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POPULATION STUDIES

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DEMOGRAPHIC BEHAVIOUR PATTERNS OF IMMIGRANTS AND NATIONAL MINORITY OF THE SAME ETHNIC BACKGROUND: CASE OF ESTONIA

LUULE SAKKEUS

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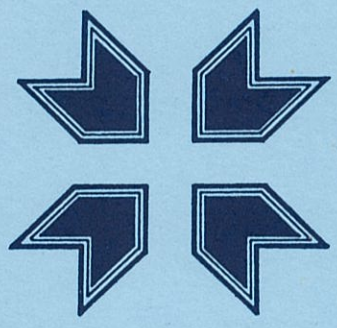

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The presented discussion of some demographic processes is the first step in a more broad overview of the development and differentials between sub-populations originating from different sides of Hajnal line but co-residing in one country. If to take into account that the immigrant population is comparable in its size with the native-born population, the study of the differentials between these populations becomes especially important from the viewpoint of elaborating adequate social and population-related policy. Already the brought out trends in family formation and abortive behaviour indicate towards a need to take into account far-developed processes in the spread of new family forms and relevant type of living among the Estonian population, while the spread of usage of contraceptive methods and attitude towards abortion demand absolutely divergent methods concerning the immigrant population.

Introduction[1]

The demographic, social and economic development of European nations since WW II has been increasingly shaped by the growing volumes of international migration. As a cumulative effect of the past flows, migration processes have left the countries with bigger and more diverse immigrant or foreign origin populations than ever (for recent overviews, see [Salt 1996, Coleman 1999]). As the expectations of a large-scale repatriation and return on the part of immigrants have faded, the questions of future development of these new populations have arisen. What to do with these populations, which often have different needs, behaviors, capacities and values from the host population? These issues have become the focus of the governments in many European countries [UN 1994; UNECE 1998].

The challenges faced by the host societies have provided a significant impetus for the advancement of research into the conditions and characteristics of immigrant populations. Apart from numerous national studies, in 1988 the Committee for International Cooperation in National Research in Demography (CICRED) and the International Organisation for Migration (IOM) launched a comparative research project on the impact of international migration on receiving countries. The project addressed both the demographic, socio-economic and cultural dimensions of immigrant populations and covered twelve countries [Kosinski 1989]. Regarding the 1990s, relevant activities under the coordination of UNECE and OECD should be mentioned [Freijka 1996, OECD 1998]. Most recently, the Population Committee of the Council of Europe has commissioned a comparative study on the situation of immigrant populations in member states (PO-S-MIG). In the framework of that project, case studies for ten countries are to be prepared in 1999-2001. Together with the development of studies on immigrant population attention has also been drawn to the long-established national minorities residing in host countries, whose demographic trends over the last century have been addressed in the framework of the study of Population Committee of the Council of Europe (PO-S-MIN) [Haug, Courbage, Compton 1999]. Understanding of the behavior patterns of established national minorities is a way to work out substantive integration policies for immigrant populations.

In Estonia, demographic research on the population of foreign origin dates largely back to the early 1990s. In earlier decades, even the absolute volume of migration flows were closed for publication, and additionally, the immediate postwar years of particularly large organised migration, suffered from substantial incompleteness of statistics. Taking the advantage of the cessation of restrictions on data availability and publication, the postwar trends of international migration, and respectively, the formation of population of foreign origin were summarised for Estonia and Baltic states [Sakkeus 1991; 1994]. The basic demographic characteristics of the foreign-born population have been outlined relying on the 1989 census which for the first time since WW II collected information on the birthplace of population [Katus, Sakkeus 1993]. Adding a new source of information, the population of foreign origin has been systematically covered by the series of national surveys, launched during the 1990s [EKDK 1995a; 1995b; 1999a; Noorkõiv and Puur 1996; Leinsalu *et al 1998*]. Over a range of demographic and social processes, the patterns of native and foreign-origin population of Estonia have been distinguished in national

[1]The preparation of the present paper has been supported by the Grant No. 82/1998 by the Research Support Scheme of the Open Society Foundation and the Grant No. 3801 by the Estonian Science Foundation

projects of the European Family and Fertility Survey and Dynamics of Population Ageing in the ECE region [UNECE 1999a; UNECE 1999b]. Additionally, to reconstruct the data on main demographic processes of national minorities in Estonia a special survey based on event history methodology was launched in 1997 [EKDK 1999b].

The aim of the paper is to highlight the behavior patterns of different demographic processes (family formation and different types of partnerships, fertility and fertility regulation) of two population sub-groups in Estonia: Russian historical national minority and Russian immigrants after the Second World War. The paper is based on the event history data collected in the Estonian Family and Fertility Survey (1994) and National Minority Survey (1997), covering female birth cohorts 1924-1973.

Background

Russian became a neighbouring nation of Estonia during the 10th century, while Russian settlement on the modern territory of Estonia dates back to the Livonic War of the 16th century. The concentration of Russians was highest in Southeast Estonia (Petserimaa). During the early 18th century, new fishing settlements were established at Lake Peipsi, mostly by Russian old-believers escaping religious oppression at home [Grass 1914; Moora 1964]. Although the Baltic provinces became part of the Russian Empire in the 18th century, there was no appreciable Russian immigration into the territory for a considerable time after that and the provinces remained under special Baltic order. The Orthodox religion was not widespread and Russian, although the official language, was not spoken as usual language by any social strata, except the military.

