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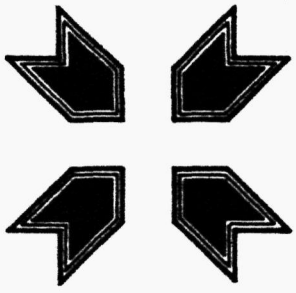
POST-WAR MIGRATION TRENDS IN ESTONIA

Luule Sakkeus

RU Series B, No.15



EESTI KÕRGKOOLIDEVAHELINE DEMOUURINGUTE KESKUS

ESTONIAN INTERUNIVERSITARY POPULATION RESEARCH CENTRE

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The Estonian Interuniversitary Population Research Centre (EKDK) emerged from population studies in the Urban Research Laboratory of the Tallinn Technical University in 1983. The demographic development in Estonia is the main research object of EKDK. At the present time fertility, marriage and family, and labour force participation serve as main research areas The results are issued in two series: applied research works since 1983, the series of working-papers since 1988.

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THE DEMOGRAPHIC BACKGROUND OF THE POST–WAR MIGRATION TRENDS

Methodologically my research of Estonian migration relies on the theoretical hypothesis of Wilbur Zelinsky [1971, 1979], the principle idea of which is that 'there are definite, patterned regularities in the growth of person's mobility through space–time during recent history, and these regularities comprise an essential component of the modernization process [Zelinsky 1971, p.221–222]. The studies of migration carried out in IIASA in the 1970s under the supervision of Andrei Rogers in many respects tested the validity of this idea. The empirical migration schedules exhibit remarkable regularities in migration age pattern.

The main concern of this paper is to exhibit the differences of internal (intraregional,i.e. within Estonia) and external (interregional,i.e. between the other republics of the Soviet Union and Estonia) migration pattern. Although I recall that these two migration processes have some slight differences in their migration patterns in general, my assumption is that the differences of interregional and intraregional migrations of Estonia are derived from two demographically different types of behavior rather than from the differences of short–distanced and long–distanced migrations. Another aim of the paper has been to look at the formation of the foreign–born population of Estonia on the basis of the post–war migration data giving the background to the process. Post–war migration data of Estonia is mainly analyzed on the basis of the current statistics for 1956–1991, the data on the foreign–born population is based on the 1989 census.

Analysis of any demographic processes in Estonia through a longer time period needs reminding of its 50 years' incorporation into USSR. It must be underlined that until the II World War Estonia's demographic development was close rather to the North/West European countries than to its East neighbours or South Eastern countries [Palli, 1988; Katus, 1982; Katus, 1991a]. At the end of 1920s the Estonia's total fertility rate had dropped under the replacement level as typical of the forerunners of the fertility transition. As to the migration, the mobility transition had gathered its speed.

At the threshold of the 20th century Estonian population was standing at the stage of formation migration potential. The potential realized mainly in two directions: firstly, in the direction of towns of the country; secondly, towards the other countries.

The rural population had started to show decrease already at the turn of the century [Maiste, 1988], the urban population, on the contrary, increased steeply. Growth index for 1881/1934 for urban population in Estonia is 2.37, whereas for the capital – Tallinn – the index is even 3.03. The urban population had grown in nearly 60 years about three times –from 11.8 per cent (1881) to 32.8 (1939). Between 1881 and 1897 censuses the population of towns of Estonia had grown by 130.2 per cent, but 1881 level compared to 1922 showed the growth of 197.0 per cent. Among one of the most steeply grown towns are the capital Tallinn by 242.5 per cent (between 1881 and 1922 censuses), Rakvere 218.3 per cent. The same trend could be analyzed by the birthplace in 1922. If the rural

population is still quite settled (87.5 per cent are born in the same county, 64.3 per cent out of them in the same administrative unit), the urban population is characterized by a far greater mobility. 58.8 per cent of the urban population are born in the same county, of them 32.6 per cent in the same administrative unit.

As to the second direction in the mobility transition, the pre–war emigration estimations show that about 20 per cent of the Estonians were living beyond their ethnic boundaries [Katus 1991b].

Just by the beginning of the II World War the intensive migration was slowing down and showed some indications of stabilization [Katus & Sakkeus 1984]. This process was interrupted by the II WW and the incorporation into the Soviet Union. To Estonia it meant the inheritance of an enormous migration hinterland with the population at an utterly different stage of development. The demographic transition had started just in the 1920s on the European part of the Russian Federation and was at the stage of formation of the intensive migration potential [Vishnevski et al 1983]. In Estonia this process coincided with the process of extensively developing economy. So Estonia became a good target both for migration and economics. During the first decades of the post–war period the migration exchange came mainly to the neighbouring regions of the European part of the Russian Federation. As in the 1960s the migration potential of these regions started gradually to slow down but with economy extensively developed, hinterland was enlarged towards the regions which were having the migration potential. It meant enlargement towards the southern regions of the European part of the Russian Federation such as Northern Caucasus, Volga Region with the population at the different stage of demographic development as well as absolutely different social, cultural and ethnic background.

The main outcome of the above–referred processes has been that while in 1945 Estonians formed on their own territory almost 97 per cent (Katus 1987), by 1989 there were 40 per cent of Estonians living in Estonia. The largest ethnicity group are the Russians. With the incorporation into USSR and rebordering, Estonia lost practically all its ethnic Russians (by 1934 census about 8 per cent). The second and third largest ethnic groups are Ukraines and Byelorussians, of whom Estonia before the WW II did have practically none. It has to be assumed that particularly the above–mentioned nations were in the very stage of demographic transition (Vishnevski et al.,1983) which loosened their migration potential and due to many coinciding circumstances (extensive development of economy, deportation and emigration of Estonians, high labour force participation rates among Estonians) this potential headed to fill the opened pool.

The population situation being formed in Estonia suggests that in any population projections the two main population groups – Estonians and Non–Estonians – must be dealt apartly. Migration data shows also their different involvement in different migration streams.

One of the main purposes of this paper was to disaggregate migration data by different streams on the basis of movement approach, which is defined treating migration

'as an event and focuses on the age-specific and origin-destination-specific migration rates that define the migration propensity of individuals as a ratio of occurrences to population exposure..' [Rogers 1988, p.358].

The data was disaggregated by main out-migration streams – (1) internal, i.e. within Estonia; (2) external, i.e. the out-migration from Estonia to other republics of the USSR (including international migration, the share of which has not been significant in it – up to 1 per thousand people). As far as those serving (from Estonia) in the army and imprisoned are in Soviet migration data always recorded in the external migration, to eliminate their specific age pattern, in further analyses they have been excluded from the external stream. Excluding the latter contingent the out-migration to other republics of the previous Soviet Union should in its structural distribution be alike and more homogeneous with the internal one. To note the difference in the paper this stream is referred to as the main migration to the Soviet Union (USSR migration). In my further discussion it is useful to give an overview of these main trends of out-migration of Estonia.

MAIN MIGRATION TRENDS IN POST-WAR ESTONIA

The figure 1 presents the total volume of the migration streams of Estonia throughout the examined period. The total streams include both internal and external migration. The data presented on the figure shows the basis for the situation formed in today's Estonia. The figure points out the main peaks of in-migration that should be focused on: the very first years of the so-called Soviet era, the middle of 1950s, the beginning of 1970s. As far as the Soviet migration statistics in the 1940s and early 1950s recorded only data referring to the movements between urban areas, the data for 1946 – 1950, 1952, 1953 are calculated for the rural population as the average of 1951, 1954, 1955, 1956, in order to get the dynamics covering total migration streams (see tables 1 and 1a).

Figure 2 illustrates the volume of migratory movements with USSR for urban population of Estonia since 1946. As regards to the in-migration from USSR the attention should be paid to its high level just in the first two years of the Soviet period. The data for the period 1946–1956 is examined for the first time (see tables 2 and 2a). In the migrational interchange with USSR the next peak in early 1950s might among others refer also to the returning of the deported Estonians from other parts of the Soviet Union. The peak of early 1960s corresponds with the assumption that alongside the European part of Russia, Ukraine and Byelorussia had by that time reached the stage in the demographic development with the largest share of working-able population, the part of population which during the formation of new demographic relationships is most free in its demographic-dependent behaviour (among others – in migrational behaviour).

Throughout the investigated period Estonia has gained from in-migration. It must be pointed out that the total amount of movements to and from USSR is about seven times higher than the net gain from 1956–1991 (out of 1.4 million movements /approximately the number of the total population of Estonia/ net migration for the period forms more

than 200.000). The amount of movements of the total external stream (incl. Soviet Army servants and migration to Western countries) is twice the number for migrations with USSR.

The above–mentioned situation refers to the high unadaptiveness of the migrants. It is worth mentioning that with the exhaustion of the migration potential of neighbouring regions in Russia, with the economy extensively developed and the high labour force participation rates, migration hinterland of Estonia was enlarged towards the regions in USSR which had the migration potential. 1980s with its fluctuations reveal the efforts made to maintain the in–migrations on the same level.

Out–migrations with USSR could be regarded as a certain response to the in–migrations. With the high unadaptiveness, increase of in–migration is corresponding with the out–migration after a certain time–lag. Crude migration rates for out–migration to USSR for 1959–1991 demonstrate the peak of 1960s as the response to the in–migration of 1950s as well as the peak around 1970 might be the reflection of the in–migration peak of the middle of 1960s (see figure 3 and table 3).

Gross migration rates (GMR) for internal and USSR out–flow expose the main trends of migration over 1967–1990 (Fig.4.). For the comparison GMR for the total external migration is added. The trend of the latter shows clearly the smoothness of the stream compared to the migration with USSR. Common trend of the last 20 years for both internal and out–migration for USSR in Estonia has been their decreasing intensity. Although, it must be mentioned that the internal one has had a more stabile trend and decrease is revealed already in the beginning of the 1970s, while the main out–flow shows absolutely the opposite trend in the mid–70s, from then onwards the steep decrease is observed.

To give the overall characteristics of the migration streams under investigation, their structure by ethnicities should be pointed out. Both migration streams are quite homogeneous, but in the opposite ways. The share of the Russians in the main (with USSR) migration is about 70 per cent, Ukraines form 16 per cent and Byelorussians 6 per cent. Estonians share is about 3 per cent (1989). Comparing crude migration rates in the migration to Soviet Union for 1975/1976 and 1988/1989, the same relative decrease is observed. The decrease has been relevant for Estonians (crude migration rate in 1975 0.96 per thousand, in 1989 0.29) – 70 per cent; for the Non–Estonians it was not so steep until the very recent years.

