

CHALLENGES OF INTERNATIONAL MIGRATION TO RECEIVING COUNTRIES: ESTONIA IN THE EUROPEAN PERSPECTIVE

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1. Introduction

The demographic, social and economic development of Europe since WW2 has been shaped by changing patterns of international migration. In the early postwar decades, North and West European nations at the advanced stages of demographic transition were among the first to make a turn from emigration to immigration countries. In the following decades, the nations of Southern and Eastern Europe experienced a similar transformation and by the turn of the 21st century only a shrinking fraction of countries continue to feature a negative migration balance, at least partly due to economic transition [CoE 2003].

As a cumulative effect of the past flows, migration processes have left Europe with bigger and more diverse immigrant or foreign origin populations than ever (recent overviews by [Bonifazi 2003; Coleman 1999; Poulain and Herm 2003; Salt 2004]). What are the future developments of these populations, which often have needs, behaviours, values and expectations different from the host population, and what policies are appropriate? These issues have become the focus in most receiving countries, with the discussion being shifted from academic circles also to intergovernmental population meetings. After the September 11 and related events, these concerns have definitely acquired a dimension of national as well as international security.

The present paper addresses the development of foreign origin populations from the viewpoint of demographic integration. The concept of integration is frequently applied on the level of individuals, to characterise their participation in host society in terms of educational attainment, labour market position, formal and informal networks, language, religion, ethnicity and personal identities etc. On the level of population groups, demographic integration is reflected in population characteristics and captured by means of demographic indicators. In this view, two major directions in the development of foreign origin population could be outlined. On one hand, a gradual convergence of foreign origin population with the host society could be envisaged. On the other hand, immigrant population may retain its differences from the native population and reproduce itself as a distinct subpopulation, under similar socio-economic conditions.

In the paper, these developments are analysed drawing on the case of Estonia. Against the general background of European immigration countries, Estonia is characterised a somewhat earlier onset of mass immigration, already in the second half 1940s. Given the geopolitical rearrangements, the immigration to Estonia was particularly intensive, compared to other European countries. As a result, today Estonia features a foreign origin population of about 35 per cent of total population and a noticeably large second generation of immigrants. From the viewpoint of research, the structure of foreign origin population offers a favourable basis for the study of demographic integration, which

stretches over several generations. In other words, in case of Estonia the processes can be traced over longer period than possible in most other receiving countries in Europe. Moreover, as regards to societal context, Estonia was characterised by a strongly centralised regime in terms policies between 1944-1991 which aimed to unify the demographic, socio-economic and cultural differences across population groups.

Structurally the paper consists of three sections. The first section briefly outlines the international migration and formation of foreign origin population in Estonia. The second section presents the analysis of integration by main demographic processes. The primary analytical focus is on the processes where the individual decisions and preferences play a direct role, including family formation, fertility, induced abortion, education, work etc whereas processes with less direct role of individual decisions, like mortality, are not addressed. In particular, the second section seeks answer to what extent various demographic patterns of foreign origin population have converged with those among the native population and national minorities. The third section includes discussion and summary of findings.

The data for the paper come mainly from the Estonian Family and Fertility Survey which is the national part in the 1990s round of European FFS, combined with census and vital statistics. It is important to note that the analytical considerations discussed above were taken into account already at the stage of survey design.

Firstly, the Estonian FFS was extended to foreign origin population, covering the first (foreign-borns) as well as the second generation. The foreign-born population or immigrant population proper refers to persons born outside Estonia. In delimiting this category, the criterion was not applied formally, taking into account the simple fact of birthplace but also considers the origin of population. Of those born outside the country, foreign-born population excludes persons whose parents — at least one of two — or grandparents — at least one of four — have been born in Estonia but moved out of the country at some point in their lifetime. Such persons are considered as part of native population, forming amongst the latter a distinct subgroup, defined as natives born abroad. Correspondingly, from the viewpoint of immigration flows those persons are regarded return natives and excluded from foreign origin population. The need to pay attention to the latter category is underlined by repeated waves of return migration which have occurred during the XX century [Tooms 1922; Kulu 1997; Rahi 1998].

The concept of population of foreign origin or immigrant population in the broader sense — covers foreign-born population together with its second generation¹. It is important to note that similarly to the definition of foreign-borns, the definition of the foreign origin population is also applied in a conservative manner. Thus, if at least one parent or grandparent of a person belongs to native population, the person him/herself is classified to the same group. In practical terms, this has direct implications to the descendants from mixed marriages between natives and immigrants who have all been classified to native population. In turn, foreign origin population includes only the persons none of whose parents and grandparents have originated from Estonia. The definitions of foreign-born and foreign origin population applied in the paper build strictly on the country of birth/origin, most importantly irrespective of ethnicity and nationality (citizenship).