Immigration did, however, start after the introduction of the russification programme by Alexander III during the 1880s. The in-flow was comprised of Russian-speaking administrators and servicemen as well as workers for the newly-established imperial enterprises. Hence, at the turn of the century, the Russian national minority was divided into two parts: an upper social strata made up of local Russian administrators together with new immigrant workers concentrated in the cities, and a peasantry with a longer history of settlement in the border regions. Regarding the Russian minority, the first Soviet occupation hit most heavily on those who had earlier entered Estonia as refugees. The deportations and other acts of repression are estimated to have accounted for one third of the them. By comparison, Russian minority who were largely peasants were somewhat less affected, also when compared to the total population. The next, much sharper decrease of the Russian minority occurred in a different way, at the commencement of the second Soviet occupation. Without waiting for the war to end or the implementation of relevant international treaties, the Supreme Council of the Soviet Union was in a hurry unilaterally to establish new boundaries in 1944, transferring most of the Petseri county (23 August) and trans-Narva areas (24 November) from Estonia to the Russian Federation. The puppet authorities of Estonia were later forced to adapt these new boundaries. From a population perspective, the transfer of Petseri county and trans-Narva areas to Russian Federation involved the reduction of population by 66,500 according to 1934 census (according to the population estimates for 1944 by 56,200 [Kaufmann 1967]). As a result, Estonia lost nearly all its mixed population areas and the remaining Russian minority was now to be found mainly in the towns and on the western fringe of Lake Peipsi. It has been estimated that after the new boundaries, the Russian minority in Estonia amounted to about 23,000

[Katus 1990]. Although reduced by more than by three fourths from its pre-war size, the Russians have maintained their existence as a national minority in Estonia. The geopolitical rearrangements relating to the Second World War impacted particularly hard on the national minorities of Estonia and four out of the five minorities present before the War practically disappeared.

The recent project of Council of Europe on national minorities was built around the application of a consistent set of five population characteristics: country of origin/place of birth, individual self-identification, usual language, religious affiliation and citizenship [Haug, Courbage, Compton 1999]. This framework proved particularly appropriate in case of Estonia as a means of identifying the national minorities and distinguishing them from the majority population as well as from the immigrant community. The discontinuity of societal development in the country was accompanied by the breakdown of the national statistical system, which, in turn, has created specific difficulties in following the development of the national minorities. For the last fifty years there have been no consistent data about the national minorities available, and in addition to the regular analysis of existing sources, a special effort was therefore required to bridge the information gap. It was for this purpose that the National Minority Survey was launched and in the framework of the mentioned project the main trends of the national minorities were established. Among others the population size was reconstructed, based on event history data collected through the survey. Additionally, figures on the precise size of the older minority cohorts and younger cohorts of all non-Estonians are available from census information and were used to control the reconstruction from both ends. Applying this methodology to the Russian national minority suggests that it amounted to some 37,500 persons at the time of the last census [Katus, Puur, Sakkeus 1999]. Since the corresponding figure in 1945 was 23,000, it would appear that the number of Russians has undergone substantial increase during the post-war period. The postwar fertility levels among Russians, discussed elsewhere, only partly explain the increase. Evidently, the increase in the population number stems mainly from the post-war repatriation of Russians to Estonia from Petserimaa and Trans-Narva. In addition, the population momentum derived from the comparatively young age structure of the Russians has also favoured growth. Taking into account these factors, the increase of the Russians has been the highest in the immediate post-war decade. In summary, in the period up to 1989 as a whole, the Russian minority grew by 63.1 per cent and exceeded the 15.9 per cent growth in the number of ethnic Estonians by a factor of four. None the less, despite these trends the Russian national minority is still less than half its pre-war size.

In the postwar period, Estonia, like other European countries at the same stage of demographic development, turned from an emigration to an immigration country. However, because of the principal geopolitical change related to the incorporation of Estonia into the Soviet Union, immigration processes to Estonia started a decade earlier. Immigration originated from the European part of Russia which at the time had entered the stage of mobility transition and featured high migration potential.

Regarding postwar Estonia, the international migration comprised overwhelmingly the migration exchange between Estonia and the Soviet Union, although it was regarded as an internal migration at that time. The trend of Estonia's external migration includes two major migration waves. The first of them covers the immediate postwar decade and the volume of migration flows proved to be the highest ever recorded [Sakkeus 1991]. By the

mid-1950s the migration exchange between Estonia and the Soviet Union had somewhat decreased, however, the intensity of migration remained rather high. The new increase of immigration was introduced in the late 1960s, the volume of migration flows accounted for about 80 per cent compared to the immediate postwar decade. Throughout the first half of the 1970s, measured by gross migration rate, the intensity of migration remained at the level of 1.6-1.7 moves. In the middle of 1970s there was a decrease by more than one fifth, after which the gross migration rate stabilised around 1.2-1.3 moves until the very last years of 1980s. Apart from migration flows, special attention should be paid to the extent of turnover. Upon the available data only approximately one out of five immigrants have remained in Estonia, the other four have left at one time or another. For instance, over the period of 1956-1991, the turnover comprised 1,400 thousand persons whereas the number of net migrants was only 200 thousand. Such a high turnover of migration is related to an extensive military component as well as to a small family component of migration. The dominance of single young immigrants is consistent with high frequency of moves.

Extensive flows of international migration have resulted in formation of foreign-born population in Estonia. In the total population of Estonia, the proportion of population with immigrant origin accounts for more than one third, comprising of foreign-borns and their second generation. The data reveal that the second generation has followed their parental behaviour patterns, having had their first socialisation in an environment supported by high migration influx, divergent regional origin and distinct spatial distribution all supporting the integration into another environment than the local one. Thus, the 30 per cent of second generation has in general had a very low adaptivity and belongs by their behavioural patterns among the foreign-born population of Estonia. Altogether this sub-population forms one of the highest proportions of foreign-born population in Europe. Due to this remarkable share, but even more importantly because of the divergent timing of demographic transition, foreign-borns require particular attention whatever demographic or social process in Estonia is concerned. Altogether among immigrant population in Estonia one could find more than 120 ethnicities, of whom 80 per cent are of Slavic origin [Sakkeus 1994]. In the current paper the immigrant population of Russian ethnic background has been addressed.

In any discussion of demographic development of the Estonian population, its native-born population, including national minorities, and immigrant population, the timing of demographic transition and the spread of European marriage pattern are key factors when it comes to understanding the trends that emerged during the first half of the 20th century. Compared with the European average, timing aspects acquired a greater significance in Estonia because of its location in an area where the demographic contrasts between neighbouring nations were particularly marked. The Estonians themselves belonged to the pioneering countries of demographic transition. Some minorities in Estonia, however, seemed to follow other patterns, in line with developments in their titular countries. The timing difference has been reflected in the course of demographic processes and, in turn, has been expressed in the age structure variability of the populations under discussion.

