332	0.003621	0.002783	0.006722	0.015346	0.725570	0.026179	0.005947
25	0.004621	0.064081	0.047262	0.003323	0.033216	0.007836	0.005794	0.003708	0.006747	0.017187	0.774374	0.024334	0.007518
30	0.008049	0.028890	0.020348	0.000914	0.021097	0.004477	0.005414	0.003113	0.004842	0.006761	0.877739	0.013972	0.004381
35	0.009633	0.017201	0.013535	0.000392	0.011587	0.001912	0.002549	0.000476	0.001671	0.004272	0.926482	0.007743	0.002547
40	0.014023	0.008997	0.011303	0.000588	0.008112	0.001226	0.001010	0.000422	0.000242	0.002183	0.947153	0.003177	0.001564
45	0.026300	0.004975	0.004983	0.000369	0.004055	0.001110	0.000376	0.000376	0.000199	0.000561	0.953966	0.001470	0.001259
50	0.033399	0.005376	0.003911	0.000562	0.004998	0.000386	0.000557	0.000012	0.000558	0.002398	0.946178	0.001295	0.000369
55	0.054913	0.002724	0.001696	0.000208	0.003559	0.000844	0.000014	0.000004	0.000214	0.001657	0.933134	0.001032	0.000003
60	0.081099	0.004470	0.002072	0.000205	0.004288	0.000420	0.000219	0.000609	0.000610	0.001612	0.902778	0.001214	0.000403
65	0.132170	0.003062	0.002384	0.000001	0.004016	0.000712	0.000015	0.000007	0.001176	0.002340	0.853410	0.000472	0.000235
70	0.209559	0.002699	0.001207	0.000000	0.001509	0.000005	0.000295	0.000004	0.000005	0.001174	0.782065	0.000594	0.000882
75	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

province oulu

age	death	migration from uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.013455	0.036043	0.024475	0.000482	0.019320	0.008346	0.006970	0.006302	0.010112	0.009967	0.017544	0.823138	0.023846
5	0.002539	0.016123	0.011287	0.000014	0.011625	0.004313	0.003667	0.003372	0.006285	0.008079	0.008738	0.912805	0.011155
10	0.001362	0.011449	0.008406	0.000004	0.007214	0.001965	0.001571	0.001563	0.002742	0.002734	0.003246	0.952713	0.005030
15	0.003507	0.061201	0.028445	0.000184	0.026887	0.003821	0.002793	0.002299	0.005465	0.004358	0.012928	0.838395	0.009716
20	0.005219	0.106517	0.044675	0.000958	0.046747	0.009626	0.006140	0.006833	0.015103	0.013219	0.024138	0.697501	0.023325
25	0.007090	0.075051	0.034302	0.000371	0.028893	0.011211	0.008738	0.006565	0.017691	0.014019	0.021189	0.743481	0.031399
30	0.009001	0.031707	0.022990	0.000203	0.017226	0.006723	0.006267	0.005461	0.010177	0.011564	0.012465	0.845140	0.021076
35	0.010197	0.021079	0.010113	0.000006	0.011431	0.005394	0.003384	0.003512	0.006434	0.004898	0.005741	0.908433	0.009378
40	0.020860	0.012632	0.008011	0.000004	0.004412	0.002081	0.002233	0.001440	0.003248	0.002444	0.005073	0.932802	0.004760
45	0.033735	0.010931	0.006420	0.000003	0.004461	0.001626	0.001202	0.001982	0.002379	0.003356	0.003391	0.927024	0.003489
50	0.044945	0.008044	0.003619	0.000004	0.005607	0.002894	0.000899	0.000456	0.001550	0.001357	0.003807	0.924620	0.002198
55	0.075009	0.009205	0.002691	0.000003	0.003238	0.002139	0.001319	0.001307	0.003157	0.000022	0.003451	0.896134	0.002325
60	0.100587	0.006466	0.002387	0.000001	0.006227	0.001567	0.001556	0.001543	0.002301	0.001544	0.003635	0.869411	0.002775
65	0.155197	0.005436	0.002605	0.000001	0.002609	0.001291	0.001273	0.001269	0.001610	0.000967	0.002895	0.823582	0.001265
70	0.223457	0.002237	0.001343	0.000000	0.002232	0.000446	0.001724	0.000877	0.002174	0.001305	0.000444	0.763325	0.000437
75	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

province lappi

age	death	migration from uusimaa	turkpor	ahvenan	lappi to hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.012412	0.033536	0.031350	0.000049	0.020744	0.007760	0.005290	0.003695	0.007240	0.006083	0.010613	0.058239	0.802990
5	0.002813	0.016319	0.012547	0.000013	0.010201	0.004418	0.002005	0.001205	0.004876	0.004667	0.004484	0.026512	0.909940
10	0.003185	0.009718	0.011197	0.000005	0.007016	0.004017	0.000946	0.000495	0.002686	0.000952	0.003170	0.019134	0.937478
15	0.004967	0.048966	0.035591	0.000070	0.022777	0.005030	0.002281	0.001531	0.002536	0.002377	0.007940	0.022854	0.843080
20	0.008052	0.107725	0.058409	0.000271	0.048611	0.009908	0.005504	0.003339	0.010239	0.009918	0.013257	0.074912	0.649854
25	0.008424	0.072571	0.034939	0.000119	0.032049	0.012887	0.005910	0.005712	0.009926	0.009529	0.013040	0.069561	0.725332
30	0.010868	0.031076	0.018859	0.000024	0.014416	0.004721	0.004484	0.003313	0.007839	0.006478	0.010349	0.044050	0.843523
35	0.010360	0.016497	0.014086	0.000005	0.014007	0.003543	0.001982	0.001936	0.002406	0.004177	0.003157	0.027076	0.900766
40	0.026221	0.015099	0.009210	0.000004	0.011037	0.004353	0.000483	0.001222	0.002782	0.000856	0.001270	0.017104	0.910361
45	0.034343	0.014141	0.009110	0.000395	0.009836	0.003539	0.001584	0.000817	0.002362	0.000446	0.003169	0.010823	0.909435
50	0.042918	0.007826	0.003722	0.000003	0.008235	0.002753	0.002706	0.000916	0.000036	0.000943	0.002774	0.008581	0.918586
55	0.073568	0.009102	0.004610	0.000003	0.007421	0.002865	0.000592	0.000576	0.000599	0.000019	0.001178	0.012824	0.886644
60	0.105190	0.008103	0.004691	0.000001	0.007550	0.004033	0.000617	0.001729	0.002857	0.001163	0.001770	0.009662	0.852634
65	0.149806	0.005648	0.002872	0.000001	0.004271	0.002117	0.000023	0.000016	0.000719	0.000715	0.001434	0.009035	0.823343
70	0.225927	0.003812	0.001914	0.000000	0.001925	0.001880	0.000931	0.000940	0.000018	0.001861	0.000948	0.004675	0.755170
75	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

APPENDIX C2 Complete Life History of Uusimaa Birth Cohorts.