Secondly, the range of the target population was extended beyond the currently fertile age span, to birth cohorts 1924-1973. These extensions provided a dataset which is

¹ In the following text, the terms foreign origin population and immigrant population are used interchangeably.

very suitable for the given aims of research. Most importantly, it covers the whole period of fifty years starting from the formation of foreign origin population in the country with information, fully comparable in terms of concepts, definitions and capacity to support advanced analytical methods (event history analysis). In addition to longitudinal data on major life careers, the survey provides information on processes that are typically not covered by traditional sources, e.g. cohabitation and new family forms, mixed marriages, values and attitudes etc.

Detailed descriptions of survey methodology is available from relevant sources [EKDK 1995; 1999], earlier analyses on immigrant population can be found in [Sakkeus 2000; Katus, Puur, Sakkeus 2002].

2. MIGRATION FLOWS AND FORMATION OF FOREIGN ORIGIN POPULATION

Following the onset of demographic transition in the middle of the XIX century, with certain time-lag, Estonia entered the stage of mobility transition. During that stage, the acceleration of population growth brought about the increase in migration potential which in case of Estonia resulted in internal urbanisation — relatively modest in comparative European perspective — and emigration from historical ethnic settlement territory, which on the contrary appeared quite intensive.

Regarding the emigration, a characteristic feature of Estonia in the context of contemporary emigration flow from Europe was its direction towards East rather than overseas. Supported by official policies, most of the Estonian emigration was channeled to Russian Empire. The majority of emigrants from Estonia were settled in neighbouring regions like Ingeria, Russian provinces of Pihkva and Vitebsk, and the city of St.Petersburg [Arens, 1994; Kulu, 1992; Moora, 1964; Pullat, 1981]. The destinations of long-distance emigrants were sparsely populated frontiers of the Russian Empire. Estonian settlements had sprung up in many regions, including Abkhazia, the Crimea, Siberia, Russian Far East as well as the lower reaches of the Volga River and Vologda province. In total, August Nigol has mapped 318 newly established Estonian settlements outside the ethnic Estonian territory and the number of Estonians living outside the ethnic borders but within the Russian Empire can be estimated approximately 200 thousand before World War I — about 20 percent of the total number of Estonians [Nigol 1918; Katus 1990].

The establishment of Estonian Republic (1918) coincided with emerging decrease of migration potential and the 1920s marked the cessation of emigration stage. Following WWI, the remaining migration potential was almost completely redirected to the development of urban settlement system in Estonia. Between the two world wars, international migration remained on very low level, with the first signs of forthcoming labour immigration. Based on bilateral agreement, in the late 1930s Estonia invited labour force from Poland, mostly to be employed in agriculture.

2.1. Migration flows after WWII

Corresponding to the geopolitical change after WWII Estonia became rather open to immigration from different regions of the Soviet Union (republics, autonomous republics and oblasts), but nearly ceased with the rest of the world. The key to the understanding of migration processes between Estonia and Soviet Union lays in the timing difference of

demographic development. From the viewpoint of migration potential, Estonia had become the immigration country which position had been strengthened by heavy human losses, continuing for about a decade after the war period. At the same time the Russian Federation as well as most other regions of the Soviet Union reached the peak of migration potential. In addition, the administratively directed migration as well as immigration-favouring policy should be taken into account, particularly for the first postwar decade.

In general, two major waves can be distinguished in the immigration (and correspondingly emigration) trend in the 1940-1980s [Sakkeus 1994]. The first wave occurred in the immediate postwar decade with immigration flows highest ever recorded in Estonia (Figure 1). By the mid-1950s, after the change in political regime, the immigration flows decreased, however, the intensity of immigration remained still at a very high level in comparison to other countries. Among others, the decrease of immigration resonated with the decrease of migration potential in the neighbouring to Estonia regions from which the majority of immigration originated during the period. More importantly, the cessation of administratively directed immigration has played an important role in that decrease.

The new increase of immigration was introduced in the late 1960s with migration flows accounting for about 80 per cent compared to the previous period. The emergence of the second wave of immigration and the maintenance of relatively high migration volumes up to the dissolution of Soviet Union reflects the principal enlargement of regions from which the immigration to Estonia originated. In the end of the 1960s — beginning of the 1970s these regions were expanded towards eastern and southern parts of the Soviet Union with somewhat later timing of demographic transition and still higher migration potential. Compared to earlier immigrants, the new ones — originating from distant regions which had few, if any historical contacts with Estonia, and coming from the socially and culturally diverse environments — significantly strengthened the heterogeneity among immigrant population. Following the restoration of independence, the international migration has sharply decreased, showing even negative net-migration for couple of years. Currently, immigration is exceeding emigration but the volume of net-migration is about one third-fourth of the 1960-1980s.