Internal migration could be characterized as the more homogeneous from the viewpoint of Estonians involved. If in 1975 about 75 per cent of the stream comprised Estonians, in 1989 already 83 per cent came to the share of Estonians. Russians form about 14 per cent (CMR 10.1 per thousand) and Ukraines more than 1 per cent (1989). The decrease of the Estonians crude migration rate from 49.3 per thousand in 1975 to 30.9 per thousand in 1989 is little more than for one third, as far as for the Non–Estonians involved in internal migration the decrease is more than for two thirds (33.5 per thousand to 11.2 per thousand respectively). From this viewpoint these two streams could be

referred to as mononational which in our discussion due to their history of demographic transition reveal two types of demographic behaviour. In conclusion of this overview it must be stressed that the investigated migration flows are formed by different ethnicities standing at the different stage of demographic development. The different demographic behaviour also has its great and even determining impact on the migrational behaviour. From this viewpoint it is interesting to analyze the age pattern of these out-migration streams.

AGE AND SEX PATTERN OF ESTONIAN MIGRATION STREAMS

As it could be seen from Figure 4, trend of the internal migration till the last 3 years is more stabile. The steep fall of GMR for the last years could partly be explained by the change in migration data recording. Whether the last-mentioned fact is the main reason of such a decline or is it somehow related to the changing pattern of migration in general must still be investigated. The dynamics for 20 years gives grounds to talk about the stability of internal migration compared to the one with USSR. The same is revealed if the changes in the investigated migration streams are analyzed in respect of the dynamics of migration by sex. The internal migration draws attention to the very similar trend for both sexes. The main peculiarity of internal migration is the higher intensity of females (Fig.4). It is interesting to mention that those age groups having greater share in absolute numbers have it in the groups of high intensity which results in the fact that during several years gross migration rate for internal stream does not characterize the mean value. In the 1980s the female migration is already clearly dominating upon the male one in most age groups.

Quite traditionally male migration is dominating in migration of USSR (Fig.4). Although, around 1980 the intensity of both sexes' migration seemed to come closer. Still, the 1980s show that it is too early to wait for turnaround in this stream.

Age-specific migration rates expose the main regularities differentiating the two migration streams under investigation from one another. Internal migration age-specific rates show consequent decrease in all age groups over the investigated period (Fig.5). Attention must be drawn to the fact that although constantly decreasing the schedule has not principally changed.

The main regularity of the internal migration is the high peak in the age-group 15-19. This is the direct reference to the education system spacing in Estonia. Estonia has two main education centers which offer different education (University in Tartu, technical education as well as education in arts and music in Tallinn). This explains the high intensity in the referred age group.

USSR migration age-specific rates show quite a different distribution. Although the intensity of USSR migration has also observably declined, the migration schedule examined over the investigated period reveals relatively greater changes than these characteristic to the internal one. It is understandable that the main peak comes to the

older age group (mostly 20–24). But the lastly observed rates for 1989–1990 exhibit the migration getting even more older. The main peak comes to the age–group 25–29 and the decreasing slope in the next age groups is not so steep as for the previous time periods.

Age–specific migration rates for internal and USSR migration by sex exhibit even more vividly the main difference in the two migration behaviours (see figures 6 and 7). In internal migration both sexes have a similar curve. The high peak in the late teens was already explained for the total rates. Similarly for both time–points compared, female migration intensity seems to be overwhelming in the early twenties. Differentiation becomes evident when the following age–groups are compared. Explanation to that is quite classical: although women tend to live longer than men, they marry men seniors by several years. As it is pointed out by Andrei Rogers [1988, p.358] the immediate consequence is the double gender cross–over: the first in the late teens, and the second during the early retirement ages. However, the peculiarity of the internal migration is that the first cross–over is not in the teens but in the late twenties. It seems that, especially, for Estonian women the differentiated spacing of education has its greater impact, as well as women knowingly tend to graduate their studies more eagerly than men. The revealed peculiarity of Estonian female migration also corresponds with the trend brought out by Andres Vikat (1991) about the later mean age of women at first marriage and its tendency to increase in Estonia. The above–mentioned trend might also have some effect to the dominating female migration in the age–group of 20–24 and the later cross–over in migration schedule.

Andrei Rogers suggests that the upward slope of the migration schedule in the intraregional migrations is their regularity differing with that from the interregional migration which show the retirement peak in the early retirement ages [Rogers 1988, p.357]. The attention should be paid to the fact that the later cross–over tends to get older in both streams. It means that the real retirement age becoming older (by estimates of Allan Puur [1991] the difference between the real and legal pensionable age is about 3.5 years) is also reflected in the retirement migration schedule.

The classical cross–over of genders is very illustratively revealed in USSR migration (see Fig.7). In this migration schedule some relevant changes have taken place. Over the investigated period main migration peaks for both sexes have greatly altered. The overall common trend for USSR migration is its becoming younger.

Comparison of standardized age–specific migration rates (Fig.8 and 9) reveal the main differences in migration behaviour. The main difference is the increasing homogeneity around the age group of 15–19 in internal female migration directly referring to the education–related migration. The shift of the highest peak of USSR female migration towards the late teens is relevant, still the distribution of the age groups older than 25 has gained in heterogeneity. Thus, USSR migration could be characterized as undergoing relevant change in age pattern.

Standardized age–specific migration rates for internal migration by both sexes reveal a very slight age–dependency slow–down. Absolutely contraversary exhibition of the

migration extremum refers again to the education system spacing in Estonia. The increasing child–dependency ratio is corresponding with the trends in fertility of Estonia and Estonians. As Kalev Katus [1991a] has pointed out the compensational baby–boom was not characteristic to Estonia. However, since the late 1960s the total fertility rate started to increase, reaching the replacement level in early 1970s and staying fluctuating around it until the very recent years. The last two years' trend shows a very steep fertility decrease, comparable to the one the European countries exercised after the baby–boom.

Comparing male migration in both out–migration streams, more traditional form of the male in USSR migration is clearly exhibited. Although the trend towards higher age–dependency in the last mentioned stream is similar to the female one exposed in the same stream, the male migration does not reveal such a principal change in age pattern with the shift of extremum as the female one. The internal and USSR migration streams being compared, the attention is drawn by the absolutely different age groups with the highest migration intensity among men.

In conclusion, the comparison of main and internal migration standardized age–sex specific rates reveal that USSR migration for male is exhibiting absolutely different age pattern of the internal one. Nevertheless, the same growth of age–dependency as the female migration pattern of the same stream showed, is revealed. Attention has to be paid to the increase of dependent migration in the USSR stream (characterized by the increase of the child– and retirement dependency ratio). The last–mentioned fact indicates to the forthcoming changes in USSR migration age pattern and as revealed by the comparison of both sexes' migration, suggests that the carriers of the change are women. The main difference between the two investigated streams is revealed by absolutely different migration peaks, thus referring to the main distinction between the two age patterns.

THE PLACE OF MIGRATION WITH OTHER COUNTIRES OF THE WORLD IN THE ESTONIAN POST–WAR MIGRATIONS

In the migration streams of Estonia the external migration must be clearly distincted from that usually referred to as international. During the Soviet era as common to all the movements in USSR migration with other countries of the world (in the following referred to as international) was practically lacking due to various kinds of restrictions.

The international migration has a tiniest share in the migration forming up the external one (see Fig. 3). For the period 1946–1990 the volume of the international migrations is shown on figure 10 for the urban population. In the in–migration of the observed migration stream 3 peaks are registered: in 1946, 1956 and in the second half of 1980s – 1985 and 1988. The last one can be easily explained by the startpoint of the initial changes in the USSR which encouraged people to return or either start with the new business. In seeking the explanation for the first peak, the definitions of that time migration must be retraced whether the demobilized soldiers who came back directly from Germany or other foreign countries were recorded in it or else, certainly a fair amount of that peak comes to the share of those who came back after the war was over.

Peak of 1956 might be explained by the first signs of normalization in the first years of Khrustchow but it needs more data to have a certain view on that. The out-migration peaks fall to the years around 1970, and the second one to the second half of 1980s (see table 3). As to the last peak - it has been common to the whole what was called Soviet Union. But unlike the other regions of previous USSR, the level of international out-migration in Estonia after the very peak of 1985 has not reached the highest point anymore.

The analysis of 10 main ethnicities of Estonia [Katus, 1991c] reveal some interesting facts indirectly helping to restore the composition of international migration. For example, by 1959 census only 670 Germans were living in Estonia, while by 1970 census their number had increased about 10 times. More speakable is the distribution by the first language spoken - out of all Germans 36 per cent speak their own language, 56.5 are Russian speaking. The Jews previously living in Estonia had practically vanished by the end of the WW II, by 1989 census their number is comparable to the pre-war one, but if analyzed by the first language (mother tongue) spoken - 12.3 per cent are speaking their mother tongue, 78.3 - are Russian speaking. Approximately the same is true for the Poles - 20 per cent are speaking Polish, 63.4 are Russian speaking (1989 census data). In international migration for 1989 crude migration rates are the highest for Poles (170 per thousand) Germans (90.6 per thousand) and Jews (63.95 per thousand). The same rates for the Ukraines, Byelorussians and Russians are on a different level (CMR ranging from 2.3 to 1.04 per thousand) and the less intensity in the out-migration with other countries than USSR show the Finns and Estonians. Such a data tempts to conclude that Estonia has been treated by some ethnicities during the Soviet period as a transit country on the way to the Western countries. It mostly explains the peak of 1970s out-migration whereas in the in-migration from Soviet Union a sudden increase of Germans could be traced just in the beginning of 1970s. The little share of the Estonians in international migration is explained by the different stage in mobility transition. In correlation with international migration it should be added that the main concern is the short-time job-oriented migrations to the foreign countries among the Estonians, but more expected are long-term migrations (with the change of permanent residence) of the other ethnicities like Russians, Ukraines and Byelorussians from Estonia to Western countries after the ethnicities having their motherland outside the previous USSR have (like Germans, Jews, Poles and Finns) emigrated. Crude migration rates' decline of the latter can be already observed.

To conclude with the overview of the Estonia's migration trends since 1945 it must be pointed out that migration has served as the main source for the formation of the foreign-born population. It should be once more underlined that by the end of the II World War Estonia had become a mononational, ethnically homogeneous country. As far as for the whole Soviet Union international migration formed an unsignificant share in all migrations of Estonia (less than 1 person per thousand), the foreign-born population is formed up by the ethnicities engaged in the migration streams with the regions of late Soviet Union. The development of migration processes formed in Estonia a situation, which is exceptional among the rest of the previous Soviet republics and the explanation to it lies in the difference of the stages of demographic development of Estonia and the rest of the USSR at the time of the incorporation of Estonia into it.