initial province of cohort uusimaa
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1.-province of residence uusimaa

age	deaths	migrants to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	1319.	80798.	2884.	69.	4505.	1900.	1033.	1076.	1288.	1184.	1314.	2017.	563.
5	133.	72366.	1455.	52.	2086.	965.	427.	474.	613.	674.	623.	724.	206.
10	92.	68676.	745.	10.	1094.	444.	301.	203.	293.	275.	300.	329.	107.
15	297.	61433.	934.	78.	1650.	640.	545.	681.	572.	439.	435.	1031.	348.
20	305.	49561.	2074.	125.	2981.	1256.	866.	1042.	1164.	855.	775.	1477.	590.
25	298.	43069.	1710.	54.	2598.	1213.	629.	641.	764.	739.	713.	1028.	382.
30	316.	40736.	1085.	20.	1519.	700.	348.	307.	479.	440.	400.	553.	182.
35	371.	39115.	683.	14.	894.	367.	202.	148.	263.	251.	282.	280.	106.
40	781.	37741.	319.	18.	533.	184.	153.	121.	99.	104.	126.	160.	53.
45	1090.	36095.	286.	6.	401.	188.	94.	62.	103.	69.	60.	144.	21.
50	1374.	34122.	175.	16.	413.	93.	73.	76.	91.	141.	102.	56.	18.
55	2152.	31453.	178.	16.	326.	166.	81.	48.	62.	43.	56.	58.	10.
60	2926.	27933.	202.	3.	363.	86.	105.	42.	39.	47.	54.	66.	9.
65	3876.	23645.	146.	11.	263.	88.	60.	33.	72.	31.	42.	33.	11.
70	4785.	18663.	73.	0.	148.	41.	31.	31.	37.	25.	16.	16.	6.
75	18848.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
total	38964.	665405.	12949.	492.	19775.	8332.	4997.	4987.	5939.	5316.	5299.	7972.	2612.

2.-province of residence turkpor

age	deaths	migrants to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	6.	69.	2639.	2.	67.	10.	6.	7.	11.	14.	22.	19.	10.
10	7.	54.	4160.	1.	53.	8.	5.	5.	6.	10.	16.	11.	4.
15	24.	136.	4566.	7.	147.	13.	14.	13.	18.	27.	43.	57.	24.
20	32.	457.	4645.	15.	368.	43.	36.	27.	56.	73.	112.	125.	57.
25	41.	572.	6398.	16.	375.	74.	52.	35.	64.	90.	133.	133.	62.
30	58.	348.	8187.	7.	329.	62.	37.	28.	48.	60.	109.	90.	38.
35	113.	202.	9428.	2.	165.	45.	19.	22.	26.	43.	48.	47.	22.
40	145.	133.	10153.	0.	117.	13.	12.	9.	20.	24.	28.	30.	11.
45	239.	94.	10308.	2.	106.	19.	6.	7.	6.	19.	17.	20.	6.
50	427.	74.	10245.	3.	52.	10.	1.	3.	3.	12.	17.	10.	3.
55	556.	62.	9868.	3.	78.	9.	3.	1.	6.	10.	14.	4.	8.
60	833.	52.	9196.	0.	73.	6.	1.	6.	4.	11.	15.	5.	5.
65	1257.	24.	8176.	0.	49.	8.	5.	3.	1.	5.	6.	5.	1.
70	1689.	33.	6637.	0.	54.	4.	1.	1.	4.	0.	1.	3.	0.
75	6783.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
total	12211.	2310.	104608.	59.	2033.	324.	199.	168.	273.	397.	581.	559.	251.

3.-province of residence ahvenan

age	deaths	migrants to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	0.	2.	1.	65.	0.	0.	0.	0.	0.	0.	1.	0.	0.
10	0.	1.	0.	119.	0.	0.	0.	0.	0.	0.	1.	0.	0.
15	0.	2.	3.	123.	0.	0.	0.	0.	0.	2.	1.	0.	0.
20	0.	14.	10.	177.	3.	1.	0.	0.	1.	1.	0.	3.	0.
25	2.	17.	12.	297.	3.	1.	0.	1.	2.	2.	7.	1.	0.
30	5.	16.	11.	345.	3.	0.	0.	0.	2.	0.	6.	1.	0.
35	3.	6.	3.	361.	0.	0.	0.	0.	0.	0.	4.	0.	0.
40	10.	6.	2.	357.	0.	0.	0.	0.	0.	0.	5.	0.	0.
45	12.	0.	1.	364.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50	9.	1.	0.	365.	0.	0.	0.	0.	0.	0.	1.	0.	0.
55	29.	1.	0.	354.	0.	0.	0.	0.	0.	0.	1.	0.	0.
60	29.	0.	0.	343.	0.	0.	0.	0.	0.	0.	3.	0.	0.
65	47.	3.	1.	294.	1.	0.	0.	0.	0.	0.	0.	0.	0.
70	62.	0.	0.	243.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75	243.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
total	451.	69.	45.	3807.	11.	2.	1.	1.	6.	6.	37.	6.	1.

4 - province of residence hame

age	deaths	migrants to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	7.	169.	120.	1.	3991.	38.	28.	15.	19.	43.	27.	33.	12.
10	9.	138.	78.	1.	5939.	29.	14.	15.	11.	25.	15.	31.	9.
15	30.	343.	203.	2.	6263.	50.	47.	41.	36.	63.	52.	79.	18.
20	36.	1054.	548.	4.	5977.	122.	102.	73.	108.	165.	129.	156.	77.
25	60.	1110.	542.	5.	7578.	179.	123.	91.	106.	176.	162.	178.	69.
30	78.	640.	368.	1.	9660.	128.	117.	66.	71.	136.	101.	116.	39.
35	111.	351.	260.	0.	10982.	79.	67.	38.	44.	96.	48.	64.	22.
40	230.	278.	159.	0.	11594.	36.	39.	26.	20.	46.	37.	36.	14.
45	351.	165.	125.	0.	11695.	20.	28.	22.	19.	28.	24.	25.	14.
50	472.	177.	94.	0.	11532.	28.	16.	11.	7.	25.	24.	28.	5.
55	662.	128.	92.	0.	11190.	28.	26.	5.	7.	21.	19.	9.	3.
60	1042.	125.	82.	0.	10374.	26.	23.	9.	9.	15.	16.	12.	11.
65	1483.	77.	45.	0.	9245.	21.	19.	9.	10.	21.	8.	11.	9.
70	1984.	56.	43.	0.	7522.	9.	7.	9.	6.	11.	2.	0.	5.
75	7780.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
total	14343.	4809.	2760.	15.	123543.	793.	655.	432.	473.	872.	664.	778.	307.

APPENDIX C2 *Continued.*

5.- province of residence kymi

age	deaths	migrants to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	4.	68.	17.	0.	30.	1715.	22.	8.	10.	9.	4.	11.	4.
10	4.	56.	14.	1.	27.	2633.	27.	6.	6.	4.	5.	7.	2.
15	19.	151.	24.	0.	75.	2806.	36.	19.	11.	7.	6.	12.	4.
20	20.	495.	74.	1.	153.	2618.	74.	41.	38.	41.	23.	38.	17.
25	31.	473.	95.	2.	162.	3245.	91.	50.	49.	57.	31.	51.	16.
30	48.	302.	78.	0.	126.	4287.	65.	44.	42.	34.	22.	34.	13.
35	62.	152.	44.	0.	77.	4927.	52.	22.	26.	17.	16.	19.	17.
40	97.	110.	23.	0.	52.	5240.	37.	11.	8.	10.	3.	7.	1.
45	185.	92.	18.	1.	56.	5174.	27.	8.	9.	4.	1.	4.	0.
50	224.	69.	16.	1.	31.	5109.	18.	8.	9.	2.	3.	7.	3.
55	335.	33.	13.	0.	28.	4853.	23.	4.	3.	2.	6.	3.	0.
60	495.	50.	6.	0.	15.	4516.	17.	9.	9.	3.	3.	1.	1.
65	712.	22.	5.	0.	12.	3902.	11.	11.	1.	1.	1.	2.	0.
70	892.	25.	4.	0.	6.	3109.	7.	7.	1.	4.	0.	0.	0.
75	3179.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
total	6307.	2098.	433.	8.	850.	54134.	507.	247.	222.	194.	124.	197.	77.