Estonia formed an eastern boundary for the European marriage pattern, which had been established by the 18th century [Palli 1988; 1996]. The onset of demographic transition in the country, which involved the almost simultaneous decline of fertility and mortality, can be traced back to the middle of the 19th century [Katus 1990]. Because of this early transition, life expectancy in Estonia was one of the highest in Eastern Europe and was

close to the levels associated with those countries that were pioneers in the mortality transition [Katus, Puur 1992]. The country's fertility transition stands out for even earlier completion compared to several West European countries, with the birth rate dropping below the replacement level already in the 1920s [Katus 1994]. The concomitant changes in age structure began in 1860s-1870s, and the ageing process was quite advanced by the time of the Second World War. By comparison, the nations bordering Estonia displayed considerable variability in the timing and patterns of demographic transition. The closest similarity was with Sweden and Northern Latvia [Hofsten, Lundström 1976; Zvidrinsh 1986]. Finland, on the other hand, lagged behind Estonia by around 20 years [Strömmer 1969]. Russia and Estonia were demonstrating one of the largest, if not the most largest difference in timing of demographic development among the neighbouring nations in Europe, accounting for almost half a century [Vishnevski, Volkov 1983].

Family formation patterns and new family forms

As already mentioned, Estonia belonged historically to the area where the European marriage pattern was prevalent [Hajnal 1965]. This pattern of relatively late marriage and a high proportion of population never marrying had become established in Estonia by the 18th century, distinguishing the country from its eastern neighbour [Palli 1997; Vishnevski, Volkov 1983]. However, after the Second World War, the situation changed radically as the European marriage pattern disappeared and the population moved towards earlier family formation and higher marriage rates. During the 1960s, the total first marriage rate approached a value of 1.0, and exposing sharp juvenation of marriage, even exceeded that level in the second half of the decade. By the 1980s the rate had more or less stabilised and the decline in the mean age at first marriage came to a halt, bottoming out at around 24-25 years of age for males and at 22-23 years for females [Vikat 1994]. The 1990s have witnessed a sharp decline in annually registered marriages. Total first marriage rate, taking into account only legal marriages, had fallen to 0.35 by 1996, when it was among the lowest in Europe alongside Iceland, Latvia, Norway and Sweden [Council of Europe 1998]. A sharp drop of marriage rate to such low levels has been associated with the postponement of marriage as well as an increase in cohabitation.

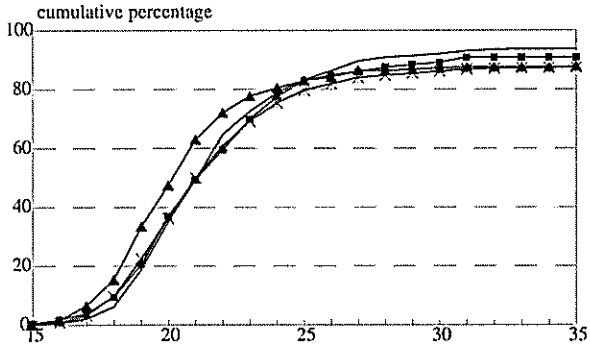
Timing of first partnership

Against this general background, significant differences in marriage intensity may be observed. The referred project on national minorities aimed to reconstruct the time series for demographic events over the post-war period. According to that it was found that the total first marriage rate has been consistently higher in the Russian minority than in the majority population, and harks back to the more traditional matrimonial behaviour of earlier periods. Moreover, the 1990s downturn in marriage rates seems to have been less sharp among the Russian national minority. Since the decline in first marriage rate is more to do with the postponement of marriage rather than in cohabitation, this suggests that consensual unions are less prevalent in the national minority population. As concerns the period marriage rates of the immigrant population, the same procedure has not been carried out. The post-war population data permits to reflect the marriage behaviour of two different sub-populations, natives and immigrants only for last two census points (1979 and 1989). According to Vikat total first marriage rate showed opposite development for

the two subpopulations: in 1980s TMR for native population showed a slight downward trend, whereas the opposite was observed for foreign-born population. The gap in mean ages between these two sub-groups of population formed almost a year [Vikat 1994].

From the cohort perspective, based on the data on comparable female cohorts from the two above-mentioned surveys, the timing of first partnership reveals much more homogeneous pattern in all the sub-populations under investigation. Separation of the second generation of the immigrant population enables to concentrate on the cohorts born between 1949 and 1973. In this cohort range between these sub-populations the second generation immigrants display the biggest timing difference accounting for over one year with the lowest mean age at first partnership with 19.8 years. Figure 1 presents the age pattern of first partnership for all the mentioned sub-populations. As concerns the part of population that remains outside partnership formation, it has undergone a significant reduction in these countries which initially were characterised by European marriage pattern and is characterised by similar proportion with those nations which lied east to the Hajnal line. In Estonia, almost all sub-populations under consideration are displaying near to 90 per cent coverage with partnership ties. However, the highest level has been reached by the first generation of the immigrant population, followed by Russian national minority, second generation of immigrant population and the lowest coverage with these ties displays the Estonian population.