FOREIGN-BORN POPULATION OF ESTONIA

Contemporary Estonia is a country with 120 ethnicities forming up the 40 per cent of Non-Estonians. The foreign-born population exhibits one of the highest shares in the context of European countries. Figure 11 presents the shares of the foreign-born populations in the member states of the Council of Europe and Estonia (see table 4). Among these countries Estonia stands the third. Even more remarkable is the situation reviewed between the same countries and the counties (maakonnad) of Estonia. The county with the lowest share of foreign-borns stands before more than 10 European countries.

If to look at the age-distribution of Estonia's population's two sub-groups - Estonians and Non-Estonians - differences are essential (fig. 12). Attention is drawn by the age-group of 25-39 - the demographically and economically most active ages - among the Non-Estonians. Such an age-distribution in large scale reminds most of all the migration schedule. The age structure of the foreign-born population of Estonia draws attention with the curve in older ages (fig.13). The answer to the two distingushed curves in the age distribution of foreign-born population of Estonia lies in the different stages of the demographic development of the two population groups - Estonians and Non-Estonians - representing in this case two different demographic behaviours.

The age-structure of the foreign-borns among Estonians show the source for the curve in older ages. Although the curve for active population is present among this sub-group as well, the overwhelming share of the older ages is visible. In the present paper I would like to put forward some hypothesis for further analysis. First of all, the Estonian foreign-borns have been in a very low extent engaged in the post-war interregional (pro international) migration processes, except when forced - like deportation. Part of the deported in the first years of Soviet era, gave birth to today's foreign-born Estonians. Part of them might have declared during the 1989 census for the regions being part of Estonia before the WW II as the foreign-borns in the boundaries of 1989. Estonia. However, to my opinion it does not explain such an overwhelmingly old age structure of the Estonian foreign-borns - it might indicate to the fact that by the beginning of the WW II the Estonians had been entering another stage of mobility transition and gone through the stage of intensive international (long-distanced) migration and reached the point of turnaround by the beginning of 1940s. In the circumstances where the population did not have migration potential for job-orientated (long-distanced) migration, neither possibilities to have short-term international migration (tourism, qualification of skilled labour, vacation etc) nor could it result in family migration gathering importance (restrictions of housing policy) and with the education system centralized - the migration process of the Estonians during the post-war period resulted in the intensive internal migration. The differences between Estonian internal and external migration are discussed in another paper [Sakkeus, 1991b]. The task for further analysis is to analyze the cohorts of foreign-borns in correlation with the time of residence as well as place of birth. Hereby, it could be underlined that the share of foreign-borns among Estonians is very little and forms only 5.2 per cent.

Among the 40 per cent of Non–Estonians 38 per cent are foreign–born. The age structure of the Non–Estonians differs greatly of that of Estonians. Although, the two peaks are also present among this sub–population, both of them fall into the ages of the working–able population (fig.13). The two peaks in the case of Non–Estonian foreign–borns most apparently indicate to the two waves of migration – one in the first years of Soviet era, the second one in the late 1960s with adding up the children of the first wave. The age structure of the Non–Estonians draws the attention with the practically lacking proportion of native Non–Estonians in working–able population (see fig.12). Data referring to the shares of some age–groups among Estonian and Non–Estonian foreign–borns shown in table 5 underline the above–said. It must be stressed that among the Non–Estonians over 45 of age the native–borns form less than 8 per cent. It certainly refers to the fact that most of the foreign–borns among Non–Estonians are the gain out of the intensive post–war migration processes, which mainly engaged population of various regions of previous USSR.

Among the 120 ethnicities forming up the Estonia's foreign–borns, 10 main ethnicities, mentioned in the previous section, form about 98 per cent, among whom the greatest share belongs to the Russians with over 65 per cent (fig.14). However, if to look at the share of the foreign–borns among the particular ethnicity, residing permanently in Estonia, the share of the foreign–borns among the Russians is one of the lowest (about 57 per cent). The explanation to that lies in the fact that Russians of European Russia were more advanced in the demographic transition among the rest ethnicities (excl. Estonians and Latvians) forming up USSR. So, in further analysis it has been put forward to test the hypothesis that the Russians formed the most part in the first post–war years' migration streams. With the extension of the hinterland, from the demographically less advanced regions also Russians of these regions were mostly involved in the mobility transition as the population exercising the certain stage of mobility transition, but as the departure regions were with totally different social and cultural background than the near hinterland, these migrants added to the unadaptive migrant population, which most probably is keeping moving – if to judge upon the out–migration intensity of the last years.

The distribution of foreign–born population by the place of birth confirms the above–mentioned. The greatest share form the regions of Russia. However, among the variety of these regions, 5 of them are outstanding by the greatest share among the rest of birthplaces. These five are Pihkva region (oblast), Leningrad region (without St. Petersburg city), Novgorod region, St. Petersburg and Tver region. Out of these five, four first ones form the nearest hinterland to Estonia – i.e. the regions are directly bordering with Estonia and have historically been related to Estonia through centuries. Figure 9 gives the overview of the main birthplaces of foreign–borns of Estonia. Although, Russia with the rest of its regions has the greatest share, Ukraine – as the place of birth with all its regions is greater than Pihkva and Byelorussia with its regions is placed before Novgorod – the attention should be paid to the fact that no other region (at the 'oblast' level) in these republics has so outstanding share as the above–referred. For further analysis it is useful to test the time of residence of those born out of near hinterland. The assumption is that these regions were more demographically developed and the population out of them must have entered the intensive stage of mobility transition earlier. In further analysis it would be interesting to look at the population born in Tver region as the only region of central Russia, outstanding of all the rest ones.

In connection to the place of birth and related to the migration processes, the little share of the nearest republics to Estonia – Latvia and Lithuania – among other birthplaces must be underlined. The migrational relationships with these republics have throughout the post–war period been unsignificant. Although the outcome is identical, the reasons in either cases are different. Relationships with Latvia are not intensive because both are in the identical stage of mobility transition with no migration potential. In the Lithuanian case, it would be the opposite. The explanation needs a more thorough analysis of the demographic development of Lithuania through centuries, but the assumption is that the stage of mobility transition should be comparable with Byelorussia or even behind of it, which means that the migration potential has not reached its intensity peak in Lithuania's case. Some light to the testing of the assumption should throw the further analysis in relation to the durance of the residence of the latter ethnicities in Estonia born out of the named regions.

CONCLUSION

The main task of this paper was to reveal the differences in the age pattern of internal and main migration in the post–war Estonian migration processes and show the main source for formation the foreign–born population in Estonia. The first aim was to reveal whether the differences between internal and migration with USSR exist. They should expose the behaviour of two population groups standing at the different stages of demographic development. In this respect, internal migration reveals the behaviour of demographically more advanced population group as far as the stream consists overwhelmingly of the Estonians. On the other hand, the migration with USSR characterizes the behaviour of the Non–Estonians, share of the Russians in which is significant.

Common to both streams is the decrease of out–migration intensity over the investigated period 1967–1990. Although it must be recalled that in the mid–70s the USSR migration had another peak which corresponded with the in–migration peak in the late 60s and first half of 70s.

The main differences between internal and USSR migration are revealed by disaggregating them by sex. Internal migration is characterized by far more intensive female migration than that of men. In the internal migration main peak of intensive migration for both sexes fall into the same age–group. The steep decline of gross migration rate for the last 3 years has not exhibited any principal change in the internal age pattern. Vice versa, the standardized age–sex specific rates for internal migration reveal even the growth for the migration peak group (15–19 years old) for both sexes compared to the same pattern of 1967–1968.

The above–stressed common peak for both sexes in internal migration is definitely the consequence of the high education–oriented migration. The changes in the age pattern of internal migration by sex reveal the synchronic decrease of male migration practically in

all ages. In female internal migration the lowest decrease expose the 0–4 and 20–24 age–groups. The high peak of female internal migration in the age–group 20–24 and internal migration not having the corresponding cross–over in male migration brings to the thought that in this migration besides the overwhelming impact of education migration, females tend to move with their children but without the corresponding spouse. The reference should also be made to the higher mean age at first marriage among Estonians.

The migration to USSR demonstrates more classical form of male being older and female younger. It seems that in main migration relatively greater changes are characteristic to females who tend to migrate in younger ages and the recent peak in the age–group 20–24 has decreased very steeply. The USSR male migration has changed relatively less and exposes more classical form. From this viewpoint more attention should be paid to the forthcoming changes in female main migration who seem to be the carriers of an essential change in this stream. The divergency of the age distribution, characteristic to the lastly compared time–point (1989–1990), seems to indicate that the age pattern of this stream is undergoing thorough changes.

It seems that the changes in internal migration highlight the forthcoming trends for migration to USSR. On the other hand, despite of the relative stabilization of internal migration intensity already by the beginning of the II WW, the traditional age pattern has not essentially changed throughout the following period. The society organization in a traditional way (no changes in the spacing of education system, strong relationships between the job and accomodation attaining, living standard lessening the higher the retirement age etc.) has not permitted to reveal the relevant changes in the age pattern of internal migration. Nevertheless, the stabile age pattern of the internal migration together with the similarities common to both sexes, on the one hand, – and the great and growing divergency in the age pattern of main migration together with still maintained traditional form, on the other hand, – give grounds to speak about the more homogeneous and advanced internal migration and the main migration at the stage of thorough changes.

The post–war migration trends indicate the main source of formation of the foreign–borns of Estonia. The main source of it has been – the intensive migration with USSR, and mostly with the European part of Russia after the incorporation into USSR. It is obvious that such a great share of foreign–borns adds to the social problems of the contemporary Estonia as in the political sense (above all no more existing Soviet citizenship) as well as from the demographic point of view. The paper made an attempt to show that the formation of the foreign–borns of Estonia is an exceptional case also in the context of previous USSR because of the different stages of demographic development the populations are going through. The mentioned difference has been the main reason, in the first place, to cause the situation described.

It must be underlined that by 1945 Estonians formed more than 97 per cent of the population in Estonia, whereas by 1989 only 60 per cent came to their share. Among all the foreign–borns Estonians form only about 10 per cent, whereas among the Estonians their share is barely 5 per cent. Among the Non–Estonians the share of foreign–borns is about 38 per cent. The two sub–populations differ greatly, especially it is shown on the basis of age distributions of each sub–population's foreign–borns. The age structure of

Non–Estonian foreign–borns draws attention with its two peaks in younger and older ages of working–able population which easily could be correlated with the main migration peaks in the post–war migration streams with USSR. The Estonians' foreign–borns overwhelming share in the old ages indicates to the basic difference in the formation of the foreign–borns of the two sub–populations of Estonia.