6.- province of residence mikkeli

age	deaths	migrants to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	2.	29.	9.	0.	25.	21.	943.	12.	20.	10.	3.	8.	2.
10	3.	25.	11.	0.	19.	17.	1362.	8.	21.	6.	2.	2.	2.
15	9.	163.	21.	0.	76.	45.	1340.	13.	40.	17.	5.	8.	2.
20	12.	356.	52.	1.	144.	103.	1145.	35.	96.	61.	13.	35.	11.
25	13.	296.	53.	1.	135.	106.	1556.	47.	87.	62.	18.	41.	16.
30	22.	128.	43.	0.	88.	71.	2186.	45.	67.	46.	7.	26.	6.
35	33.	79.	24.	0.	66.	57.	2586.	21.	59.	18.	5.	13.	7.
40	53.	53.	13.	0.	51.	32.	2787.	11.	42.	10.	6.	4.	4.
45	97.	53.	5.	0.	21.	33.	2822.	15.	37.	11.	1.	7.	1.
50	152.	31.	8.	0.	20.	16.	2759.	9.	24.	10.	1.	3.	0.
55	197.	34.	3.	0.	18.	22.	2590.	9.	22.	17.	0.	3.	0.
60	269.	23.	6.	0.	15.	11.	2402.	11.	16.	5.	0.	3.	3.
65	400.	16.	5.	0.	12.	10.	2116.	5.	16.	7.	2.	1.	1.
70	550.	7.	2.	0.	16.	6.	1639.	1.	9.	6.	0.	1.	1.
75	1707.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
total	3518.	1293.	254.	2.	704.	551.	28231.	243.	566.	285.	63.	154.	57.

7.- province of residence poh.kar

age	deaths	migrants to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	3.	30.	16.	0.	17.	17.	14.	950.	13.	3.	2.	7.	4.
10	6.	25.	11.	0.	12.	11.	8.	1408.	4.	1.	1.	3.	2.
15	5.	215.	33.	0.	56.	32.	17.	1262.	18.	8.	4.	9.	3.
20	11.	416.	63.	1.	125.	71.	42.	1192.	52.	25.	12.	36.	13.
25	23.	268.	58.	1.	102.	76.	62.	1724.	82.	25.	19.	51.	21.
30	24.	146.	37.	0.	59.	47.	45.	2236.	59.	27.	18.	30.	20.
35	31.	86.	39.	0.	40.	34.	32.	2507.	28.	7.	6.	21.	12.
40	55.	57.	14.	0.	13.	19.	18.	2616.	18.	4.	1.	8.	3.
45	79.	33.	10.	0.	25.	24.	1.	2639.	8.	4.	4.	5.	1.
50	140.	26.	13.	0.	23.	9.	13.	2544.	10.	0.	1.	5.	4.
55	189.	31.	8.	0.	18.	7.	8.	2384.	9.	3.	1.	8.	1.
60	244.	24.	6.	0.	10.	15.	5.	2138.	13.	2.	1.	5.	0.
65	357.	11.	6.	0.	6.	6.	1.	1838.	11.	1.	1.	2.	0.
70	431.	9.	6.	0.	4.	1.	1.	1445.	13.	0.	1.	0.	0.
75	1507.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
total	3105.	1376.	319.	2.	512.	368.	267.	26884.	340.	110.	74.	190.	84.

8.- province of residence kuopio

age	deaths	migrants to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	3.	36.	12.	0.	22.	9.	19.	12.	1144.	11.	3.	13.	4.
10	2.	24.	5.	0.	15.	13.	13.	11.	1747.	7.	4.	14.	4.
15	10.	190.	39.	0.	54.	17.	33.	16.	1693.	20.	6.	24.	4.
20	15.	378.	74.	1.	101.	42.	82.	51.	1544.	55.	21.	54.	11.
25	24.	334.	71.	1.	118.	60.	90.	78.	2175.	75.	33.	92.	38.
30	30.	166.	57.	0.	66.	43.	75.	48.	2846.	65.	20.	66.	24.
35	60.	74.	30.	0.	52.	23.	45.	38.	3361.	19.	11.	30.	12.
40	74.	47.	18.	0.	26.	14.	25.	23.	3614.	11.	3.	23.	7.
45	113.	56.	7.	0.	18.	13.	38.	12.	3567.	13.	3.	10.	3.
50	183.	44.	17.	0.	16.	11.	16.	11.	3448.	13.	4.	17.	0.
55	227.	27.	7.	0.	14.	11.	11.	3.	3292.	9.	1.	5.	0.
60	367.	19.	9.	0.	11.	4.	21.	13.	2952.	7.	2.	13.	4.
65	418.	16.	10.	0.	14.	7.	13.	6.	2572.	2.	2.	5.	1.
70	627.	17.	4.	0.	7.	4.	7.	6.	2016.	3.	1.	4.	1.
75	2098.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
total	4251.	1430.	359.	3.	535.	271.	488.	327.	35971.	311.	116.	372.	114.

APPENDIX C2 *Continued.*

9.- province of residence keski

age	deaths	migrants to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	3.	35.	15.	0.	34.	5.	7.	5.	10.	1047.	8.	10.	5.
10	3.	31.	14.	0.	28.	4.	10.	1.	6.	1721.	7.	6.	5.
15	9.	137.	47.	1.	80.	9.	18.	5.	12.	1704.	19.	15.	3.
20	12.	322.	117.	1.	180.	33.	45.	15.	44.	1439.	50.	39.	16.
25	11.	269.	92.	0.	154.	41.	63.	28.	55.	1958.	53.	62.	28.
30	28.	156.	79.	0.	113.	31.	31.	20.	51.	2703.	45.	45.	20.
35	41.	101.	40.	0.	97.	19.	30.	4.	28.	3194.	22.	23.	12.
40	52.	53.	36.	0.	46.	16.	12.	3.	9.	3442.	11.	15.	6.
45	98.	46.	20.	0.	31.	7.	6.	6.	12.	3433.	8.	7.	2.
50	149.	23.	11.	0.	34.	4.	6.	2.	5.	3347.	9.	8.	4.
55	238.	28.	9.	0.	26.	7.	14.	0.	3.	3236.	1.	7.	1.
60	338.	23.	6.	0.	35.	3.	9.	1.	7.	2911.	9.	4.	1.
65	428.	14.	10.	0.	18.	3.	8.	1.	3.	2524.	5.	4.	1.
70	615.	16.	2.	0.	15.	0.	6.	1.	3.	1945.	1.	1.	0.
75	2005.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
total	4029.	1254.	498.	3.	892.	182.	263.	92.	248.	34602.	249.	246.	105.