Measured by general migration rate, throughout the first half of the 1970s the intensity of international migration remained at the level of 1.6-1.7 (Figure 2). In the middle of the 1970s there was a decrease by more than one fifth, after which the general migration rate stabilised around 1.2-1.3 until the very end of the 1980s. During that period, another decrease in the external migration was introduced, related to the political change.

Following in general the classical pattern of emerging immigration stage after a long-term emigration period, the specific feature of migration development in Estonia, however, is extremely large migration flows, and high turnover. Concerning the latter, very low proportion of immigrants who had arrived in Estonia have permanently stayed in the country. For instance, over the period of 1946-1991, the migration turnover comprised 2,900 thousand persons whereas the number of net migrants was only 337 thousand. In other words, approximately seven out of eight immigrants emigrated in one time or another. Such a high turnover of migration reflects, among others, extensive military-related migration component and very low adaptiveness of immigrants. The latter has had also political grounds, but at least partly, stems from the heterogeneity among the regions of origin of immigrants, with no historical, social, or cultural contacts with Estonia. Indeed, in that sense Estonia represents the case of geographically very diverse immigration in the European context.

Concerning the migration flows special attention to the Soviet military bases in the territory of Estonia should also be considered. That meant the presence of a significant number of military personnel in extraterritorial units, accompanied with supporting staff as well as family members. This population was not included into the resident population of Estonia neither were their moves between extraterritorial units counted in migration statistics. However, the consistency of migration statistics was maintained only partly, regarding the moves from extraterritorial units to civil territory. Somewhat paradoxically, the referred inconsistency had particularly notable effect in the 1990s when the special status of military territories disappeared in Estonia. When leaving the country — upon the Estonian-Russian agreement the withdrawal of armed forces was completed in 1994 — the emigration statistics was included part of military-related population in extraterritorial units which had statistically never entered the country. As a result, the observed reversal in Estonia's net international migration for a couple of years in the early 1990s might represent a statistical artefact.

2.2. Age pattern of international migration

The age pattern of international migration of Estonia demonstrates the typical profile with sharp concentration of immigrants into a short age range between late teens and early twenties [Rogers and Willekens 1986]. In case of Estonia this concentration is particularly strongly expressed (Figure 3). On one hand, the relative number of children accompanying adults has been lower than usual in other European countries which has partly a demographic explanation as the immigration originated from the regions which had already completed fertility transition and characterised by relatively late marriage and childbearing. Also, the administrative assignment of graduates from vocational schools and higher educational establishments has contributed to this relatively strong concentration of migration age profile.

On another hand, the immigration of older population has been rather low, in particular lacking any signs of retirement migration. After age 50 females display somewhat higher migration intensities compared to males, however, the levels have been relatively low for both sexes. Otherwise the female and male migration patterns have been very similar, to a much higher degree than typical in European countries. Relatively young immigration with median age around 20 years, reflects, among others, low or very low proportion of family migration. Typically, immigrant population has established their (first) families after arrival in Estonia. Frequently those marriages have been ethnically mixed, however, rather seldom involving native population but between immigrants themselves.

2.3. Formation of foreign origin population

Extensive flows of international migration have resulted in the formation of extensive foreign born population, and together with its growing second generation, population of foreign origin in Estonia.

For the period preceding WWII, the number of foreigners could be directly drawn from the official statistics. For the period following the war, the dynamics of foreign origin population, i.e. its continuous growth could be estimated but not directly measured: the relevant official statistics was non-existent up to the political changes in the late 1980s. As

discussed earlier, the best source for the exercise is the census statistics. Among others, the 1989 census supported almost complete information to estimate the foreign origin population. The censuses 1959-1979 lack the place of birth/origin in their programme but it could be estimated with relatively high accuracy, based on the combination of other population characteristics such as migration status, ethnicity and family/household. The dynamics of foreign origin population is given in the table 1.

Table 1. Native and foreign origin population*
in Estonia**
(excluding the military occupation forces)

Census	Total population	Native population	Foreign origin population
1922	1107100	1082300	24800
1934	1126400	1114200	12200
1941	999900	999900	.. ²
1945 ¹	854000	854000	.. ²
1959	1196800	944900	251900
1970	1356100	990300	365800
1979	1464500	1013800	450700
1989	1565700	1029800	535900
2000	1439200 ³ 1370500 ⁴	?	?