The analysis of the Non–Estonians age structure reveals the fact that the share of 60 per cent of their native population are formed mostly at the expense of the children – the second generation of the foreign–born population, because already among the ages more than 20 years old – the share of the foreign–borns is about 80 per cent. Even more outstanding is the share of the foreign–borns among the Non–Estonians over 45 years old – more than 92 per cent out of 45 years and older Non–Estonians are foreign–born. It clearly indicates that the main source to the formation of the foreign–born population has been the migration with USSR if further analyzed in respect to the places of birth and ethnicities forming up the foreign–born population.

Another task of the paper has been to put forward different assumptions to be tested as the second step of the research study of the foreign–born population of Estonia.

First of all, attention is drawn to the fact that the Estonians have been in a very low extent engaged in the post–war interregional (pro international) migration process, except when forced – like deportation. Overwhelming share of old ages in the structure of the Estonian foreign–borns might indicate that by the beginning of the WW II the Estonians had been entering another stage of mobility transition and gone through the stage of intensive international (long–distanced) migration and reached the point of turnaround. The task for further analysis is to analyze the cohorts of foreign–borns in correlation with the time of residence as well as place of birth in order to get proof to the assumption of a turnaround among the Estonians.

Among the 120 ethnicities forming up the Estonia's foreign–borns 10 main ethnicities comprise about 98 per cent, among whom the greatest share belongs to the Russians with over 67 per cent. However, the share of the foreign–borns among the Russians is one of the lowest (about 57 per cent). In further analysis it has been put forward to test the hypothesis that the Russians formed the most part in the first post–war years' migration streams as well as with the extension of the hinterland, from the demographically less advanced regions the mobility transition first of all involved Russians.

The analysis of places of birth brought up 5 dominating regions among the foreign–borns. Out of these five, four form the nearest hinterland to Estonia – i.e. the regions are directly bordering with Estonia and have historically been related to Estonia through centuries. The attention is drawn to the fact that no other region in the other republics of previous Soviet Union has so outstanding share as the above–referred. For further analysis it is useful to test the durance of residence of those born out of near hinterland. The assumption is that these regions were more demographically developed and the population out of them must have entered the intensive stage of mobility transition earlier.

In connection to the place of birth and related to the development of migration processes, the little share of the nearest republics to Estonia – Latvia and Lithuania – among other places of birth is underlined, the explanation to what lies in different directions of demographic development – with Latvia – the same stage of no migration potential, with Lithuania not yet resulted migration potential. Some light to the testing of the assumption should throw the further analysis in relation to the durance of the residence of the latter ethnicities in Estonia.

Estonia with its more than 26 per cent of foreign–borns is an outstanding country in the context of Europe. The main outcome of the analysis is that the main source of formation the foreign–born population of Estonia has been the post–war migration exchange with the previous Soviet Union and mostly with Russia. The Non–Estonians mainly forming up the foreign–borns are either of the slavic origin (Russians, Ukraines and Byelorussians, more than 80 per cent) or ethnicities migrated from USSR to Estonia for further emigration to their motherland (e.g. Germans, Poles, Jews). The analysis of the foreign–borns reveals that the socio–political problems of todays' Estonia lie not in the conflicts between ethnicities but are rather related to the unadaptiveness of the migrant population of totally different social, ethnical and cultural background forming up the Non–Estonian population and the foreign–borns.

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Table 1. IN-MIGRATION FLOWS, Estonia, 1946–1991

Years	Total	Internal	External	USSR	Special	International
1946 *	115553	56436	59117	46455	11153	1509
1947 *	115237	61701	53536	47498	5515	523
1948 *	100302	59849	40453	33624	6151	678
1949 *	99056	63065	35991	31286	4366	339
1950 *	110147	67094	43053	36289	6269	495
1951	109077	62699	46378	40076	5980	322
1952 *	101315	57444	43871	37556	5854	461
1953 *	108719	58883	49836	39323	10096	417
1954	102604	55901	46703	36462	9869	372
1955	94292	51612	42680	30764	11151	765
1956	106553	56049	50504	39084	10033	1387
1957	94279	55146	39133	31911	6758	464
1958	92261	56742	35519	28449	6775	295
1959	84283	53834	30449	24024	6045	380
1960	85209	55262	29947	23093	6590	264
1961	81249	55072	26177	22297	3545	335
1962	84306	56055	28251	22122	5964	165
1963	86847	57672	29175	21478	6589	251
1964	85875	56271	29604	22082	7259	263
1965	83419	54338	29081	21784	7028	269
1966	86268	56229	30039	22892	6927	220
1967	87407	57456	29951	21714	8048	189
1968	96089	58740	37349	27813	9338	198
1969	103310	61184	42126	31409	10190	527
1970	100864	59500	41364	30235	10435	694
1971	100820	61146	39674	28787	10391	496
1972	95599	60295	35304	25324	9763	217
1973	94774	58756	36018	26197	9584	237
1974	92756	57527	35229	24668	10226	335
1975	92099	57829	34270	23828	10142	300
1976	87078	53770	33308	23488	9536	284
1977	87876	53355	34521	24158	10021	342
1978	85469	53273	32196	22608	9163	425
1979	83378	52287	31091	21703	9003	385
1980	82453	50936	31517	20321	10631	565
1981	81856	50000	31856	20034	11281	541
1982	79870	48954	30916	19184	11135	597
1983	77547	47468	30079	17546	11840	693
1984	77694	48225	29469	16814	11967	688
1985	80485	48523	31962	17098	12833	2031
1986	79905	49155	30750	17349	12289	1112
1987	78850	49106	29744	16045	12870	829
1988	69483	43107	26376	12560	12208	1608
1989	61709	37224	24485	11118	11987	1380
1990	52373	33955	18418	7554	10037	827
1991	43855	29413	14442	4966	9239	237

* estimations

Table 1a. OUT-MIGRATION FLOWS, Estonia, 1946-1991

Years	Total	Internal	External	USSR	Special	International
1946 *	66440	44614	21826	14489	6603	734
1947 *	76070	52249	23821	18593	4944	284
1948 *	80026	50095	29931	21700	7977	254
1949 *	82524	50846	31678	21647	9887	144
1950 *	85809	53617	32192	22792	9226	174
1951	89116	52648	36468	26774	9519	175
1952 *	85463	51662	33801	23526	10101	174
1953 *	85670	50836	34834	26817	7874	143
1954	91441	52728	38713	25714	12668	331
1955	87416	49404	38012	28659	9214	139
1956	89852	50674	39178	29060	9868	250
1957	92419	50676	41743	31973	9030	740
1958	85476	50879	34597	21468	12735	394
1959	75439	47579	27860	18779	8759	322
1960	81469	52032	29437	21514	7561	362
1961	72627	51802	20825	14339	6318	168
1962	74416	51806	22610	14693	7747	170
1963	73460	52296	21164	13417	7589	158
1964	74517	51889	22628	13092	9289	247
1965	75125	51926	23199	14342	8650	207
1966	80152	54136	26016	16487	9304	225
1967	81124	55012	26112	18093	7851	168
1968	86008	56583	29425	18269	10878	278
1969	90135	59227	30858	19936	10540	382
1970	88204	58110	30094	18956	10534	604
1971	89900	60049	29851	18698	10477	676
1972	87533	59183	28350	17492	10084	774
1973	87518	58554	29073	18272	9846	955
1974	88071	56591	31480	18744	10052	2684
1975	87756	56789	30967	18010	10633	2324
1976	82236	53726	28510	16887	9195	2428
1977	80315	53908	26387	16005	8745	1637
1978	80272	53389	26883	16407	9612	864
1979	79286	53093	26193	16332	9004	857
1980	75307	50427	24880	14010	10007	863
1981	75397	49727	25670	13348	11680	642
1982	74167	48631	25536	13341	11459	736
1983	72350	47300	25050	12923	11417	710
1984	71385	47682	23703	12064	10949	690
1985	72318	48062	24256	11681	11637	938
1986	71902	48389	23513	11352	11164	997
1987	71001	47747	23254	11205	10663	1386
1988	66198	41847	24351	10754	11148	2449
1989	56922	37224	19872	9960	7547	2365
1990	49514	33955	15559	10735	3157	1667
1991	43876	29413	14463	11544	1226	1693

* estimations

Table 2. IN-MIGRATION FLOWS, Estonia, urban population, 1946-1990

Years	Total	Internal	External	USSR	Special	International
1946	79830	32283	47547	37410	8748	1389
1947	79514	37548	41966	38453	3110	403
1948	64579	35696	28883	24579	3746	558
1949	63333	38912	24421	22241	1961	219
1950	74424	42941	31483	27244	3864	375
1951	72272	38546	33726	28845	4679	202
1952	65592	33291	32301	28511	3449	341
1953	75683	34730	40953	32909	7747	297
1954	68350	31748	36602	28944	7406	252
1955	61367	27459	33908	25503	7760	645
1956	64960	27927	37033	28546	7314	1173
1957	55226	27532	27694	22452	4854	388
1958	53706	28639	25067	20054	4790	223
1959	51829	29010	22819	18003	4552	264
1960	55089	30814	24275	18985	5060	230
1961	50620	29953	20667	17907	2632	128
1962	52690	30910	21780	17370	4294	116
1963	57300	33778	23522	18200	5123	199
1964	55138	31932	23206	17645	5375	186
1965	53553	29949	23604	18355	5044	205
1966	54707	30627	24080	19132	4803	145
1967	55769	31778	23991	18277	5590	124
1968	60108	32615	27493	20913	6410	170
1969	66307	34716	31591	24030	7080	481
1970	65182	33717	31465	23356	7487	622
1971	64491	34270	30221	22438	7380	403
1972	61381	33767	27614	20632	6854	128
1973	62238	33375	28863	22057	6644	162
1974	60168	32128	28040	20749	7097	194
1975	60083	32812	27271	19953	7166	152
1976	56353	29644	26709	19792	6764	153
1977	57294	29708	27586	20293	7082	211
1978	55637	29916	25721	18996	6473	252
1979	54692	29502	25190	18242	6661	287
1980	53874	28722	25152	17009	7769	374
1981	53094	28150	24944	16543	7995	406
1982	52243	28001	24242	15818	8045	379
1983	49590	25980	23610	14592	8529	489
1984	50112	26586	23526	14293	8686	547
1985	52728	26853	25875	14561	9566	1748
1986	52318	27333	24985	14754	9372	859
1987	51308	27521	23787	13677	9545	565
1988	43923	23723	20200	9961	8846	1393
1989	39098	19490	19608	9542	8929	1137
1990	31287	17494	13793	6304	6788	701