10.- province of residence vaasa

age	deaths	migrants to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	2.	22.	26.	0.	13.	2.	4.	2.	3.	7.	1218.	12.	3.
10	3.	17.	18.	1.	14.	2.	2.	0.	3.	3.	1857.	7.	3.
15	9.	76.	59.	7.	51.	4.	3.	2.	3.	10.	1974.	14.	7.
20	11.	253.	148.	13.	113.	16.	9.	7.	17.	40.	1881.	68.	15.
25	14.	201.	148.	10.	104.	25.	18.	12.	21.	54.	2424.	76.	24.
30	30.	107.	76.	3.	78.	17.	20.	12.	18.	25.	3261.	52.	16.
35	39.	70.	55.	2.	47.	8.	10.	2.	7.	17.	3778.	32.	10.
40	60.	38.	48.	3.	35.	5.	4.	2.	1.	9.	4035.	14.	7.
45	113.	21.	21.	2.	17.	5.	2.	2.	1.	2.	4088.	6.	5.
50	141.	23.	17.	2.	21.	2.	2.	0.	2.	10.	4005.	5.	2.
55	230.	11.	7.	1.	15.	4.	0.	0.	1.	7.	3913.	4.	0.
60	327.	10.	8.	1.	17.	2.	1.	2.	2.	7.	3643.	5.	2.
65	498.	12.	9.	0.	15.	3.	0.	0.	4.	9.	3213.	2.	1.
70	691.	9.	4.	0.	5.	0.	1.	0.	0.	4.	2578.	2.	3.
75	2604.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
total	4773.	878.	644.	44.	546.	93.	77.	43.	84.	204.	41868.	299.	98.

11.- province of residence oulu

age	deaths	migrants to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	5.	33.	23.	0.	23.	9.	7.	7.	13.	16.	18.	1841.	23.
10	4.	31.	23.	0.	19.	5.	4.	4.	7.	7.	9.	2566.	14.
15	10.	103.	85.	1.	80.	11.	8.	7.	16.	13.	39.	2507.	29.
20	20.	402.	169.	4.	177.	36.	23.	26.	57.	50.	91.	2635.	88.
25	34.	357.	163.	2.	137.	53.	42.	31.	84.	67.	101.	3536.	149.
30	48.	170.	123.	1.	92.	36.	34.	29.	55.	62.	67.	4534.	113.
35	57.	119.	57.	0.	64.	30.	19.	20.	36.	28.	32.	5120.	53.
40	119.	72.	46.	0.	25.	12.	13.	8.	19.	14.	29.	5323.	27.
45	191.	62.	36.	0.	25.	9.	7.	11.	13.	19.	19.	5243.	20.
50	247.	44.	20.	0.	31.	16.	5.	3.	9.	7.	21.	5080.	12.
55	393.	48.	14.	0.	17.	11.	7.	7.	17.	0.	18.	4694.	12.
60	485.	31.	12.	0.	30.	8.	7.	7.	11.	7.	18.	4191.	13.
65	671.	23.	11.	0.	11.	6.	6.	5.	7.	4.	13.	3559.	5.
70	813.	8.	5.	0.	8.	2.	6.	3.	8.	5.	2.	2778.	2.
75	2811.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
total	5908.	1584.	786.	7.	742.	245.	188.	169.	351.	300.	475.	53610.	560.

12.- province of residence lappi

age	deaths	migrants to uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5	2.	9.	7.	0.	6.	2.	1.	1.	3.	3.	3.	15.	512.
10	2.	8.	9.	0.	6.	3.	1.	0.	2.	1.	2.	15.	736.
15	4.	43.	32.	0.	20.	4.	2.	1.	2.	2.	7.	20.	747.
20	10.	128.	70.	0.	58.	12.	7.	4.	12.	12.	16.	89.	774.
25	14.	121.	58.	0.	53.	22.	10.	10.	17.	16.	22.	116.	1211.
30	22.	63.	38.	0.	29.	10.	9.	7.	16.	13.	21.	89.	1700.
35	22.	36.	31.	0.	30.	8.	4.	4.	5.	9.	7.	59.	1955.
40	58.	34.	21.	0.	25.	10.	1.	3.	6.	2.	3.	38.	2028.
45	74.	31.	20.	1.	21.	8.	3.	2.	5.	1.	7.	23.	1966.
50	88.	16.	8.	0.	17.	6.	6.	2.	0.	2.	6.	18.	1874.
55	142.	18.	9.	0.	14.	6.	1.	1.	1.	0.	2.	25.	1706.
60	183.	14.	8.	0.	13.	7.	1.	3.	5.	2.	3.	17.	1486.
65	230.	9.	4.	0.	7.	3.	0.	0.	1.	1.	2.	14.	1263.
70	292.	5.	2.	0.	2.	2.	1.	1.	0.	2.	1.	6.	978.
75	997.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
total	2140.	533.	316.	2.	301.	102.	47.	39.	76.	66.	101.	543.	18935.

APPENDIX C3 Life Expectancies by Province of Birth and Province of Residence.

age initial province of cohort uusimaa
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	total	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	71.90661	37.97063	6.64617	0.24009	8.03815	3.45739	1.88782	1.76564	2.35311	2.25077	2.64535	3.41954	1.23195
5	67.83437	33.89783	6.66194	0.24154	8.03147	3.45546	1.88562	1.76197	2.35193	2.25087	2.64743	3.41414	1.23416
10	62.94715	30.05663	6.49010	0.23713	7.77077	3.34233	1.82389	1.69982	2.27613	2.17810	2.56966	3.30049	1.20210
15	58.03113	26.49094	6.25951	0.23101	7.43745	3.19543	1.74446	1.62202	2.17852	2.08212	2.46776	3.16062	1.16129
20	53.27337	23.23336	6.00265	0.22305	7.06714	3.03572	1.65478	1.53410	2.07226	1.97962	2.35572	3.00163	1.11334
25	48.52400	20.34934	5.67089	0.20970	6.61640	2.84587	1.54767	1.42435	1.93835	1.85784	2.22058	2.79753	1.04549
30	43.79310	17.86450	5.25395	0.19198	6.09004	2.61874	1.42345	1.29693	1.77691	1.71037	2.05695	2.55274	0.95653
35	39.09766	15.65553	4.78373	0.17344	5.51944	2.36446	1.28572	1.16121	1.60132	1.54282	1.86957	2.28564	0.85478
40	34.46042	13.62247	4.28320	0.15528	4.92646	2.09840	1.14010	1.02394	1.41672	1.36621	1.66926	2.01058	0.74781
45	30.05227	11.76242	3.78653	0.13791	4.34853	1.83843	0.99638	0.89161	1.23605	1.19433	1.47171	1.74406	0.64431
50	25.85331	10.03085	3.29936	0.12119	3.78901	1.58710	0.85659	0.76292	1.06188	1.02882	1.28015	1.48799	0.54743
55	21.81803	8.39982	2.82025	0.10435	3.24056	1.34324	0.72159	0.63817	0.89408	0.86587	1.09164	1.24199	0.45648
60	18.07953	6.91813	2.36870	0.08794	2.72171	1.11276	0.59544	0.52327	0.73791	0.71133	0.91181	1.01613	0.37441
65	14.65848	5.59627	1.94499	0.07261	2.23451	0.89594	0.47578	0.41818	0.59456	0.56949	0.74206	0.81184	0.30224
70	11.62992	4.46530	1.55844	0.05893	1.79168	0.69987	0.36423	0.32374	0.46573	0.44218	0.58655	0.63251	0.24076
75	9.05481	3.53934	1.22035	0.04747	1.40529	0.52807	0.26588	0.24071	0.35230	0.33171	0.45062	0.48163	0.19145