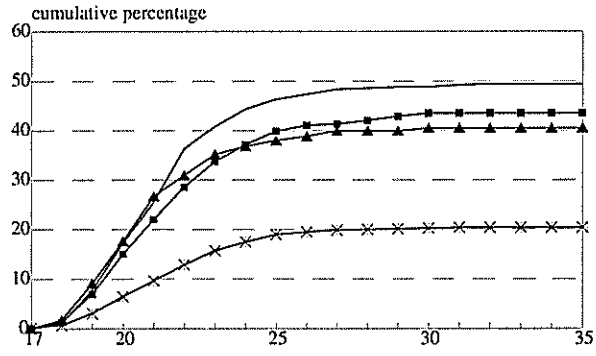
Figure 1. TIMING OF FIRST PARTNERSHIP
birth cohorts 1924-1973



Data sources: EFFS 1994, ESNM 1997

The development of marriage and family in recent decades has undergone a gradual transformation in these social institutions and the modification of existing forms of families, particularly concerning the first union. The most widespread new type of family is consensual union but there are also other emerging forms like living apart together etc. Although practiced already in earlier decades, there has been a steady rise in the number of consensual unions among Estonians whose marital behaviour has traditionally followed the Baltoscandian pattern. For example, young people now enter consensual unions at a rate comparable with Sweden and Denmark, countries usually considered to be at the forefront of new matrimonial behaviour. Marriage follows later, and is usually related to the childbirth. The way how first partnerships are started is the element of family formation where the difference

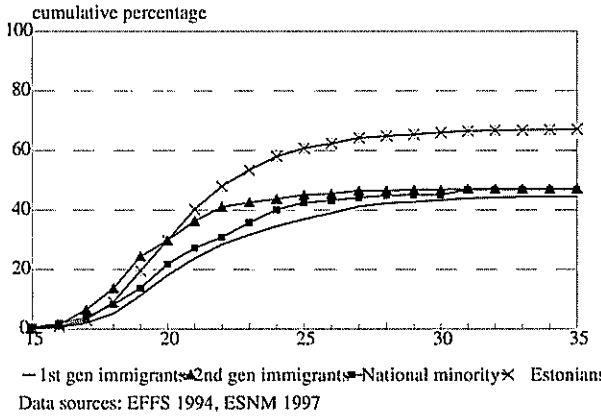
Figure 2. TIMING OF FIRST DIRECT MARRIAGE
birth cohorts 1949-1973



Data sources: EFFS 1994, ESNM 1997

between native- and foreign-born population is the largest: the native-born population is essentially more prone to start first partnership as a consensual union which has clearly become the mainstream route to family building. On the other hand, also timing aspects between direct marriage and consensual unions deserve attention.

Figure 3. TIMING OF FIRST CONSENSUAL UNION
birth cohorts 1949-1973



Data sources: EFFS 1994, ESNM 1997

One would expect consensual unions to start earlier than direct marriages. Still, it is interesting to note that while among Russian immigrant and minority population the difference in mean ages at one or another event are not so important, in the Estonian population the difference in timing accounts almost for a year. However, the second generation of immigrant population displays even bigger difference. At the same time, all three sub-populations, except the majority population have quite similar age pattern of first direct marriage: by age 25 two fifths of the population have been married (Figure 2). Significantly different is the age pattern of Estonian population among which prevalence of direct marriage by the same age remains twice lower. Among the first mentioned sub-populations first generation immigrants display higher prevalence of direct marriage in the cohorts 1949-1973: almost half of them still marry directly.

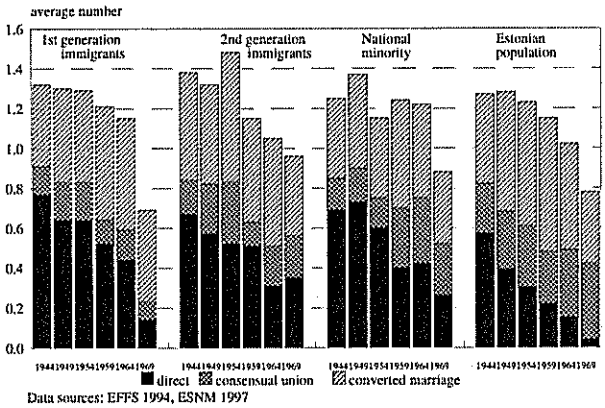
Timing pattern of consensual unions is characterised by a quite opposite trend to the above-described one. By age 25 three fifths of the Estonian population have entered into their first consensual union, while among the second generation immigrants and Russian national minority around 45 per cent have experienced the first consensual union by that age, thus leaving the first generation immigrants with the lowest prevalence of the new family formation types (figure 3).

Even more clearly the diversity of family formation patterns is exhibited between the sub-populations when analysing the composition of all partnerships by five-year cohorts (Figure 4). It can be measured by two indicators: proportion of direct marriage and proportion of consensual unions (not converted into marriage). The Estonian population is characterised by one-directional development by both of these indicators: with every cohort the proportion of direct marriages reduces to almost nil in the youngest cohort, at the same time proportion of pure consensual unions gradually increases among all partnerships. While taking together the number of pure consensual unions and cohabitations later converted into marriages, the prevalence of consenusal union in all partnerships has reached already 95 per cent in the youngest cohort. It is also noteworthy that pure consensual unions already outnumber converted cohabitations.

Concerning the composition of partnerships in the population of Russian ethnic background, the structure of partnerships appears most similar to that of Estonian population among the Russian national minority. In particular it becomes evident, if

measuring it by the dynamics of the proportion of pure consensual unions. However, it has to be borne in mind, that while addressing the youngest cohort, high selectivity might be imminent to their behaviour of whom more than 40 per cent have not yet entered into their first partnership at all. Among immigrant population the dynamics of direct marriage and consensual union by cohorts is not outlined into a very clear trend. Neither first nor second generation immigrant population have a clearly increasing trend of pure consensual unions, also the proportion of direct marriage, which demonstrates lower prevalence in the two youngest cohorts, has not yet formed a visibly decreasing trend.

Figure 4. AVERAGE NUMBER OF PARTNERSHIPS
birth cohorts 1944-1973



Data sources: EFFS 1994, ESNM 1997

Thus, the emergence of new family forms might be the most sensitive indicator of the divergent behaviour patterns between these sub-populations, clearly originating from the time-lag in their demographic transitions.The knowledge of this diversity bears significance also from the aspect of development of social policy in Estonia. Until now, the differences among sub-populations have not been acknowledged, neither has the elaborated population-related policy taken into consideration the emerging new family forms, not to mention their prevalence. This is even more important if to consider the policies towards children, as becomes further evident from the discussion of fertility patterns of these sub-populations.