Table 2a. OUT-MIGRATION FLOWS, Estonia, urban population, 1946-1990

Years	Total	Internal	External	USSR	Special	International
1946	34244	18506	15738	10600	4508	630
1947	43874	26142	17732	14704	2849	179
1948	47830	23988	23842	17811	5882	149
1949	50328	24739	25589	17758	7792	39
1950	53613	27510	26103	18903	7131	69
1951	52738	26541	26197	19226	6901	70
1952	53267	25555	27712	19637	8006	69
1953	54250	24729	29521	23501	5877	143
1954	60973	26621	34352	23761	10260	331
1955	57217	23297	33920	26387	7394	139
1956	57337	24308	33029	24606	8217	206
1957	52742	23207	29535	21602	7397	536
1958	50405	22621	27784	17778	9674	332
1959	41999	20311	21688	15109	6365	214
1960	45677	22554	23123	17190	5674	259
1961	38715	22038	16677	11945	4611	121
1962	40972	23260	17712	12013	5575	124
1963	39688	22605	17083	11602	5352	129
1964	41197	23892	17305	10987	6164	154
1965	42524	24260	18264	12168	5950	146
1966	46102	25436	20666	13983	6516	167
1967	46615	25892	20723	15288	5299	136
1968	51041	27646	23395	15307	7858	230
1969	52171	28283	23888	16026	7519	343
1970	51759	28442	23317	15290	7493	534
1971	52686	29442	23244	15126	7485	633
1972	51560	29452	22108	14482	7018	608
1973	52052	29405	22647	15137	6894	616
1974	52981	28551	24430	16035	6964	1431
1975	52639	28804	23835	15268	7313	1254
1976	49592	27395	22197	14318	6417	1462
1977	47968	27577	20391	13605	5848	938
1978	48041	26938	21103	13798	6749	556
1979	47579	27134	20445	13714	6142	589
1980	45186	25773	19413	11615	7204	594
1981	45606	25716	19890	11216	8167	507
1982	45697	28470	17227	8296	8350	581
1983	45804	25563	20241	11035	8641	565
1984	44415	26462	17953	9071	8379	503
1985	44968	26897	18071	8406	8885	780
1986	45664	26768	18896	9765	8271	860
1987	44683	25959	18724	9702	7951	1071
1988	42898	24282	18616	8594	8028	1994
1989	35472	19716	15756	8417	5316	2023
1990	31808	18965	12843	8844	2574	1425

Table 3. CRUDE OUT-MIGRATION RATES, Estonia, 1959-1991

Years	Total	Internal	External	USSR	Special	International
	62.9238	39.6857	23.2381	15.6636	7.3059	0.2686
1960	67.2443	42.9471	24.2972	17.7576	6.2408	0.2988
	59.2836	42.2847	16.9989	11.7046	5.1572	0.1371
	59.9354	41.7251	18.2103	11.8339	6.2395	0.1369
	58.3563	41.5437	16.8126	10.6584	6.0287	0.1255
	58.3508	40.6319	17.7189	10.2517	7.2738	0.1934
1965	58.0323	40.1116	17.9207	11.0789	6.6819	0.1599
	61.2511	41.37	19.8811	12.5991	7.11	0.1719
	61.5065	41.709	19.7976	13.7177	5.9525	0.1274
	64.6078	42.5043	22.1036	13.7234	8.1714	0.2088
	66.9279	43.9778	22.913	14.8031	7.8263	0.2836
1970	64.7185	42.6374	22.0811	13.9087	7.7292	0.4432
	65.1711	43.5313	21.6399	13.5547	7.5951	0.4901
	62.7619	42.4347	20.3272	12.5419	7.2303	0.555
	62.1668	41.5927	20.6515	12.9792	6.9939	0.6784
	62.0354	39.8615	22.1738	13.2029	7.0804	1.8906
1975	61.3442	39.6973	21.6469	12.5895	7.4328	1.6245
	57.0904	37.298	19.7924	11.7234	6.3834	1.6856
	55.3605	37.1584	18.1883	11.0321	6.0279	1.1284
	54.9664	36.5582	18.4082	11.2347	6.5818	0.5916
	54.0028	36.1624	17.8404	11.124	6.1328	0.5837
1980	50.9887	34.143	16.8457	9.4859	6.7755	0.5843
	50.6899	33.4318	17.2581	8.974	7.8525	0.4316
	49.5042	32.4597	17.0445	8.9047	7.6485	0.4913
	47.9596	31.3544	16.6052	8.5664	7.5681	0.4706
	47.0113	31.4014	15.6098	7.9449	7.2106	0.4544
1985	47.308	31.4405	15.8674	7.6413	7.6125	0.6136
	46.6864	31.4193	15.2671	7.3709	7.2488	0.6474
	45.743	30.7614	14.9816	7.2189	6.8697	0.8929
	42.3835	26.7927	15.5908	6.8853	7.1375	1.568
	36.286	23.7291	12.6678	6.3492	4.811	1.5076
1990	31.5157	21.6124	9.9033	6.8328	2.0094	1.061
	28.0134	18.7793	9.2342	7.3705	0.7828	1.0809

Table 4. SHARE OF FOREIGN-BORN POPULATION IN THE POPULATIONS OF SELECTED MEMBER STATES OF COUNCIL OF EUROPE AND ESTONIAN COUNTIES (MAAKONNAD)

COUNTRY/county	
Ida-Virumaa	50.98
LIECHTENSTEIN	36.1
Harjumaa	33.1
LUXEMBOURG	26.7
ESTONIA	26.3
Laane-Virumaa	20.2
Valgamaa	19.5
Laanemaa	18.4
SWITZERLAND	17
Tartumaa	16.2
Parnumaa	13.8
Raplamaa	9.4
Viljandimaa	9.3
Vorumaa	9.2
Jarvamaa	9.2
SAN MARINO	8.8
BELGIUM	8.8
Polvamaa	8.8
Jogevamaa	8.6
GERMANY	7.3
Saaremaa	6.6
FRANCE	6.5
SWEDEN	5.3
Hiiumaa	5.1
AUSTRIA	4.7
NETHERLANDS	4.2
NORWAY	3.2
GREAT BRITAIN	3.1
DENMARK	2.9
GREECE	2.2
ICELAND	1.9
PORTUGAL	0.9
SPAIN	0.8
FINLAND	0.4
ITALY	0.1
TURKEY	0.1

Source: Recent demographic developments in the member states of the Council of Europe and Yugoslavia. Council of Europe. Strasbourg 1990. pp. 9, 16;
Estonian data is from 1989 census

Table 5. SHARE OF FOREIGN-BORNS AMONG SUB-POPULATIONS, Estonia, 1989

Age group	Non-Estonians	Estonians	Total
0 – 19	21.75	1.05	8.85
15 – 19	36.75	1.4	13.92
20 – 44	65.36	3.4	30.55
20+	79.29	5.85	33.54
45+	92.41	7.92	36.46
60+	91	9.05	33.69