age initial province of cohort turkpor
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	total	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	72.08714	11.11985	37.80719	0.30539	7.97940	2.01626	1.20664	0.98780	1.57691	1.89171	3.01216	2.94222	1.24162
5	67.99500	11.16335	33.63743	0.30724	7.98560	2.02235	1.21057	0.99213	1.58037	1.89644	3.01097	2.94561	1.24296
10	63.13822	10.93607	29.61523	0.30192	7.76291	1.97814	1.18449	0.97130	1.54119	1.84953	2.92100	2.86001	1.20644
15	58.24002	10.63190	25.81354	0.29411	7.47149	1.92013	1.14977	0.94129	1.48992	1.78642	2.80734	2.76981	1.16432
20	53.49657	10.27800	22.32141	0.28386	7.13525	1.85744	1.11073	0.90690	1.43511	1.71643	2.68171	2.65535	1.11442
25	48.75842	9.71844	19.35187	0.26684	6.68350	1.77591	1.05828	0.86167	1.36006	1.62251	2.52207	2.49241	1.04485
30	44.01470	8.91293	16.96028	0.24352	6.13397	1.66104	0.98599	0.80098	1.25857	1.49803	2.32496	2.28058	0.95385
35	39.30734	7.99897	14.91703	0.21850	5.54341	1.51626	0.89611	0.72694	1.13995	1.35359	2.10281	2.04319	0.85060
40	34.69235	7.07708	13.05789	0.19425	4.93698	1.35584	0.79724	0.64667	1.01224	1.20132	1.87086	1.79824	0.74375
45	30.23676	6.17825	11.32173	0.17118	4.34113	1.19197	0.69652	0.56524	0.88312	1.04938	1.64208	1.55661	0.63956
50	25.98924	5.31606	9.69533	0.14933	3.76584	1.03179	0.59887	0.48477	0.75758	0.90212	1.42156	1.32450	0.54229
55	21.95741	4.49585	8.16985	0.12785	3.21313	0.87662	0.50409	0.40695	0.63839	0.75918	1.20890	1.10436	0.45224
60	18.16629	3.72703	6.74718	0.10696	2.68622	0.72676	0.41513	0.33427	0.52612	0.62242	1.00452	0.89988	0.36980
65	14.69427	3.03225	5.45004	0.08771	2.19429	0.58543	0.33119	0.26751	0.42303	0.49693	0.81273	0.71613	0.29702
70	11.63528	2.43719	4.30714	0.07095	1.75350	0.45792	0.25364	0.20731	0.33125	0.38497	0.63935	0.55660	0.23545
75	9.03339	1.95088	3.33077	0.05729	1.37063	0.34609	0.18532	0.15428	0.25109	0.28859	0.48918	0.42296	0.18630

age initial province of cohort ahvenan
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	total	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	72.65642	9.10600	6.75769	43.00642	3.43827	1.10837	0.59171	0.53319	1.01405	1.31065	3.91697	1.46778	0.40532
5	68.36912	9.13727	6.75799	38.65393	3.43401	1.11116	0.59661	0.53779	1.01628	1.31568	3.92613	1.47355	0.40874
10	63.38498	8.95100	6.58162	34.29390	3.34898	1.09319	0.59322	0.52916	0.99962	1.28624	3.84760	1.45396	0.40649
15	58.40069	8.68894	6.36564	30.13282	3.25479	1.06634	0.58749	0.51309	0.98171	1.24387	3.73149	1.43170	0.40280
20	53.59724	8.41303	6.12534	26.25124	3.16311	1.03433	0.57479	0.49774	0.95963	1.17666	3.59971	1.40347	0.39819
25	48.67375	7.95266	5.75209	22.81178	3.02142	0.99013	0.55000	0.47743	0.92037	1.08266	3.39680	1.33281	0.38560
30	43.91157	7.31634	5.29070	20.00750	2.82646	0.92800	0.51804	0.44739	0.86245	0.98750	3.13768	1.22700	0.36241
35	39.34872	6.60610	4.79301	17.64016	2.59606	0.85154	0.47747	0.40825	0.78403	0.88665	2.86656	1.10819	0.33069
40	34.69001	5.83485	4.25148	15.41353	2.32947	0.76259	0.42804	0.36379	0.69130	0.78214	2.56463	0.97563	0.29255
45	30.38363	5.10371	3.74244	13.42953	2.07391	0.67546	0.37848	0.32049	0.60373	0.68444	2.26683	0.84959	0.25502
50	26.22696	4.38902	3.24141	11.56328	1.81922	0.58801	0.32821	0.27659	0.51837	0.58931	1.96898	0.72613	0.21843
55	22.01121	3.67445	2.73046	9.67570	1.55327	0.49704	0.27629	0.23113	0.43248	0.49158	1.66538	0.60157	0.18186
60	18.40709	3.06618	2.29523	8.07246	1.32237	0.41685	0.23107	0.19209	0.35874	0.40611	1.39960	0.49531	0.15108
65	14.87087	2.47944	1.86550	6.51775	1.08706	0.33486	0.18448	0.15342	0.28644	0.32235	1.12517	0.39265	0.12176
70	11.82749	1.98556	1.49112	5.19745	0.87564	0.26228	0.14179	0.11924	0.22349	0.24932	0.87910	0.30515	0.09736
75	9.24505	1.57130	1.16666	4.10139	0.68531	0.19816	0.10376	0.08895	0.16817	0.18597	0.66628	0.23144	0.07768

age initial province of cohort hame
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	total	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	71.91129	14.20157	8.62717	0.14366	31.56412	2.81795	1.85557	1.40825	1.91700	2.53715	2.72472	2.99679	1.11736
5	67.89527	14.24745	8.63655	0.14555	27.47273	2.82848	1.84928	1.40815	1.91966	2.53424	2.72612	3.00370	1.12337
10	63.00904	13.89344	8.37567	0.14470	23.72482	2.75681	1.77658	1.36399	1.86470	2.44284	2.64397	2.92211	1.09941
15	58.10184	13.43500	8.04236	0.14254	20.27587	2.65817	1.68961	1.30857	1.79664	2.32734	2.54415	2.81516	1.06633
20	53.33776	12.89496	7.66880	0.13925	17.16420	2.54658	1.59863	1.24569	1.72316	2.20372	2.43471	2.68921	1.02884
25	48.57013	12.08238	7.18119	0.13285	14.63463	2.40556	1.49552	1.16851	1.62439	2.05577	2.29559	2.52130	0.97243
30	43.83931	11.00035	6.59276	0.12298	12.73604	2.22696	1.37803	1.07558	1.49762	1.88243	2.12303	2.31097	0.89254
35	39.14089	9.82697	5.96207	0.11165	11.16433	2.01794	1.24492	0.96926	1.35391	1.69245	1.92502	2.07333	0.79903
40	34.50711	8.66267	5.31444	0.10030	9.73645	1.79481	1.10241	0.85793	1.20040	1.49545	1.71606	1.82584	0.70034
45	30.08737	7.55335	4.67961	0.08937	8.42931	1.57395	0.96138	0.74868	1.04823	1.30374	1.51114	1.58417	0.60442
50	25.87937	6.49603	4.06300	0.07880	7.21576	1.36041	0.82494	0.64151	0.90078	1.11970	1.31277	1.35198	0.51430
55	21.84457	5.48351	3.46216	0.06806	6.07046	1.15333	0.69375	0.53722	0.75889	0.94043	1.11837	1.12885	0.42954
60	18.07355	4.54278	2.89348	0.05739	5.01004	0.95555	0.57070	0.44056	0.62603	0.77053	0.93196	0.92203	0.35249
65	14.63423	3.69712	2.36559	0.04745	4.04785	0.77014	0.45506	0.35255	0.50450	0.61581	0.75723	0.73611	0.28481
70	11.58974	2.96907	1.88865	0.03861	3.19966	0.60240	0.34882	0.27333	0.39535	0.47754	0.59803	0.57323	0.22686
75	9.00437	2.37145	1.47557	0.03129	2.47705	0.45604	0.25425	0.20368	0.29976	0.35822	0.46014	0.43671	0.18021