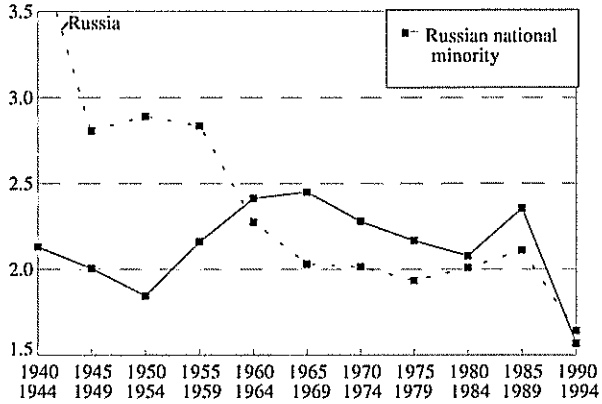
Fertility patterns

The early beginning as well as relative regional homogeneity of the fertility transition in Estonia provides the general context within which the individual trends for the other sub-populations should be assessed. Also, the unusual phenomenon to pioneering European nations in fertility transition - the absence of a post-war baby boom in Estonia - is an additional factor that should be taken into account. For the majority population, period fertility remained below replacement level throughout the forty year period 1928 to 1968, but the level was never more than 10-15 per cent lower, even during the war and the period of repressions. However, the pattern changed at the end of the 1960s when Estonian fertility climbed to replacement level where it remained with slight fluctuations to the end of the 1980s.

The fertility transition in the Russian minority lagged behind that of the Estonians, but exposed large timing difference with neighbouring regions of the Russian Federation. Accordingly, the fertility decline in the Russian minority associated with the final stages of transition during the 1940s and 1950s was not mirrored in the Estonian population which had completed the process earlier. For a short period Russian fertility actually dropped below that of the Estonians but then recovered. Like the Estonians, Russian fertility remained at or slightly above replacement level for a long period up to the 1990s. It is interesting to note that the fertility of the post-war immigrants of Russian origin

experienced rather different trend: continuously declining and dropping below replacement level in the 1960s [UN ECE 1999a]. In this regard, the Russian minority is very clearly characterised by the fertility development closer to the Estonians than the post-war Russian immigrants.

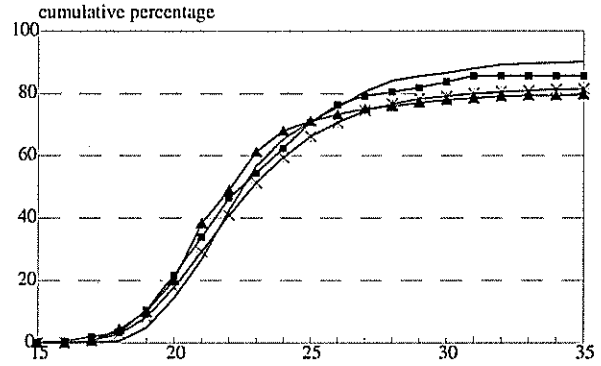
Figure 5. TOTAL PERIOD FERTILITY RATE, 1940-1994



Source: Authors' calculation, ESNM 1997

In fact, the fertility transition in the Russian minority was significantly more advanced than in Russia proper (Figure 5). Although their fertility transition was somewhat later than that of Estonian as referred to earlier, it was still several decades ahead of the Russian Federation. It is particularly noteworthy taking into account that even the bordering oblasts of Pskov and Novgorod exhibited the same fertility trends as for Russia as a whole and lagged behind the Estonians by about half a century [Katus 1997a; Barkalov, Dörbritz, Kirmeyer 1998]. These disparities between the trends of the Russian minority compared with those of the Russian Federation (as well as of the immigrant population originating from that country) were still apparent through the 1960s and into the 1980s. During those decades the fertility of the Russian minority was consistently higher. Only the sharp fertility decline of the 1990s has typified all sub-populations under investigation.

Figure 6. TIMING OF FIRST BIRTH birth cohorts 1949-1973



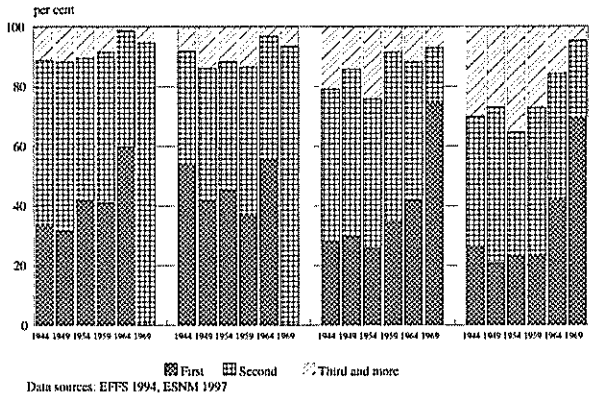
Data sources: EFFS 1994, ESNM 1997

Regarding these processes from the cohort perspective, the difference in median age at first birth for women born between 1929 and 1939 of the Russian national minority compared to the majority population was about a year, in the consequent birth cohorts the trend is not so clearly reflected anymore. Among the immigrant population the second generation immigrants have maintained younger median age at first birth over all post-war birth cohorts (1949-1973). Among Estonian population evidently the shift towards younger ages took place because of the disappearance of the European marriage pattern, which had been characteristic to them. The immigrant population of the country was rather different in so far as it originated from the eastern side of the Hajnal line, as referred above and the second generation demonstrates even to a greater extent the behaviour patterns characteristic to these populations.

The cohort total fertility rate offers the grounds to judge upon the perspectives of the development of one or another sub-population under investigation. The Estonian

population, reflecting the distinctions in the fertility development outlined above for this century, displays outstanding stability in the fertility rates over the birth cohorts 1924-1973 (Figure 6). Also, it is interesting to note that in the presented comparison cohort fertility rate of the Estonian population is the highest, demonstrating in the cohorts 1949-1954 replacement level fertility. Quite similar pattern in cohort fertility is demonstrated by the Russian national minority but it remains constantly lower than that of the majority population by around 5 per cent. As concerns the two youngest cohorts, the drop in fertility rate has not been so sharp for the Russian minority population. Quite distinct fertility pattern from the two above-mentioned sub-populations displays the immigrant population, demonstrating constantly lower fertility rates, in particular among the second generation immigrants.