FIG.1. MIGRATION STREAMS OF ESTONIA
incl. internal and external, 1946-1991

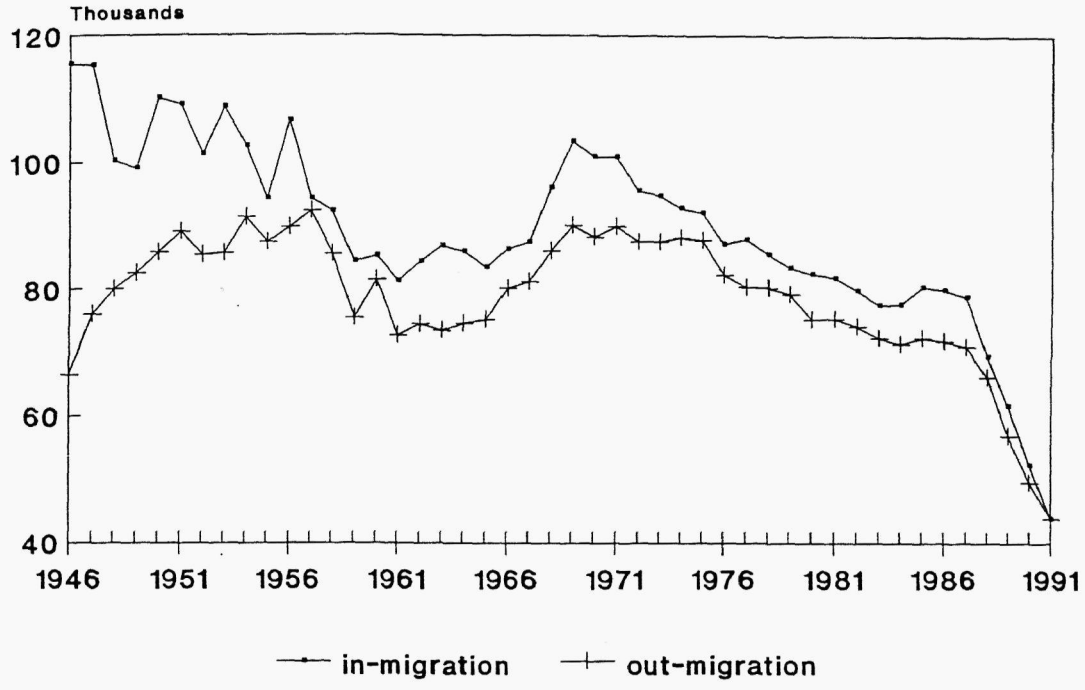


FIG.2. MIGRATION EXCHANGE WITH USSR,
URBAN POPULATION, ESTONIA, 1946-1991

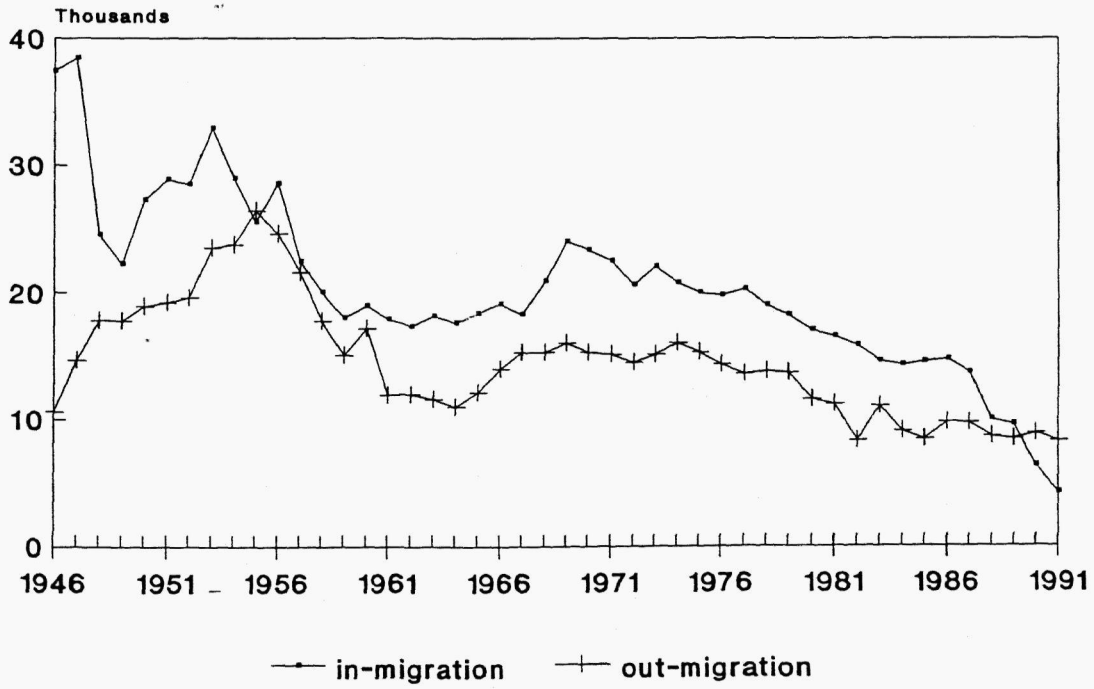


FIG.3. CRUDE MIGRATION RATES FOR INTERNATIONAL AND MIGRATION TO USSR ESTONIA, 1959-1991

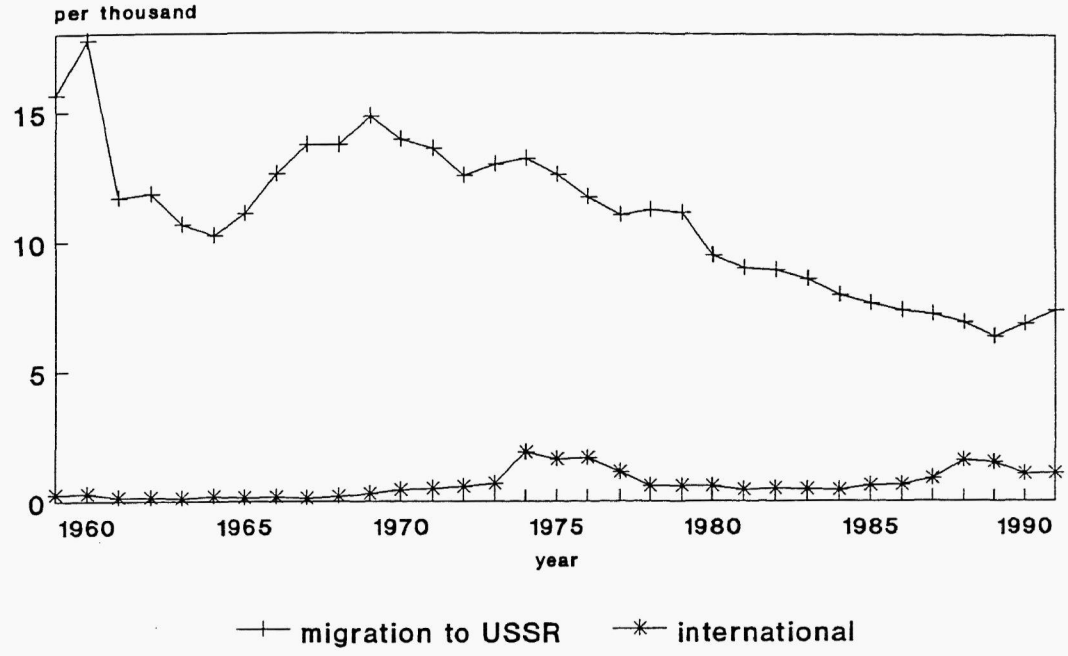


FIGURE 4 CHANGES IN INTERNAL AND MAIN MIGRATION BY SEX, ESTONIA 1967-1990 (GMR 1967=1)