APPENDIX C3 *Continued.*

age initial province of cohort kymi
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	total	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	71.31776	14.84577	4.97036	0.12666	6.95244	31.23877	2.63960	1.67759	1.99058	1.86550	1.78407	2.33018	0.89624
5	67.42773	14.91949	5.01220	0.12808	6.98652	27.15431	2.63467	1.67730	1.99994	1.87555	1.79376	2.34461	0.90131
10	62.55313	14.55230	4.92310	0.12654	6.81217	23.29851	2.52486	1.61834	1.94699	1.82800	1.75313	2.28944	0.87976
15	57.65007	14.08465	4.79753	0.12373	6.58571	19.72050	2.37934	1.54737	1.87725	1.76625	1.70167	2.21426	0.85183
20	52.95483	13.55202	4.65829	0.12019	6.32284	16.49322	2.22156	1.47240	1.80499	1.70539	1.64753	2.13346	0.82295
25	48.22607	12.70917	4.45238	0.11469	5.95789	13.84741	2.05236	1.38076	1.70961	1.62199	1.57525	2.02267	0.78188
30	43.52277	11.56670	4.16385	0.10654	5.50657	11.87950	1.87311	1.26948	1.58431	1.50295	1.47532	1.87082	0.72364
35	38.85570	10.33165	3.81399	0.09718	5.00477	10.29505	1.68339	1.14266	1.43738	1.35840	1.35034	1.68824	0.65264
40	34.23764	9.10325	3.42799	0.08783	4.47529	8.88844	1.48773	1.00976	1.27694	1.20384	1.21077	1.49195	0.57384
45	29.81427	7.93223	3.03682	0.07875	3.95209	7.60891	1.29502	0.87998	1.11653	1.05171	1.06987	1.29739	0.49498
50	25.64264	6.82667	2.65487	0.06993	3.44744	6.44201	1.11042	0.75500	0.96256	0.90636	0.93427	1.11133	0.42177
55	21.61433	5.75926	2.27478	0.06062	2.94743	5.34907	0.93189	0.63304	0.81246	0.76321	0.79957	0.93052	0.35247
60	17.87061	4.77561	1.91367	0.05128	2.47276	4.34911	0.76508	0.52060	0.67203	0.62779	0.67000	0.76308	0.28960
65	14.44966	3.89184	1.57504	0.04253	2.02924	3.44449	0.60847	0.41797	0.54291	0.50389	0.54728	0.61166	0.23434
70	11.43509	3.13482	1.26824	0.03475	1.63089	2.65338	0.46506	0.32537	0.42719	0.39360	0.43524	0.47919	0.18737
75	8.85388	2.51198	0.99917	0.02823	1.28368	1.97190	0.33918	0.24253	0.32557	0.29760	0.33715	0.36732	0.14957

age initial province of cohort mikkeli
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	total	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	71.61347	15.38136	5.46490	0.10351	8.43512	5.26536	22.18241	2.29716	4.03439	2.88746	1.88254	2.67870	1.00055
5	67.49259	15.43785	5.49136	0.10473	8.43115	5.24190	18.03563	2.27653	4.01829	2.87392	1.88872	2.68647	1.00403
10	62.60353	15.13466	5.39403	0.10450	8.18209	5.03687	14.50717	2.16288	3.85848	2.76304	1.84966	2.62707	0.98306
15	57.71171	14.75308	5.26050	0.10392	7.87247	4.78274	11.33541	2.02403	3.64770	2.63172	1.80033	2.54486	0.95496
20	52.98854	14.22162	5.10005	0.10291	7.50067	4.49577	8.65647	1.88449	3.40427	2.49449	1.74622	2.45731	0.92426
25	48.25755	13.27653	4.85886	0.09955	6.99590	4.14562	6.81879	1.74129	3.11417	2.32439	1.67111	2.33090	0.88043
30	43.52879	12.01149	4.52587	0.09309	6.40218	3.75462	5.70167	1.58577	2.80665	2.11843	1.56387	2.15083	0.81431
35	38.84578	10.68991	4.13498	0.08522	5.78024	3.35680	4.87763	1.41871	2.50665	1.89662	1.42988	1.93682	0.73230
40	34.22643	9.40203	3.71095	0.07718	5.14562	2.96006	4.16683	1.24886	2.20805	1.67139	1.28217	1.70973	0.64350
45	29.80495	8.18246	3.28363	0.06928	4.52600	2.57687	3.53253	1.08519	1.91830	1.45563	1.13340	1.48611	0.55554
50	25.61275	7.03026	2.86553	0.06154	3.93210	2.21247	2.95763	0.92759	1.64159	1.25068	0.98375	1.27154	0.47307
55	21.60948	5.93376	2.45591	0.05357	3.35769	1.86432	2.42990	0.77592	1.37827	1.05221	0.84653	1.06548	0.39591
60	17.87146	4.91820	2.06542	0.04548	2.81301	1.53595	1.95224	0.63569	1.13278	0.86364	0.70921	0.87401	0.32583
65	14.45355	4.00469	1.69955	0.03783	2.30628	1.23106	1.52246	0.50768	0.90885	0.69090	0.57948	0.70067	0.26410
70	11.42378	3.21840	1.36594	0.03097	1.85022	0.95812	1.14143	0.39263	0.70942	0.53685	0.46030	0.54830	0.21119
75	8.86517	2.58064	1.07717	0.02530	1.45884	0.72247	0.81830	0.29273	0.53742	0.40476	0.35703	0.42139	0.16912

age initial province of cohort poh.kat
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	total	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kat	kuopio	keski	vaasa	oulu	lappi
0	71.19382	16.05346	5.74937	0.11034	7.28720	4.44861	2.52462	23.89808	3.31077	1.88140	1.78323	2.95069	1.19604
5	67.38008	16.19841	5.80797	0.11215	7.34094	4.45162	2.52744	19.79209	3.29425	1.89510	1.79988	2.96015	1.20009
10	62.55626	15.92413	5.70913	0.11206	7.18404	4.28835	2.42773	16.11326	3.13624	1.85549	1.77140	2.87153	1.16291
15	57.75385	15.57654	5.56422	0.11173	6.98220	4.08860	2.29630	12.74863	2.95792	1.80790	1.73621	2.76684	1.11677
20	52.95367	14.97573	5.36742	0.11068	6.70545	3.85277	2.15074	9.85863	2.77266	1.75080	1.69181	2.65027	1.06670
25	48.21567	13.90251	5.08824	0.10703	6.30070	3.57011	1.99419	7.87914	2.57052	1.66675	1.62723	2.50189	1.00734
30	43.53371	12.53871	4.72887	0.09997	5.79814	3.25301	1.82343	6.63403	2.34497	1.54743	1.53030	2.30560	0.92926
35	38.85279	11.14241	4.31482	0.09138	5.25135	2.91885	1.63676	5.68402	2.10217	1.40076	1.40210	2.07439	0.83378
40	34.22965	9.78728	3.86986	0.08264	4.68573	2.58066	1.44288	4.86658	1.85349	1.24190	1.25787	1.83042	0.73032
45	29.81941	8.51076	3.42368	0.07410	4.13416	2.25302	1.25306	4.13844	1.61242	1.08656	1.11309	1.59091	0.62922
50	25.61794	7.30254	2.98581	0.06572	3.60110	1.93800	1.07137	3.46812	1.38188	0.93650	0.97152	1.36855	0.53482
55	21.62023	6.16106	2.55880	0.05716	3.08310	1.63649	0.89925	2.84996	1.16398	0.79032	0.83250	1.14081	0.44681
60	17.89514	5.10727	2.15233	0.04852	2.58919	1.35224	0.73800	2.29383	0.96109	0.65102	0.69824	0.93678	0.36661
65	14.48057	4.15706	1.77031	0.04035	2.12548	1.08631	0.58690	1.79890	0.77482	0.52258	0.57068	0.75120	0.29598
70	11.46845	3.34313	1.42357	0.03305	1.70785	0.84720	0.44903	1.36998	0.60832	0.40763	0.45376	0.58876	0.23617
75	8.89712	2.67523	1.11921	0.02692	1.34410	0.63806	0.32909	1.00360	0.46151	0.30783	0.35100	0.45232	0.18824