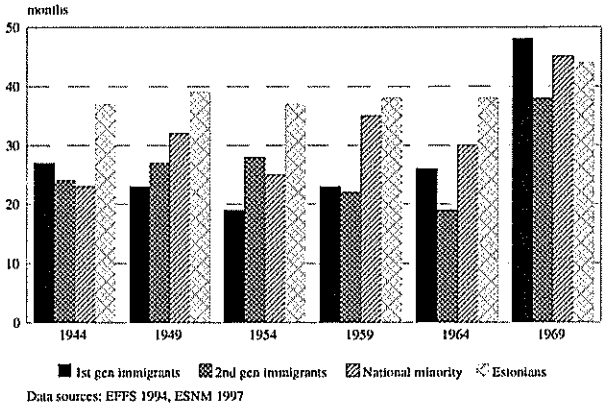
Figure 7. DISTRIBUTION BY PARITY
birth cohorts 1944-1973



Data sources: EFFS 1994, ESNM 1997

Somewhat the differences between the investigated sub-populations are explained by the differentiation in the parity distribution (Figure 7). While among the Estonian and national minority population has shown concentration into the second order of births, the third ones comprising in the first-mentioned sub-population still almost one fourth in the cohort range 1949-1973 and the first ones less than one third, among immigrant population the third order births play the decisive role forming barely 8 per cent. The youngest cohorts among immigrant population display very sharp shift towards first order births, reflecting quite similar trends observed in the population of Russian neighbouring regions [Barkalov, Dörbritz, Kirmeyer 1998].

Figure 8. INTERVAL BETWEEN FIRST SEXUAL INTERCOURSE AND FIRST BIRTH
birth cohorts 1944-1973



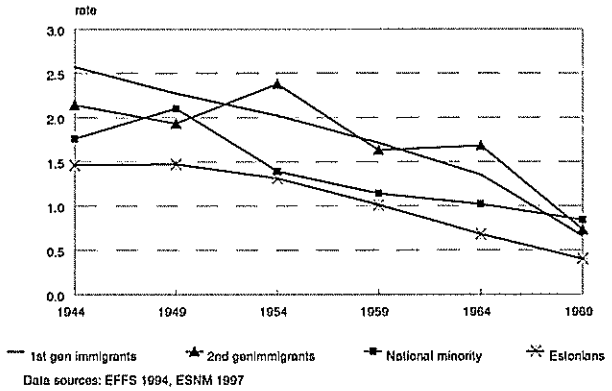
Data sources: EFFS 1994, ESNM 1997

It has been brought out that the trend towards younger age at first birth is connected with the earlier beginning of sexual life [Katus 1997b]. More interesting in the present comparisons is the interval between the first sexual intercourse and first birth. It seems that in connection to birth outcome of the first pregnancy, the interval has remained practically the same over the cohorts, if to exclude the sharp shift towards earlier beginning in the sexual life in the youngest cohort (Figure 8). However, as much as the interval between the two events has remained the same as much has been maintained the timing difference of this interval between all the mentioned sub-populations. Immigrant population is displaying the shortest interval between these two events with the difference being between 1.5 - 2 years over the cohort range 1949-1973. Russian national minority is

presenting the interval from 2 to 2.5 years, while the Estonian population has had the stable interval of 3 years. As it has been pointed out in the youngest cohort the difference in timing of these two events has widened which might have more implications on the development of other demographic processes.

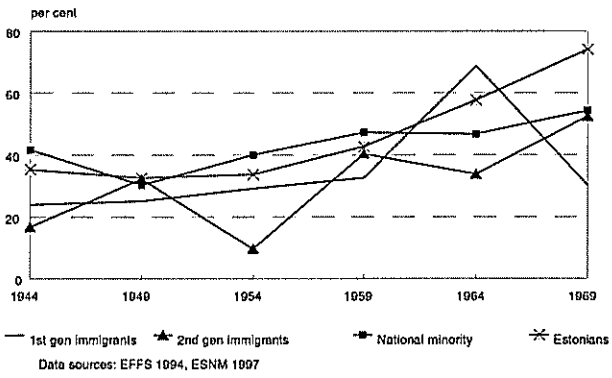
Abortion trends

Figure 9. TOTAL ABORTION RATE
birth cohorts 1944-1973



The fertility transition in Estonia was accomplished by the use of traditional methods of fertility control. Among the Estonians born during the 1920s, characterised by below replacement fertility, the total abortion rate was relatively low but this increased rapidly with each successive generation and peaked in the birth cohorts of the 1940s and early 1950s when it reached a level of 1.4-1.5 lifetime abortions per woman. The increase in the number of abortions, however, had no effect on the fertility level, which suggests that abortions did not replace live births but rather reflected limited access to and deteriorating knowledge of contraceptives during the Soviet period [UN ECE 1999a]. The shortage of modern contraceptives continued up to the end of the 1980s. Nevertheless, starting with the cohorts born during the 1950s, the total abortion rate has been constantly declining.