* Figures presented in this table result from harmonisation and should be regarded as estimates

** From 1945 the territory of Estonian SSR; 2334 km² less than the territory of Estonian Republic

¹ Estimate 1.01.1945

² Number is negligible from the viewpoint of population reproduction

³ ESA, estimate 1.01.2000

⁴ ESA, census 2000

From the viewpoint of population origin Estonia has been homogenous country like most of the European countries in the beginning of the XX century, although from the viewpoint of ethnicity there has been five national minorities. The small number of immigrants registered in the 1922 census comprise the refugees from Russia after the 1917 revolution. Many of them moved further to Europe and overseas during the 1920-1930s. The 1934 census registered only half of the previous number of refugees/immigrants and the trend was even strengthened in the late 1930s with rising international tension in the region. The political

repressions following the occupation of Estonia hit the former refugees harder than the population on average, and consequently the foreign origin population as a group was reduced to a very small number, statistically almost negligible. By the end of the WWII the situation remained unchanged.

The postwar period is characterised by very rapid growth of immigrant population. The first wave of immigrants entered the country almost simultaneously with Soviet troops or only slightly later. From the current viewpoint, this is the main reason for relatively high proportion of second generation of immigrants in Estonia. The growth of foreign origin population continued to be extremely rapid, particularly against the background of moderate growth of native population. Moreover, most of the growth of native population up to the 1959 census, but also in the 1960s is due to the return migration of the surviving deportees who were granted a permission to return from their life-long sentence to deserted areas in Siberia after Stalin's death. It is notable that native population of Estonia (together with Ingrian national minority) has not reached its prewar number as well the population number achieved before WWI.

Currently, the proportion of foreign origin population accounts for about 36 percent in the total population of Estonia which is one of the highest in the European context. Comparing the first generation of immigrants only, or foreign-borns, their

proportion in Estonia (26 percent) follows closely Luxembourg, exceeding, for example, the corresponding figure in Latvia and Switzerland, and being almost three times higher than in the countries like Germany, Austria and Belgium [Council of Europe 1993-2003]. The second generation of immigrants has been also growing during the last 35-40 years (Figure 4).

The demographic and sociological research reveals that the second generation has followed the behavioural patterns of their parents, 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 [Katus, Puur and Põldma 2002]. In other words, the first and second generations of immigrants demonstrate very similar behavioural patterns, supporting the thesis of low adaptivity of immigrants in Estonia. Due to its remarkably high proportion, but even more importantly because of the patterns divergent from native population, the population of foreign origin requires particular attention whatever demographic or social process in Estonia is concerned.

2.4. Impact of migration on resident population in Estonia

The impact of immigration from 1945 has been estimated on population number as well as age structure. The procedure of estimation builds generally on Le Bras method, however, with the consideration of specific circumstances in Estonia. Namely, when considering the development of native population in closed borders, nevertheless, the return migration has been taken into account. This flow consists of survivors from inmates of concentration camps and deportees from 1940-1953 [Sarv 2001]. After Stalin's death most of the survivors were gradually granted the permission to return [Rahi 1998]. In calculations this group of survivors has been regarded as never crossing the Estonian border and living in the country intermittently throughout the period.

The dynamics of population number demonstrates nearly zero growth of native population, thus all the population increase of postwar Estonia has been due to immigration (Figure 5). Starting from the 1970s the direct contribution of immigration formed roughly one half of its total effect, leaving another half to the emergence of the second generation of foreign origin population.

The same dynamics is even better caught in the age pyramids of the four census points 1959-1989 (Figure 6). Being already very extensive but still relatively young in 1959, foreign origin population has experienced rapid ageing, clearly visible throughout all successive census points. It should also be noted that immigration has introduced or strengthened the irregularities in age profile of total population.

2.5. Structure of foreign origin population

2.5.1. Country of origin

The composition of foreign born population by their homeland, among others, represents the extension of the regions of origin, noted in the previous section. On average, only one fourth of foreign-borns originate from the so-called near Russia which refers to closer regions from which the majority of first wave immigrants came (Figure 7). Enlargement of the regions of origin towards east and south involved different (autonomous) republics up

to North-Caucasia and Volga region. These regions account for about half of the current foreign origin population. Ukraine and Belorussia together form another fourth, strengthening the divergence among the population of Slavic origin. Further, the share of Central Asia has grown comparable to that of the entire Baltic region. The extremely wide coverage of different home regions has resulted in a variety of ethnic background, accounting for 120 ethnicities, also differing in their social, cultural and historical background. Still, about 80 per cent of the immigrants are Russians, Ukrainians, Belorussians and other smaller groups of Slavic origin.