age initial province of cohort kuopio
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	total	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kat	kuopio	keski	vaasa	oulu	lappi
0	71.44370	14.66683	5.49948	0.10615	6.98430	3.13890	3.07194	2.37605	25.67463	2.74925	2.02326	3.82372	1.32917
5	67.43050	14.75195	5.53776	0.10757	7.00679	3.15124	3.05404	2.36189	21.54670	2.74439	2.03224	3.81002	1.32590
10	62.57503	14.48173	5.44687	0.10744	6.83234	3.07770	2.91290	2.25569	17.88211	2.64674	1.99088	3.66266	1.27797
15	57.66289	14.12465	5.32045	0.10694	6.60201	2.97330	2.73751	2.12425	14.50859	2.52707	1.93682	3.48157	1.21976
20	52.91565	13.61839	5.16242	0.10605	6.32859	2.85089	2.55303	1.99063	11.58064	2.40052	1.87612	3.28795	1.16043
25	48.19835	12.71847	4.91108	0.10252	5.95526	2.69289	2.34781	1.84780	9.42299	2.24625	1.79313	3.06557	1.09457
30	43.49450	11.51758	4.56760	0.09560	5.49341	2.48947	2.12777	1.68344	7.97470	2.05791	1.67571	2.80218	1.00913
35	38.81516	10.25405	4.16854	0.08733	4.98406	2.25389	1.90156	1.50501	6.87278	1.84622	1.52962	2.50844	0.90365
40	34.22495	9.02660	3.74143	0.07900	4.45587	2.00603	1.67366	1.32575	5.91760	1.62912	1.37051	2.20759	0.79169
45	29.81289	7.86011	3.31024	0.07079	3.93229	1.75951	1.45297	1.15097	5.04920	1.42010	1.21065	1.91406	0.68201
50	25.61603	6.75469	2.88757	0.06276	3.42617	1.52074	1.24159	0.98216	4.25151	1.22047	1.05534	1.63362	0.57941
55	21.62095	5.70452	2.47510	0.05456	2.93516	1.29021	1.03998	0.82082	3.51943	1.02696	0.90327	1.36585	0.48407
60	17.88480	4.72918	2.08102	0.04628	2.46609	1.06947	0.85238	0.67203	2.85227	0.84279	0.75638	1.11931	0.39761
65	14.49333	3.85763	1.71456	0.03852	2.03022	0.86342	0.67883	0.53752	2.25943	0.67519	0.61860	0.89721	0.32219
70	11.44900	3.09715	1.37547	0.03146	1.62972	0.67473	0.51740	0.41537	1.73668	0.52378	0.49029	0.69938	0.25708
75	8.89917	2.48468	1.08390	0.02569	1.28730	0.51156	0.37843	0.31027	1.29026	0.39539	0.37983	0.53675	0.20610

APPENDIX C3 *Continued.*

age initial province of cohort keski
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	total	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	71.64815	14.02793	6.93171	0.12591	8.89043	2.52496	2.25036	1.32043	2.53701	25.74422	2.96138	3.08961	1.24421
5	67.63060	14.09331	6.95761	0.12758	8.89602	2.54112	2.23719	1.32254	2.53049	21.61629	2.96748	3.09312	1.24786
10	62.80685	13.80802	6.80352	0.12745	8.62722	2.49676	2.14463	1.28410	2.43661	17.97126	2.88974	3.00393	1.21361
15	57.91510	13.42650	6.60018	0.12684	8.27567	2.43225	2.03416	1.23392	2.31986	14.62475	2.78879	2.88842	1.16378
20	53.15547	12.92807	6.35614	0.12503	7.86420	2.35764	1.91532	1.18281	2.20027	11.67996	2.67336	2.76212	1.11056
25	48.41072	12.09801	5.99763	0.11966	7.32220	2.24938	1.78116	1.12129	2.05856	9.49451	2.51962	2.60155	1.04715
30	43.65247	10.97539	5.52969	0.11081	6.68407	2.09238	1.62547	1.03755	1.88598	8.03386	2.32384	2.39121	0.96222
35	38.96914	9.79251	5.01937	0.10086	6.02900	1.90320	1.45783	0.93611	1.69745	6.91785	2.10472	2.14863	0.86161
40	34.34903	8.62453	4.48517	0.09085	5.36187	1.69773	1.28568	0.82879	1.49897	5.95304	1.87391	1.89384	0.75467
45	29.90763	7.50663	3.95284	0.08107	4.70931	1.49049	1.11646	0.72320	1.30334	5.08495	1.64667	1.64278	0.64968
50	25.69371	6.44818	3.43478	0.07161	4.08631	1.28904	0.95545	0.62006	1.11619	4.28894	1.42853	1.40249	0.55213
55	21.66552	5.44016	2.93054	0.06198	3.48446	1.09376	0.80268	0.51970	0.93762	3.54524	1.21607	1.17262	0.46068
60	17.92380	4.51145	2.45586	0.05243	2.91762	0.90793	0.66044	0.42710	0.77219	2.86609	1.01445	0.96038	0.37786
65	14.50592	3.67568	2.01422	0.04347	2.38990	0.73293	0.52691	0.34252	0.62099	2.25985	0.82558	0.76881	0.30515
70	11.45670	2.95085	1.61130	0.03542	1.91025	0.57359	0.40322	0.26579	0.48478	1.72675	0.65199	0.59996	0.24280
75	8.89804	2.36597	1.26638	0.02886	1.50089	0.43618	0.29616	0.19907	0.36751	1.28010	0.50304	0.46024	0.19365