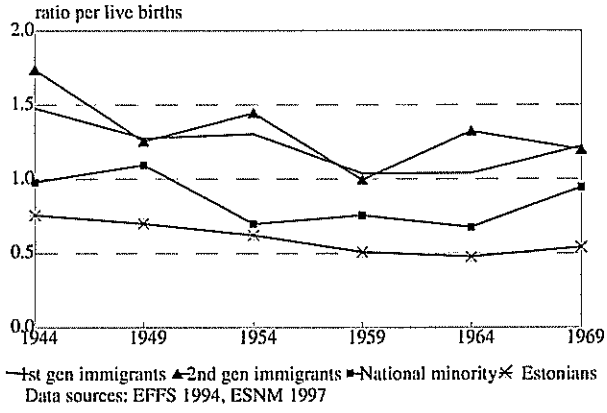
Figure 10. PROPORTION OF THOSE NEVER HAVING HAD ABORTION
birth cohorts 1944-1973



Similar trend in the number of abortions can be followed for the Russian national minority, although with somewhat higher levels in earlier birth cohorts with the maximum of 2.1 lifetime abortions per woman in the birth cohort 1949-1953. From that cohort onwards, the cohort total abortion rate demonstrates gradual decrease. It has to be mentioned that ever-usage of contraception methods has been the lowest among this sub-population, however, much higher abortion rates are displayed by their counterparts of foreign origin. For the first generation immigrant population the trend in the number of abortions can be followed from the 1924 birth cohort, in which almost three times higher rate can be found compared to the Estonian population (Figure 9). Even in the youngest cohorts which have showed a considerable decrease in the abortion rate, the difference is maintained almost two-fold. It is quite remarkable that the second generation immigrants who are more prone to use contraception display similarly high rates reaching the maximum with 2.4 lifetime abortions as late as in the 1954-1958 birth cohort.

The divergent behaviour pattern between the four sub-populations in connection with abortion becomes even more evident if to compare the cohorts by the proportion of those who have never had abortion. In the birth cohorts of 1920s the Estonian population and Russian national minority clearly diverge from the immigrant cohorts with the majority of the cohort - two thirds - having not experienced an abortion. However, in the subsequent cohorts the proportion of those without abortions decreases up to one third in post war cohorts, starting from the birth cohort of 1954 share of those not having abortions increases quickly and in the youngest cohort three fourths of the cohort have not (yet) had abortion (Figure 10). In the Russian national minority birth cohorts of 1949-1973 more than two fifths have never experienced abortion, in the same birth cohorts of first and second generation immigrants the share of those not having abortions is between 30-37 per cent.

Figure 11. ABORTION RATIO
birth cohorts 1944-1973



Data sources: EFFS 1994, ESNM 1997

It has been said that abortion was imported into Estonia with the incorporation into the Soviet Union but the abortion ratio per live births demonstrates that the main contribution to the high abortion rate in Estonia have made immigrant cohorts with their totally different behaviour pattern.

Thus, in Estonian population and to a lesser extent in the Russian minority population abortions have never overweighed live births, the opposite is true for all birth cohorts of immigrant population (Figure 11). While the use of traditional methods is quite similar across populations, the largest difference is to be found in the proportion of women who reportedly had never used contraception. The decline in the proportion of non-users has proceeded more slowly in the other three sub-populations and has not dropped to the low levels seen among Estonians.

Conclusion

Estonia offers a good site for the comparison of demographic behaviour patterns of immigrant population, distinguishing its second generation and long-established national minority, originating from the same ethnic background (namely, Russian) and demographically from the east side of the Hajnal line with the native population — Estonians — demographically belonging to the nations of early demographic transition and advanced stage of demographic development. Event history data collected for comparable female birth cohorts enables to outline the relevance of difference in timing of demographic transition to the behaviour patterns, reflected in the sub-populations until nowadays. On one hand, the discussed processes of family formation, fertility and abortion indicate that there is a certain impact of belonging to a population originating from the demographically different stage of development. On the other hand, greater distinction becomes evident between the immigrant and native-born origin. In this context, second generation of immigrant population displays quite divergent behaviour patterns, however,

considerably more reflecting those which are characteristic to their parent's country of origin.

In the processes of family formation the man indicator for carrying patterns of new behaviour has become the type of entry into the first partnership. It has been argued that first post-war generations were the carriers of patterns of new family behavior in the West (van de Kaa 1987). From the presented overview, Estonian population displays behaviour patterns very common to Scandinavian populations with prevalence of consensual unions having become the mainstream development already since cohorts born in 1939 and sharp decreasing trend of direct marriages up to practically non-existent in the youngest cohort born in 1969-1973. In this context all sub-populations of Russian ethnic background do not present a very clear trend, although the national minority population displays the steady increase in the proportion of first partnerships started as pure consenusal unions, while second generation remains with the highest proportion of those who have started their partnership as direct marriage in the youngest cohort.

The difference between the investigated sub-populations becomes also visible in the number of live-births. Estonian population has had a very stable cohort fertility, reaching n some cohorts to the replacement level, no sub-population of Russian ethnic background, obviously reflecting the post-transitional developments of fertility in Russia, has reached in any cohort replacement level. In this context, again Russian national minority has had the highest numbers of live-births over the cohorts, whereas the second generation of immigrant population displays the lowest levels of fertility. Another interesting development in the behaviour patterns is observed in the intervals between the first sexual intercourse and first birth. Estonian population, having the youngest median age at first sexual intercourse, are also characterised by the longest time interval between these two events. The difference between the Estonian population and Russian national minority by this indicator is only half a year, whereas the difference with the first generation of immigrant population is almost one and a half year. With the somewhat earlier entry into first partnership and first childbearing of the population of Russian ethnic background, this difference in the beginning of sexual life bears one of the significant behaviour distinctions.

However, the biggest difference in the behaviour patterns, studied in the current paper are found in connection with fertility regulation and abortion as the second most important pregnancy outcome. Behaviour patterns related to abortion clearly divides the population into two parts: native-born (Estonians and Russian national minority) and immigrant population. Throughout the cohort range in these two sub-populations abortion rates are lower than fertility rate, while the immigrant population demonstrates opposite behaviour with abortions outnumbering live births and abortion rate being more than 1.5 times higher than among the Estonian population.

REFERENCES

Barkalov, Nicholas, Jürgen Dörbritz and Sharon Kirmeyer (1998). *Fertility Characteristics of the Baltic Populations: a Parity-Progression View.* Paper presented at the conference *Estonia and the European Union: Estonia on its Way to a Changing Europe.* Tallinn.

Coleman, David (1999). International Migration in Europe in the late 1990s. *David Coleman and Eskil Wadensjö. Immigration to Denmark. International and National Perspectives.* Aarhus, Aarhus University Press, pp.46-103.