Related to ethnicity, another dimension of heterogeneity among foreign population is associated with language [Viikberg 1999]. The immigration of different ethnicities has brought along the increase in the variety of languages spoken as mother tongue. However, the linguistic diversity appears considerably lesser than the ethnic variety among immigrants in Estonia. Quite unexpectedly, the switch away from titular language has not implied the transition to Estonian language in the majority of cases. Instead, up to 1991 immigrants have much more often switched to Russian. The same trend has been visible also in the command of second language. Immigrant population demonstrates very low knowledge of Estonian language, remaining below 20 percent across the entire age spectrum.

2.5.2. Age structure

The age structure of foreign origin population reflects the variation in migration flows and reveals the instability with noticeable differences in neighbouring age groups. Altogether, immigrant population still features somewhat younger age structure than native population. In ages 45 and older, the subgroup consists almost exclusively of the first generation immigrants, the second generation emerges below that age. Towards younger age groups the share of second generation gradually increases, gaining predominance under age 20.

According to the 1989 census, taken at the end of the period of mass immigration, the highest concentration of immigrant population can be found in age groups 25-39 as well as 50-64. Also, in these age groups with the highest concentrations of immigrant population, their proportion accounts for almost 50 per cent in the total population. Among others, intensive immigration had restrained population ageing in Estonia for several decades. Since the 1990s, however, large immigrant cohorts are already reaching old age, bringing about the period of very rapid ageing together with relevant implications on societal development [Katus *et al* 1999].

3. ANALYSIS OF DEMOGRAPHIC INTEGRATION

In the following sections, the demographic integration is addressed across the main demographic processes, comparatively among native and foreign origin population. The analysis of integration covers a fifty years' time span which allows to identify systematic patterns and trends, leaving aside various similarities and dissimilarities of short-term and incidental nature. Such analytical perspective needs to be emphasised as comparable data on native and foreign origin population, covering a long time span as well as a broad range of demographic processes and characteristics appears rather unique among immigration countries in Europe.

To cover a comprehensive range of demographic processes, in this paper the integration across each process can be estimated only by means of a few indicators. In the following, each process is characterised by one summary indicator, complimented in some cases by more specific measures.

3.1. Parental home

To characterise the parental home and primary socialisation environment of the population in general, basic indicators include the number of siblings with whom the person is growing up (Figure 8).

The prevailing orientation towards large families is most apparent in parity distribution of foreign origin population according to which almost two thirds of 1924-1938 cohorts come from families with four or more children. In the 1939-1958 birth cohorts, this difference was considerably reduced, temporarily leading to a quite similar structure of parental households when compared to the native population. This similarity, however, is not maintained and in the youngest cohorts, the foreign-origin and native populations diverge again, displaying a much stronger concentration into one- and two-child parental families among foreign origin population. In general, the changes across cohorts have been rather extensive in this subpopulation. At the same time, the effect of structural factors has been much less. Unlike the native population, the decrease of the size of parental families among the foreign origin population is caused mainly by fertility decline, while the role of homogenisation of parity distribution is smaller.

Another important determinant of the socialisation environment of a child is the endurance of the parental home, including the presence of both parents. In the long-term perspective, mainly two demographic processes have shaped this feature. First, the mortality transition considerably prolonged life expectancy, extending it well beyond the average age of parents when their children are leaving the parental home. Later, the spreading of divorce has had an opposite effect on the intactness of the parental home. In addition, in Estonia the effect of political repressions should be taken into account.

Figure 9 presents the proportion of the repressed parental home in the breakdown of native and foreign origin populations. Among the native population, repression peaks in the 1939-1944 cohort, followed by a decline. In the foreign origin population, the repression rate is systematically lower than among the native-born, albeit extremely high in the European context. It is noteworthy, however, that the discrepancy between the native and foreign origin populations in Estonia has been maintained throughout the post-war period.

3.2. Marriage

The general indicator to analyse marriage is the total number of partnerships, which is presented on Figure 10 comparatively for foreign origin and native population, birth cohorts 1924-1973.

Compared to native population, foreign origin population has displayed generally higher nuptiality level. In older cohorts 1924-1938, immigrants exceed the level of native population systematically by ca 10 percent. In the following three-four cohorts, the difference temporarily decreased and among those born in 1939-1943, a cross-over occurred. In younger cohorts, higher nuptiality level among foreign origin population re-appeared and was maintained until the end of the cohort range. If based on the number of registered marriages, the excess of foreign origin population would have been even larger and more persistent.