age initial province of cohort vaasa
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	total	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	71.95515	10.56813	7.86963	0.46625	6.34400	1.68149	1.12858	0.80041	1.34044	2.07413	35.15882	3.38922	1.13404
5	68.03490	10.65644	7.90074	0.46997	6.37704	1.69520	1.13372	0.80787	1.34965	2.07904	31.03207	3.39346	1.13970
10	63.13070	10.48448	7.69047	0.46306	6.23552	1.66772	1.10466	0.79500	1.32272	2.01721	26.95482	3.28297	1.11206
15	58.22499	10.26075	7.42426	0.45430	6.06000	1.63194	1.06749	0.77720	1.28704	1.94293	23.09487	3.14792	1.07628
20	53.46467	9.97255	7.11457	0.43972	5.84127	1.59265	1.02930	0.75794	1.24943	1.86607	19.55807	3.00823	1.03469
25	48.69031	9.41927	6.67814	0.41202	5.51081	1.53374	0.98433	0.72897	1.19483	1.76342	16.66119	2.82474	0.97887
30	43.93209	8.60128	6.12495	0.37420	5.08474	1.44045	0.92309	0.68338	1.11339	1.62264	14.47920	2.58212	0.90263
35	39.25162	7.70582	5.53301	0.33505	4.61640	1.31851	0.84265	0.62259	1.01236	1.46099	12.68262	2.31096	0.81066
40	34.61991	6.80287	4.92774	0.29733	4.12256	1.18083	0.74990	0.55438	0.89945	1.29336	11.05093	2.02095	0.71162
45	30.16307	5.92890	4.32820	0.26142	3.63281	1.04022	0.65500	0.48573	0.78589	1.12877	9.54971	1.75250	0.61391
50	25.94277	5.09969	3.74817	0.22744	3.16130	0.90273	0.56291	0.41800	0.67669	0.97208	8.16119	1.49052	0.52204
55	21.86701	4.30019	3.18099	0.19352	2.69805	0.76691	0.47341	0.35124	0.57080	0.81831	6.83894	1.23971	0.43492
60	18.08438	3.56350	2.65092	0.16133	2.26051	0.63716	0.38975	0.28972	0.47208	0.67277	5.61989	1.01021	0.35652
65	14.59548	2.89504	2.15748	0.13159	1.84839	0.51338	0.31043	0.23261	0.38062	0.53839	4.49735	0.80276	0.28743
70	11.51953	2.32269	1.71693	0.10557	1.47780	0.40151	0.23754	0.18110	0.29824	0.41807	3.50738	0.62338	0.22936
75	8.91836	1.85820	1.33943	0.08433	1.15889	0.30401	0.17386	0.13642	0.22603	0.31393	2.66503	0.47478	0.18344

age initial province of cohort oulu
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	total	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	71.52343	11.94226	6.74620	0.14604	6.26343	2.22442	1.41574	1.22794	2.14299	2.11999	3.38691	31.00216	2.90533
5	67.46481	12.01380	6.77618	0.14681	6.29989	2.23361	1.41738	1.22872	2.14659	2.12365	3.38865	26.80499	2.88453
10	62.62483	11.82787	6.64445	0.14464	6.19151	2.18682	1.37795	1.19294	2.08785	2.06169	3.29072	22.86680	2.75160
15	57.71356	11.57560	6.46438	0.14213	6.03571	2.12329	1.32659	1.14618	2.00951	1.97586	3.16650	19.15569	2.59111
20	52.92294	11.20285	6.22721	0.13906	5.82480	2.05238	1.27251	1.09769	1.92544	1.88836	3.02327	15.84544	2.42392
25	48.18663	10.53040	5.87459	0.13272	5.49510	1.95926	1.21011	1.04050	1.81884	1.78287	2.83753	13.26345	2.24126
30	43.48069	9.59959	5.42277	0.12257	5.07013	1.82972	1.12911	0.96606	1.67893	1.64806	2.61197	11.36985	2.03192
35	38.81139	8.59217	4.92186	0.11116	4.60551	1.67006	1.02793	0.87677	1.51741	1.48920	2.36319	9.83524	1.80085
40	34.18383	7.58626	4.39607	0.09970	4.11650	1.49381	0.91533	0.77961	1.34512	1.31880	2.10450	8.46305	1.56508
45	29.78736	6.62850	3.88002	0.08877	3.63848	1.31720	0.80258	0.68348	1.17557	1.15327	1.85428	7.22187	1.34334
50	25.61430	5.71512	3.37642	0.07824	3.17702	1.14512	0.69262	0.58889	1.01212	0.99350	1.61302	6.08334	1.13890
55	21.60331	4.83503	2.88206	0.06752	2.72302	0.97564	0.58586	0.49621	0.85501	0.83602	1.37590	5.02312	0.94793
60	17.90911	4.02565	2.42020	0.05709	2.29510	0.81390	0.48627	0.41116	0.70941	0.68884	1.15143	4.07322	0.77685
65	14.50166	3.28506	1.98535	0.04725	1.88816	0.65872	0.39073	0.33178	0.57338	0.55308	0.93739	3.22544	0.62533
70	11.49621	2.64619	1.59259	0.03852	1.51873	0.51756	0.30177	0.25983	0.45136	0.43148	0.74168	2.49904	0.49747
75	8.93859	2.11923	1.25018	0.03128	1.19628	0.39299	0.22265	0.19633	0.34422	0.32572	0.57006	1.89377	0.39589

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	total	uusimaa	turkpor	ahvenan	hame	kymi	mikkeli	poh.kar	kuopio	keski	vaasa	oulu	lappi
0	71.36420	11.53683	7.47029	0.10247	6.30718	2.24592	1.23008	0.98240	1.76419	1.71194	2.59623	7.50757	27.90911
5	67.22966	11.59693	7.48482	0.10363	6.33393	2.25450	1.23214	0.98540	1.76803	1.71806	2.60199	7.45450	23.69574
10	62.40374	11.42449	7.32105	0.10349	6.22331	2.21107	1.20399	0.96606	1.72539	1.68073	2.54481	7.13524	19.86411
15	57.56932	11.19974	7.11078	0.10309	6.07550	2.14941	1.16896	0.94195	1.66693	1.63033	2.47077	6.74264	16.30923
20	52.83151	10.87282	6.82818	0.10216	5.87787	2.07467	1.13046	0.91528	1.60426	1.57746	2.37955	6.32201	13.14678
25	48.17607	10.26476	6.41390	0.09895	5.56686	1.97917	1.08196	0.87992	1.52553	1.50659	2.25767	5.84156	10.75919
30	43.49307	9.37559	5.89148	0.09261	5.14603	1.84631	1.01312	0.82493	1.41629	1.40185	2.09740	5.27981	9.10765
35	38.84294	8.40417	5.33626	0.08489	4.68429	1.68496	0.92528	0.75252	1.28576	1.27243	1.90857	4.69932	7.80400
40	34.21621	7.42878	4.76124	0.07688	4.19708	1.50935	0.82572	0.67154	1.14265	1.12964	1.70447	4.11824	6.65063
45	29.85555	6.50634	4.20360	0.06923	3.72170	1.33517	0.72685	0.59106	1.00197	0.99013	1.50745	3.56705	5.63439
50	25.68999	5.61629	3.65625	0.06154	3.25477	1.16273	0.62939	0.51068	0.86374	0.85470	1.31514	3.04180	4.72296
55	21.67592	4.75404	3.11815	0.05338	2.79154	0.99195	0.53301	0.43120	0.72984	0.72081	1.12378	2.54089	3.88735
60	17.98502	3.96173	2.61679	0.04532	2.35402	0.82935	0.44218	0.35790	0.60636	0.59528	0.94210	2.08424	3.14976
65	14.59809	3.23863	2.14624	0.03767	1.93839	0.67322	0.35526	0.28926	0.49101	0.47949	0.76931	1.66932	2.51029
70	11.59988	2.61020	1.71847	0.03083	1.55841	0.52954	0.27392	0.22625	0.38586	0.37478	0.61008	1.30554	1.97599

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