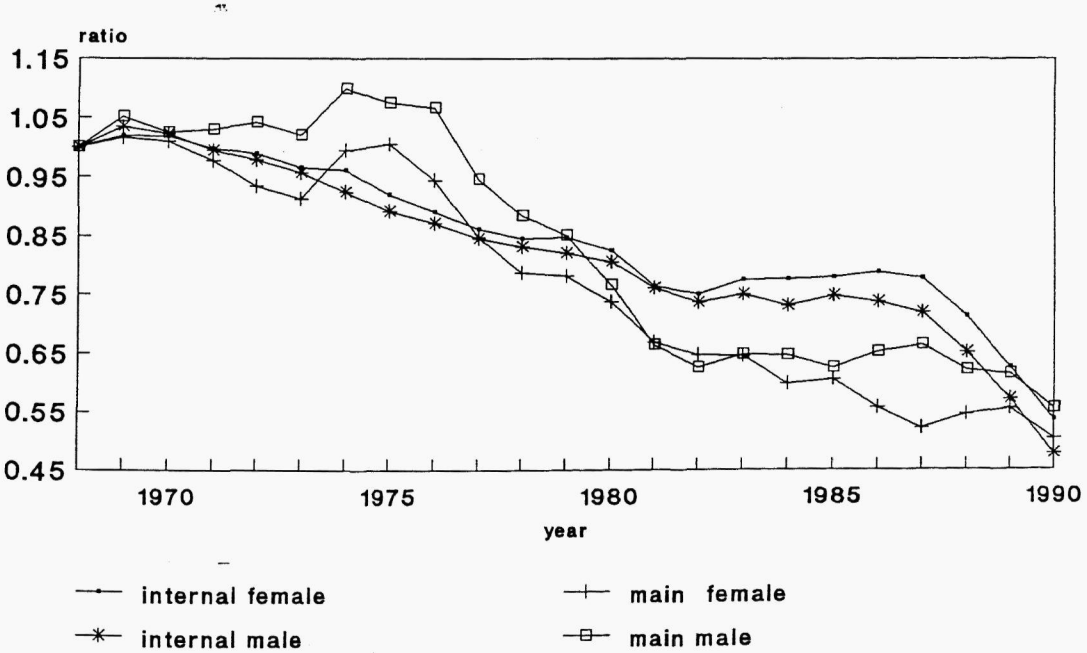


FIGURE 5 AGE-SPECIFIC MIGRATION RATES
FOR INTERNAL AND MAIN MIGRATION, ESTONIA
for 1967-1968 and 1989-1990

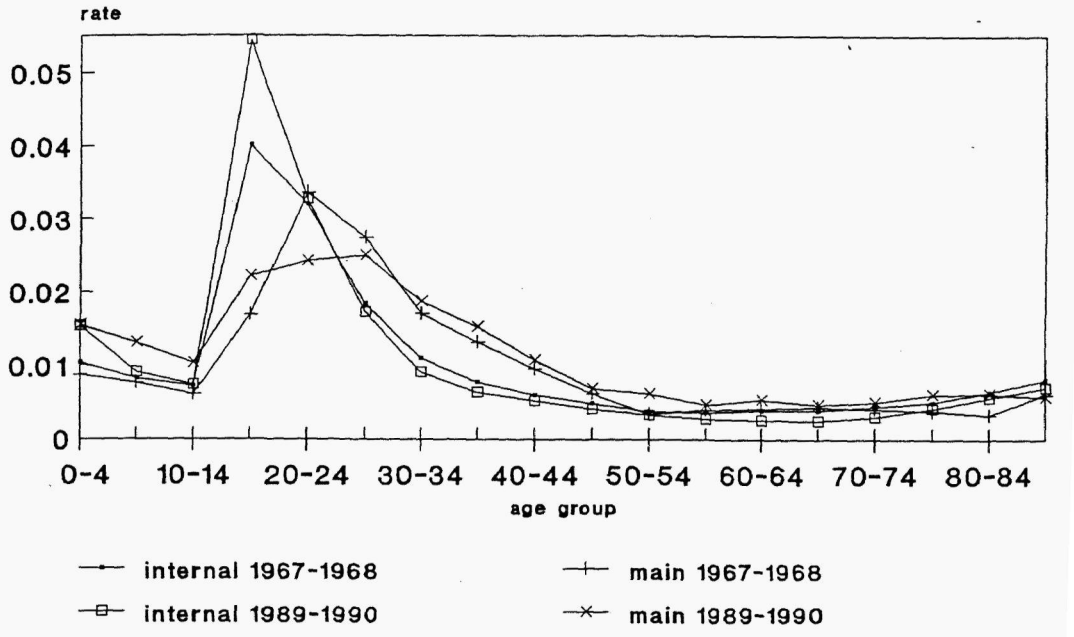


FIGURE 6 AGE-SPECIFIC MIGRATION RATES
FOR INTERNAL MIGRATION,ESTONIA
for 1967-1968 and 1988-1989

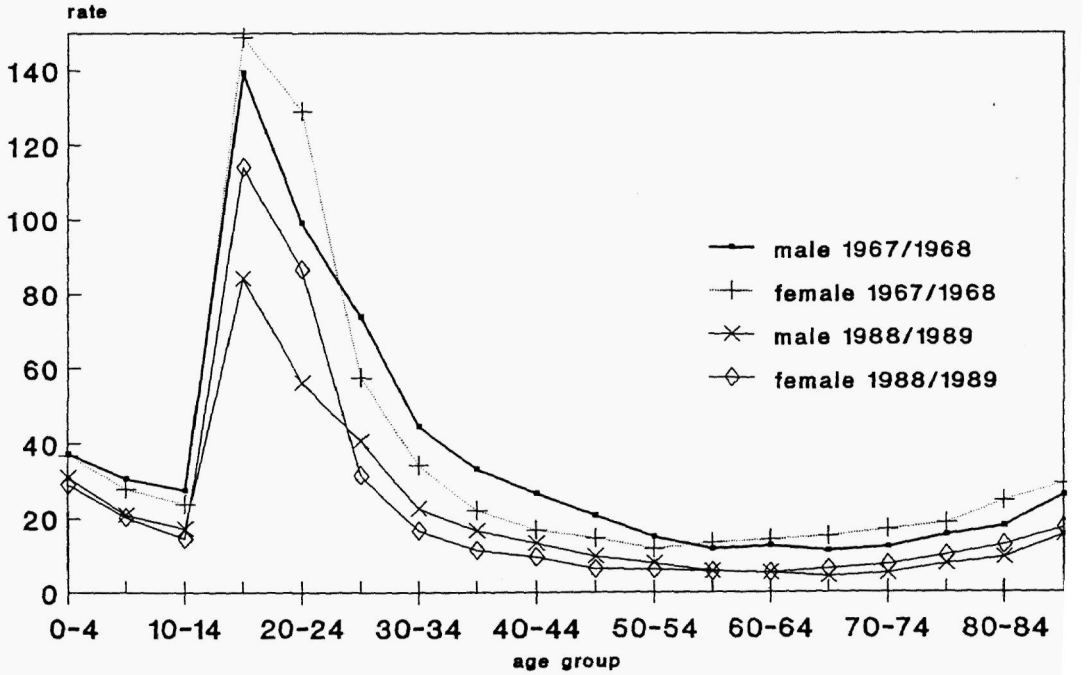


FIGURE 7 AGE-SPECIFIC MIGRATION RATES
FOR MIGRATION WITH USSR, ESTONIA
for 1967-1968 and 1988-1989

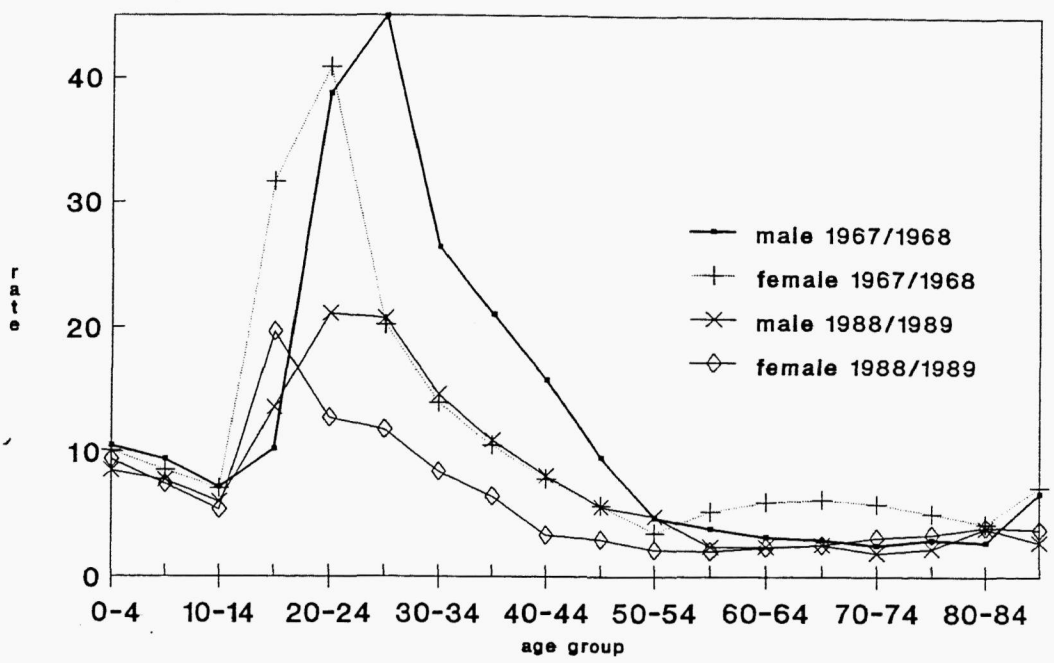


FIGURE 8 COMPARISON OF FEMALE MIGRATION
ESTONIA, for 1967-1968 AND 1989-1990

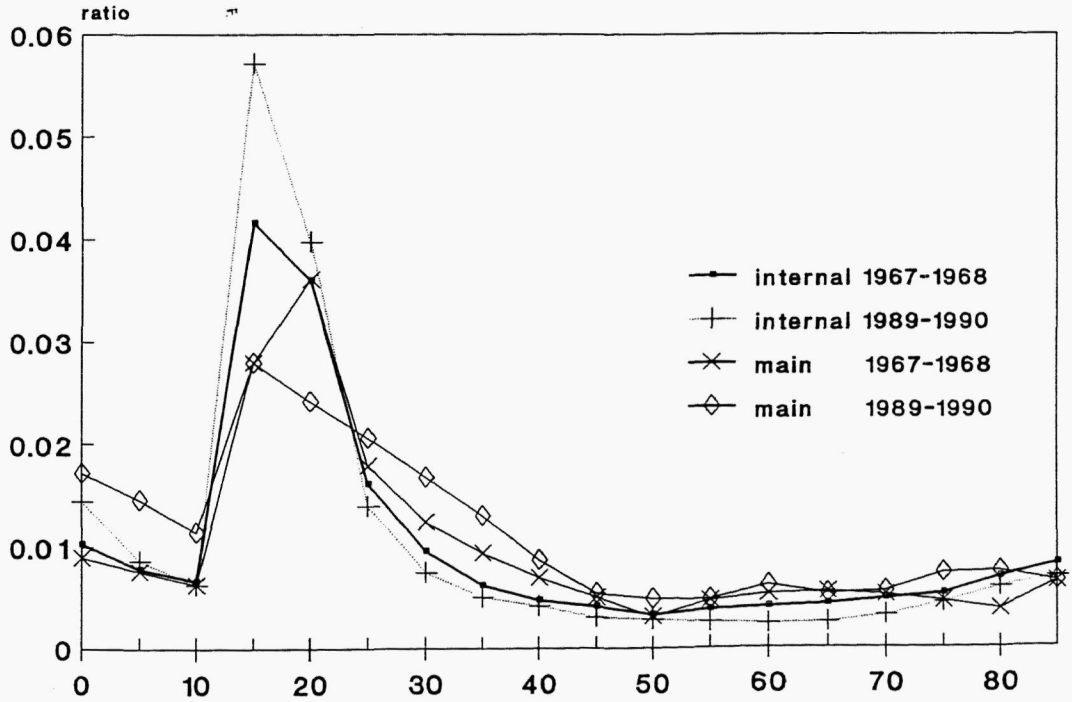


FIGURE 9 COMPARISON OF MALE MIGRATION
ESTONIA, 1967-1968 AND 1989-1990