The last decades have witnessed the increasing diversity of family forms and prevailing mode of union formation has undergone considerable transformation (Figure 11). Among foreign origin population direct marriage has been the prevailing mode of union formation. In the cohort range for which data are available, on average nearly two thirds of immigrants entering their first union have followed the traditional pathway. At the same time, however, there are important differences across cohorts. In older cohorts of 1924-1943 which started their marital careers in the 1940-1950s, and to a lesser extent also in the 1960s, the proportion of direct marriages accounted to 75 percent. It is interesting to note that between 1924-1928 and 1929-1933 cohorts the prevalence of traditional family formation pattern even increased (12 percentage points). This unexpected rise probably reflects the period effect introduced by the turbulence of the repression and WWII period. Among others, this hypothesis is supported by the manifestation of corresponding irregularity also in several other life careers of these early cohorts of foreign origin population [Katus, Puur and Põldma 2002].

In the following cohorts, the proportion of direct marriages turned to decline, however, the latter pathway was still prevailing until the 1959-1963 cohort. Although the trends in both subpopulations have moved in the same direction, the transformation of family formation pattern has lagged systematically behind among foreign origin population. For example, difference in the proportion of direct marriages has reached its peak (32 percentage points) in the youngest cohort 1969-1973. The proportion of direct marriages among immigrants in the referred cohort is comparable to the corresponding figure of native population born in 1949-1953, i.e approximately two decades earlier. Consistent with their more traditional pathway to family formation, the proportion of consensual unions, not converted into marriage, appears almost three times lower among foreign origin population, with virtually no change until the 1964-1968 cohort. It is interesting to note that the referred difference can be observed also in second and higher order partnerships, although the prevalence of cohabitation in these unions is generally much higher.

To conclude the section, despite considerable changes in matrimonial behaviour in both native and foreign origin population the difference between two subpopulations has not decreased. Reflecting the modern nuptiality trends, the centre of these differences has shifted primarily to the types of partnerships.

3.3. Fertility

The general indicator to analyse fertility is the total fertility rate, which is presented on Figure 12 comparatively for foreign origin and native population, birth cohorts 1900-1960. Fertility of the foreign origin population demonstrates almost continuous decline throughout the cohort range, stretching to the final stage of fertility transition. Among the cohorts, born in the first two decades of the XX century the difference in fertility levels was particularly large. From that viewpoint, fertility development of foreign origin population in Estonia, including the second generation, has been well in line with the trends in their countries of origin for the period (see also [Andreev *et al* 1998]).

The convergence of fertility in twenty years' cohort range resulted in identical levels in birth cohort 1925-1929. However, that state was only temporary, followed by a divergence into another direction. The largest difference in fertility levels between foreign origin and native population could be observed in the 1949-1958 cohorts. Immigrant women have not experienced the fertility increase in the late 1960s and their total fertility rate of foreign origin population has fluctuated between 1.7-1.9. As a result, in comparative perspective Estonia represents a rare case where foreign origin population has displayed systematically lower fertility than native population for several decades.

The parity distributions of native and foreign origin population are quite distinct (Figure 13). The third parity has been at systematically lower level among foreign origin population. Compared to native population, corresponding proportion has been twice or even more than twice lower, demonstrating the largest difference across parity distribution. On another hand, the proportion of women with one child has been continuously higher among immigrants, exceeding the native population by approximately 10 percent points. Also, the concentration at two births has been stronger among foreign origin population but there has been no increase over time.

At the same time, the proportion of nulliparous women has been systematically lower among foreign origin population, particularly in older cohorts. As the overwhelming majority of the immigrant population originates from the regions east to the Hajnal line, their fertility has not departed from low childlessness, unlike in the countries which experienced the European marriage pattern. Correspondingly, no distinct trend in the proportion of nulliparous women can be perceived over the cohort range.

In terms of non-marital fertility, native population of Estonia has followed the Scandinavian or Baltoscandian pattern throughout the whole stage of post-transitional fertility. Non-marital fertility had been already very high in Estonia during the first postwar decade, demonstrating some decline up to the mid-1960s and followed by the increase until to the 1990s [Katus 1997]. Development of non-marital fertility among the immigrant population, however, displays a clearly different pattern over time. Turning to cohort perspective, non-marital fertility in among immigrants has remained relatively stable across cohorts comprising about 10-13 percent of all births. As a result, the development of non-marital fertility is demonstrating increasing divergence between native and immigrant population starting from birth cohorts of the late 1940s when the increase of non-marital fertility commenced among native population. Towards the end of the observed cohort range, the proportion of non-marital birth appears twice lower among immigrants, and the difference tends to grow (Figure 14).

3.4. Household composition

Household composition of the population reflects an outcome of several demographic processes, including nuptiality, fertility, intergenerational coresidence etc. In this section, the household composition of native and foreign origin population is compared by distinguishing between four types of households classified on the basis of family nucleus, having (a) children, (b) partner, (c) both and (d) none of them². Additionally, the information is presented also on some other key aspects of household composition such as living alone and residence in multi-generational households (Table 2).