Council of Europe (1998). *Recent Demographic Developments in Europe.* Strasbourg, Council of Europe Press.

UN (1994). European Population Conference. *Population Bulletin of United Nations.* No.37/38.United Nations, New York.

EKDK (1995a). *Estonian Family and Fertility Survey. Methodological Report.* RU, Series A, No.39. Tallinn, EKDK.

EKDK (1995b). *Estonian Family and Fertility Survey. Standard tabulations.* RU Series C, No.6. Tallinn, EKDK.

EKDK (1999a). *Estonian Family and Fertility Survey. Design and Methodology of Male Survey.* RU Series A, No.40. Tallinn, EKDK.

EKDK (1999b). *Estonian National Minority Survey. Methodological Report.* RU Series A, No.41. Tallinn, EKDK. Forthcoming.

Freijka Tomas (1996). International Migration in Central and Eastern Europe and the Commonwealth of Independent States. *UNECE Economic Studies No.8.* United Nations, New York and Geneva.

Grass, Konrad (1914). *Die Russische Sekte.* Dorpat.

Hajnal, John 1965. European marriage patterns in perspective. *D. V. Glass & D. E. C. Eversley (eds), Population in History: Essays in Historical Demography.* London: Edward Arnold. Pp 101–143

Haug, Werner, Paul Compton and Youssef Courbage. (`1998) (Eds). *Demographic Characteristics of National Minorities in Certain European Countries.* Vol.1. Population Studies No.30. Council of Europe, Strasbourg.

Hofsten, Erland, Hans Lundström (1976). *Swedish Population History. Main trends from 1750 to 1970.* Stockholm, Statistiska Centralbyran.

Katus, Kalev 1990. Demographic trends in Estonia throughout the centuries. In: *Yearbook of Population Research in Finland, XXVIII.* Helsinki: Väestöliitto. Pp 50–66

Katus, Kalev (1994). Fertility Transition in Estonia, Latvia and Lithuania. *W. Lutz, S. Scherbov, A. Volkov (Eds). Demographic Trends and Patterns in the Soviet Union before 1991.* London, New York, IIASA, pp. 89-111.

Katus, Kalev (1997a). Long-term Fertility Development in Baltoscandia. *Yearbook of Population Research in Finland,* Vol. 34, pp.18-34.

Katus, Kalev (1997b). *Post-transitional Fertility: Case of Estonia.* RU, Series B, No.33. Tallinn, EKDK.

Katus, Kalev and Allan Puur (1992). *Eesti rahvastiku suremustrend elutabelite analüüsi põhjal.* RU, Series B, No.14. Tallinn, EKDK.

Katus, Kalev and Luule Sakkeus (1993). *Foreign-Born Population in Estonia.* RU, Series B, No.19. Tallinn, EKDK.

Katus, Kalev, Allan Puur and Luule Sakkeus (1999). Development of National Minorities in Estonia. *Werner Haug, Paul Compton and Youssef Courbage. (Eds). Demographic*

Characteristics of National Minorities in Certain European Countries. Vol.2. Council of Europe, Strasbourg.

Kaufmann, Voldemar (1967). *Rahvastiku dünaamika ja seda mõjutanud seaduspärasused Eestis XX sajandi esimesel poolel (1897-1959).* Tallinn. Käsikiri.

Kosinski, Leszek A. (1990). The Impact of International Migration of Receiving Countries. A Comprehensive Research Project. *International Migration.* Vol.28,No.3.

Leinsalu, Mall, Marina Grintshak, Rivo Noorkõiv, Brian Silver (1998). *Eesti Terviseuuring. Metodoloogiaülevaade.* Tallinn, EKMI.

Moora, Aliise (1964). *Peipsimaa etnilisest ajaloost.* Tallinn, Eesti Riiklik Kirjastus.

Noorkõiv, Rivo and Allan Puur (1996). *Estonian Labour Force Survey 1995: Experience from Retrospective Data Collection.* Paper presented to the European Conference of Statisticians. Paris.

OECD (1998). *Trends in International Migration.* Annual Report 1998 edition. Paris, OECD.

Palli, Heldur 1988. *Otepää rahvastik aastail 1716-1799.* Tallinn: Eesti Raamat

Palli, Heldur (1996). *Eesti rahvastiku ajalugu aastani 1712.* Tallinn, Teaduste Akadeemia Kirjastus.

Palli, Heldur (1997). *Eesti rahvastiku ajalugu 1712-1799.* Tallinn, Teaduste Akadeemia Kirjastus.

Sakkeus, Luule (1991). *Post-war Migration Trends in Estonia.* RU Series B, No.15. Tallinn, EKDK.

Sakkeus Luule (1994). The Baltic States. *Solon Ardittis (Ed). The Politics of East-West Migration.* MacMillan Press. Pp. 68-85.

Salt, John (1996). *Current Trends in International Migration in Europe.* Strasbourg, Council of Europe.

Strömmer, Arno (1969). *Väestollinen muuntuminen Suomessa.* Tornio.

UNECE (1998) *Regional Population Meeting.* Budapest December 7-9, 1998.

UNECE (1999a). Fertility and Family Surveys in the Countries of the ECE Region. Standard Country Report. Estonia. *UNECE Economic Studies.* United Nations, New York and Geneva. Forthcoming.

UNECE (1999b). Dynamics of Population Ageing in the Countries of the ECE Region. Standard Country Report. Estonia. *UNECE Economic Studies.* United Nations, New York and Geneva. Forthcoming.

Van de Kaa, Dirk J 1987. Europe's second demographic transition. *Population Bulletin* 42 (1)

Vikat, Andres 1994. *Family Formation in Estonia.* Publications of the Finnish Demographic Society 15. Helsinki: Finnish Demographic Society

Vishnevski, Anatoli G & Andrei G Volkov (eds) 1983. *Vosproizvodstvo naselenia SSSR.* Moskva: Finansy i Statistika

Zvidrinsh, Peteris (1986). *(Ed). Naselenye Sovetskoi Latvii.* Riga, Zinatne.