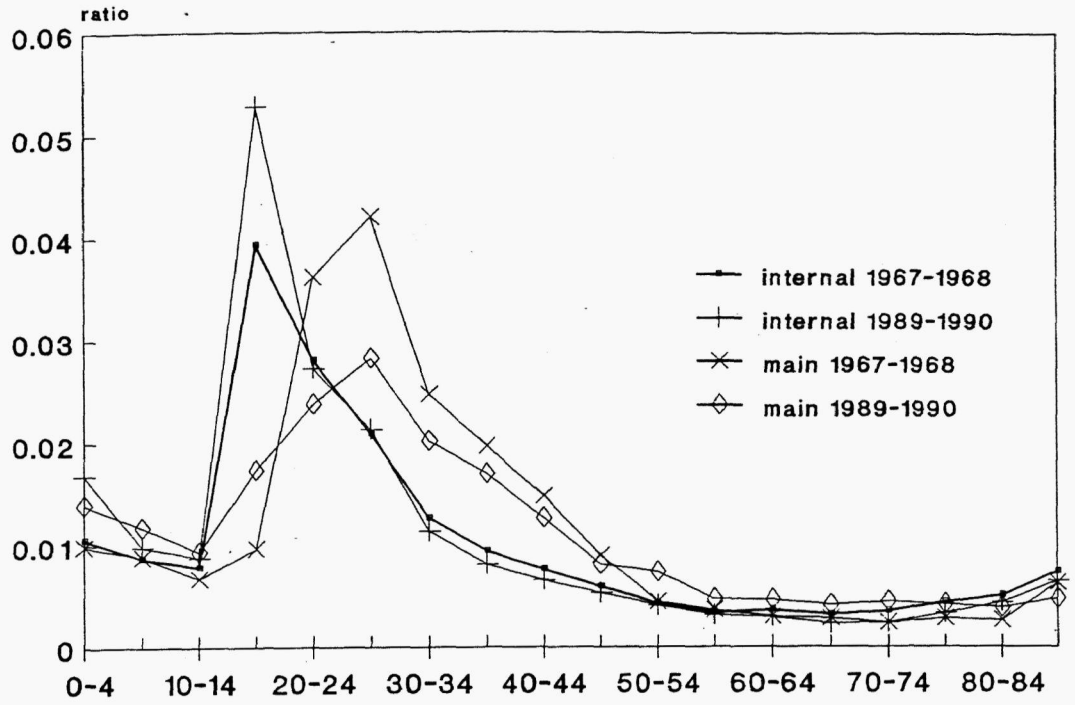


FIGURE 10 INTERNATIONAL MIGRATION STRE
URBAN POPULATION, ESTONIA, 1946-1990

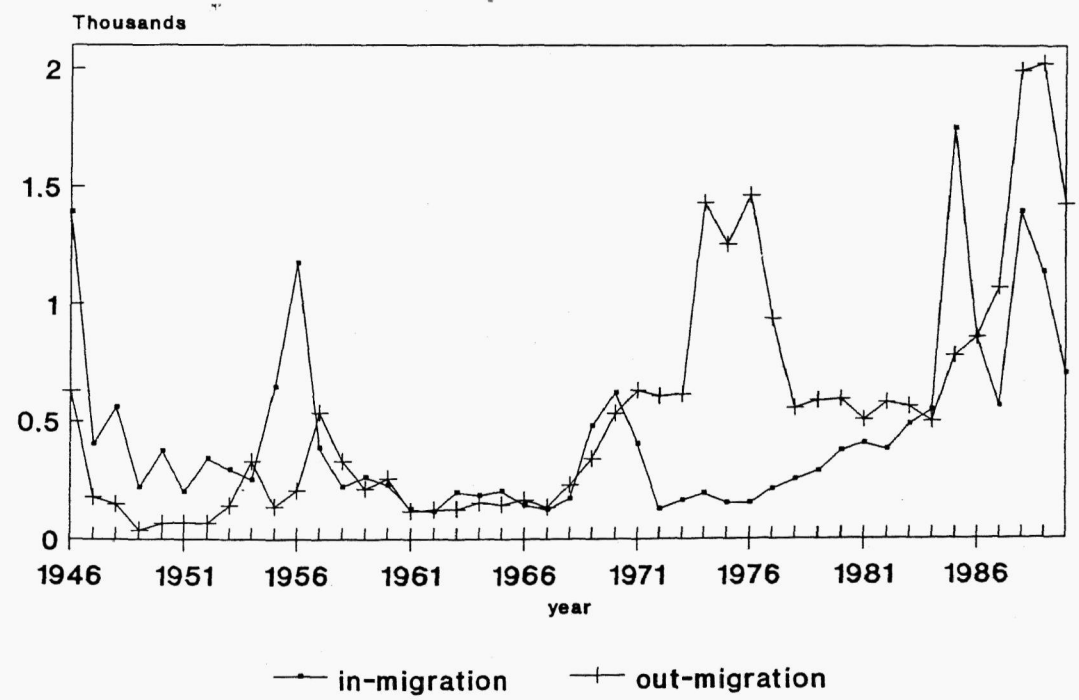


FIGURE 11 FOREIGN-BORN POPULATION IN STATES OF COUNCIL OF EUROPE AND COUNTIES(MAAKOND) OF ESTONIA, 1989

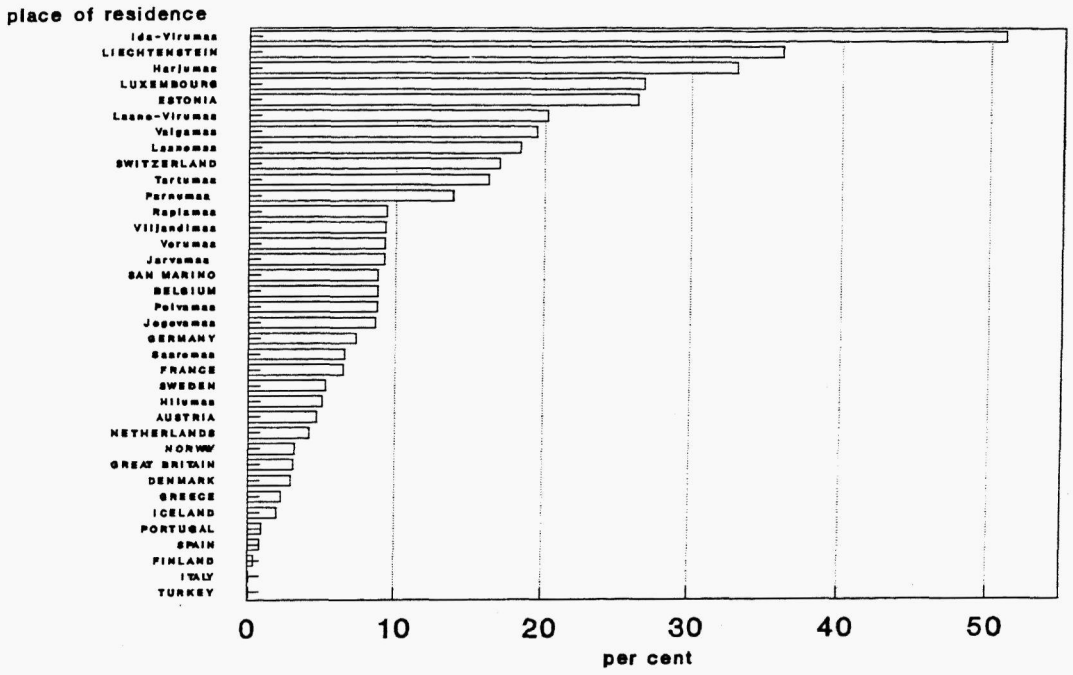


FIG.12 POPULATION AGE STRUCTURE BY MAIN ETHNICITIES AND THEIR NATIVE-BORNS ESTONIA, 1989

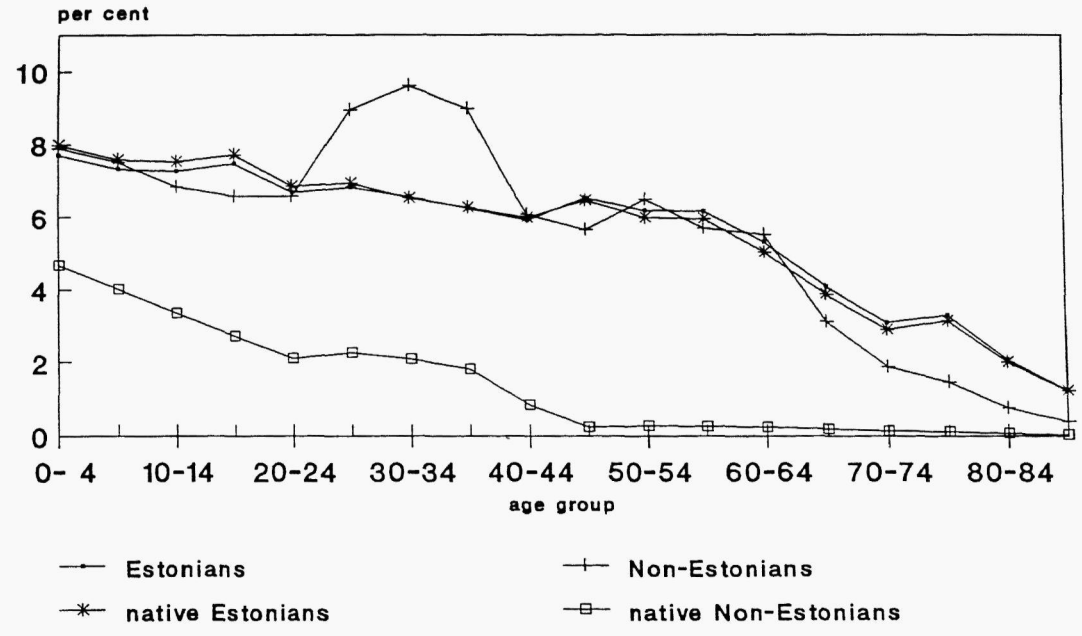


FIG.13. AGE STRUCTURES OF FOREIGN-BORNS
ESTONIA, 1989

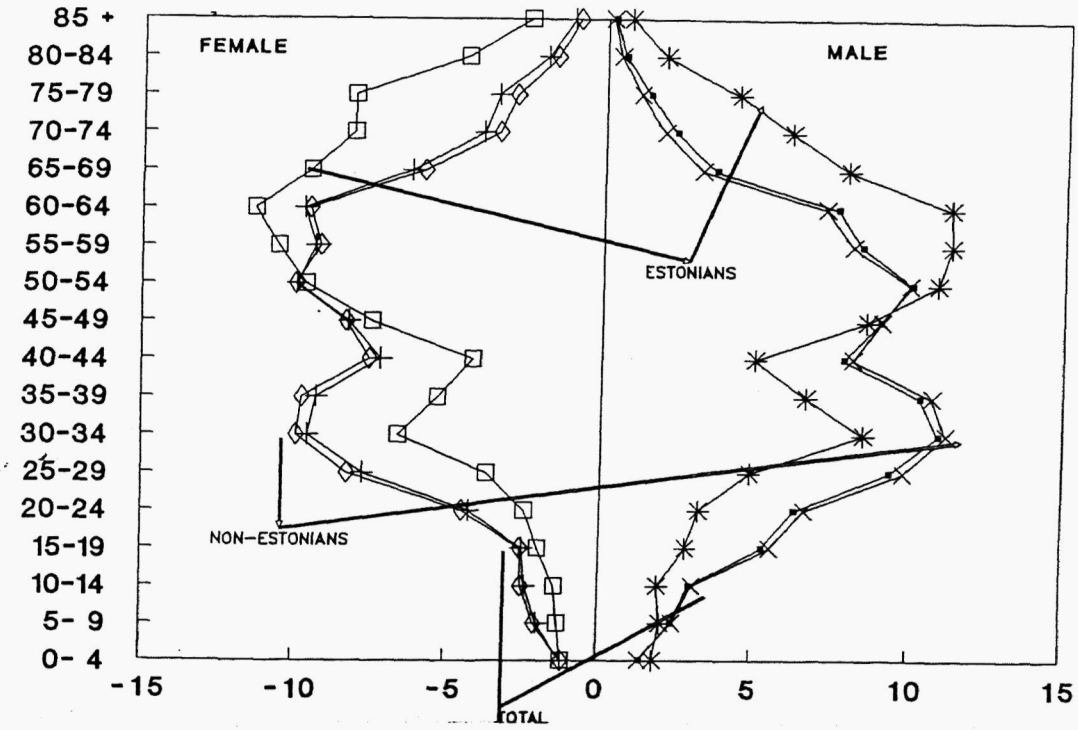
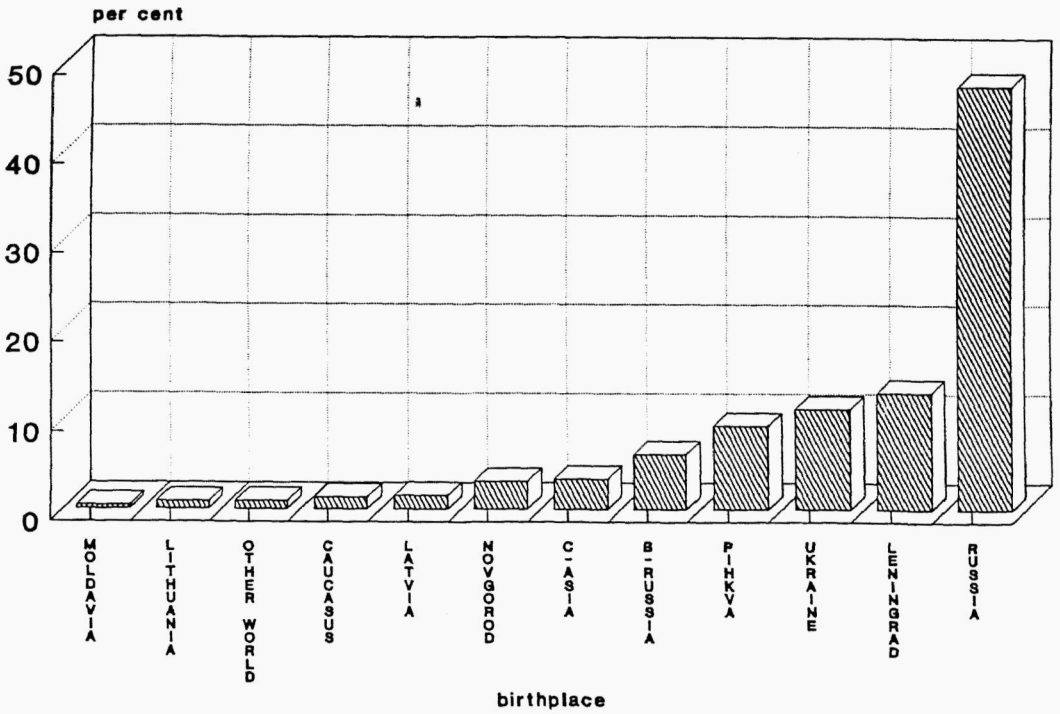


FIG.14. DISTRIBUTION OF FOREIGN-BORNS
BY THE BIRTHPLACE, ESTONIA, 1989



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