The most common of the four referred household types is a couple with children which accounts for nearly half of population in a given age range. Living with a partner but having no children in the household appears slightly more common than having children but partner. The share of respondents lacking both partner and children is almost equal to the latter. In general, the ordering of the groups follows the same pattern among native and foreign origin population. Notably, when combined together, households belonging to types *b*, *c* and *d* outweigh the complete nuclear family — partner with children — in both subpopulations emphasising considerable diversity of living arrangements in Estonia.

Understandably, the frequency of each household type varies according to the stage of family life cycle resulting in different distributions cohort/age range. Reflecting the long-term trends towards earlier family formation and childbearing it is not surprising that the proportion of women having children and living with a partner is close to 50 per cent already in the youngest group. After a rapid increase this living arrangement reaches a peak in the age group 30-34 where nearly 80 per cent of foreign origin women share this most common living arrangement, followed by gradual decline. Compared to native population, in fertile age-span households with both partner and children present are somewhat more prevalent among immigrants.

Slightly more common among foreign origin population are also single-parent households, consisting typically of mother with children. The difference between two subpopulations has been concentrated in age groups 20-24 and 25-29, in later ages natives seem to catch up with foreign origin population. Considering the realities of transition economy and scant social safety net, a large proportion of single-parent households implies considerable poverty risks for the individuals involved, regardless of native or immigrant origin. On the other hand, the two remaining household types — living with a partner but having no children and living without a partner and children, particularly living alone — are somewhat less prevalent among foreign origin population.

It is important to note that the differences in household composition between foreign origin and native population are not limited to a particular age group but stretch across all successive life cycle stages. The analyses focusing on older population, published elsewhere, have revealed remarkable differences in living arrangements of immigrant and native elderly [Katus *et al* 1999]. Older persons of immigrant origin are much less inclined to live alone, in some age groups, the propensity of immigrant elderly to live in single-person households is about twice lower than among their native counterparts. In turn, immigrant elderly have been found to live more frequently in multigenerational households — this pattern shows up also in the oldest age group

² The discontinuity of national statistical system also implied a gap in the information on households. Postwar population censuses based on Soviet methodology, including the 1989 census, did not apply the internationally comparable concept on households. The concept of household was reintroduced in the early 1990s in survey statistics on which evidence the present section draws.

included in the table. This finding deserves particular attention against the background of comparatively more restricted possibilities of immigrants to establish multigenerational households and evidently reflects less advanced degree of individualisation among foreign origin population.

Table 2. Household composition
Birth cohorts 1924-1973

	1924 1928	1929 1933	1934 1938	1939 1943	1944 1948	1949 1953	1954 1958	1959 1963	1964 1968	1969 1973	Total
Native population											
a. Partner and children	4.5	14.3	28.1	40.4	48.9	66.9	72.6	75.1	67.3	49.4	46.3
b. Partner, no children	39.3	40.3	34.7	27.6	19.1	6.0	3.1	2.5	8.4	15.3	20.0
c. No partner, children	12.1	11.7	12.3	18.8	18.4	20.1	20.3	15.9	10.5	5.5	14.6
d. No partner, no children	44.1	33.7	24.9	13.2	13.6	7.0	4.0	6.5	13.8	29.8	19.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Alone	41.2	31.6	22.1	11.5	8.9	5.0	1.6	5.0	6.9	7.7	14.2
3+ generations	9.9	13.1	12.9	16.2	9.8	11.6	10.6	10.0	13.8	19.0	12.8
Average household size	1.95	2.20	2.43	2.89	3.06	3.68	4.00	3.93	3.58	3.46	3.10
Foreign origin population											
a. Partner and children	13.3	12.2	20.3	31.5	64.2	71.3	69.9	78.5	74.4	45.8	47.8
b. Partner, no children	28.7	47.7	39.0	29.1	16.1	3.7	11.4	5.1	1.3	16.9	19.1
c. No partner, children	21.1	14.5	15.8	18.2	11.7	20.2	21.6	14.1	15.0	9.9	16.5
d. No partner, no children	36.9	25.6	24.9	21.2	8.0	4.8	4.6	3.3	9.3	27.4	16.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Alone	33.9	21.5	23.7	16.4	8.0	3.7	4.0	1.1	1.9	5.6	12.4
3+ generations	19.5	11.6	11.9	15.2	13.0	12.8	6.8	7.3	15.0	24.7	13.6
Average household size	2.31	2.21	2.29	2.60	3.10	3.46	3.39	3.60	3.45	3.39	2.97
	65-69	60-64	55-59	50-54	45-49	40-44	35-39	30-34	25-29	20-24	Total

As a result, in age groups above 60 foreign origin population features systematically greater household size. The referred situation, however, is not characteristic to younger population in which the pattern becomes reversed. Among native population, in age range 20-69 the average household size accounted for 3.10 whereas the corresponding figure for immigrant population was 2.97. This reversed pattern does not reflect so much the presence of a large number of single guestworkers in Estonia but lower fertility levels among foreign origin population in a wide range of birth cohorts, discussed in previous sections.

3.5. Induced abortion

A broader concept of fertility also considers other pregnancy outcomes beside the delivery of a child. Such an approach is particularly important when other pregnancy outcomes are relatively frequent when compared to live births. Spontaneous abortion and stillbirth are two pregnancy outcomes less dependent on personal decisions; induced abortion, however, certainly involves a decision-making process. Therefore, the magnitude of induced abortion is expected to have greater variability compared to stillbirth and spontaneous abortion in societies of similar health conditions.

The proportions of pregnancy outcomes are presented in Figure 14. Stillbirths are combined with spontaneous abortions, and cover together 7-9 per cent of pregnancy

outcomes for the native-born as well as the foreign-born population. This proportion has remained rather stable over all cohorts.

Induced abortion has been an important pregnancy outcome for all cohorts, however, noticeably different between the native-born and the foreign-born populations in Estonia. Comparing their total abortion rates, at least two major features are evident. First, the difference between the older cohorts of the native-born and foreign-born populations is impressive. (Figure 15). Furthermore, it is not due mainly to an extremely low abortion level of abortion within the native-born population. Those cohorts have already experienced below-replacement fertility and the total abortion rate of 0.75 - 1.0 should be considered rather substantial. One can anticipate this level to be higher when compared to the European average for comparable birth cohorts [Blayo 1991; Frejka 1985]. Consequently, the explanation for the large difference between the native-born and foreign-born populations is the extremely high abortion rate of the immigrant population. Compared to the corresponding fertility indicator, the total abortion rate of the Estonian foreign-born population has been continuously higher, making abortion the most frequent pregnancy outcome. Data on current abortion trends again illustrate the widening gap in abortion behaviour between the native and foreign origin populations, which has been predicted elsewhere [Anderson *et al* 1993].

Another major feature of the dynamics of induced abortion concerns the total abortion rate for the older cohorts of the native population which has doubled, from 0.75 up to 1.5. What is exceptional is the interrelation between abortion and fertility trends for the native-born population: the highest levels of both fertility and abortion are found within the same cohorts. Moreover, the sharply increasing abortion rate among the cohorts of 1924-1933 seems to have no impact on corresponding fertility levels. Subsequently, both fertility and abortion rates of the cohorts of 1939-1953 are demonstrating a relatively slow but nearly identical increase, followed by a decrease in succeeding cohorts, which is also parallel. This seems to offer strong evidence against the hypothesis of an inverse relationship between fertility and abortion, widely assumed in numerous micro-level studies. The corresponding relationship among the foreign origin population is rather different from the native-born, even concerning the reversed ratio of indicators throughout all cohorts. Also, there has been no increase in abortion, and the highest levels in the FFS cohort range have been characteristic within the older cohorts.

In the context of extremely high levels, induced abortion plays important role throughout the entire reproductive career of women. In this context, abortion is not an exceptional event reflecting inadequate knowledge and/or failure of contraception but rather a common means of fertility regulation, applied for spacing as well as for stopping purposes. Figure 16 presents the total abortion rate disaggregated by stages of reproductive career: before first birth, between births (spacing), and after the last birth (stopping). Total abortion rate for the first stage displays comparable levels between native and foreign origin populations. For the second and third stage the foreign origin population features systematically more than twice higher levels. These differences reflect not only the levels but more importantly the different role which induced abortion has played in reproductive careers among native and foreign origin population.

3.6. Educational attainment

Estonia has featured a relatively long record of public education with comprehensive coverage of population. Already in the cohorts born in the end of 19th century almost

complete literacy was reached (Figure 17). This was not the case for migration hinterland of Estonia, which is understandably reflected in the educational attainment of immigrants who settled in Estonia after the Second World War. In the cohorts of foreign origin population born in the late 19th century, the proportion of illiterates and persons with incomplete primary education accounted for ca 60 per cent. Concerning the secondary and tertiary education, the educational attainment of native and foreign origin population has not been markedly different. In other words, when moving from older to younger cohorts, the tendency towards homogenisation of educational attainment has clearly prevailed.

Against that background, however, foreign origin population demonstrates a more traditional pattern in terms of gender differences in educational attainment. In native population the proportion of university graduates is higher among women in all birth cohorts starting from 1934-1938, on the level of secondary education the female advantage in education emerges even earlier. In foreign origin population, on the contrary, the proportion of university graduates has remained higher among men, with the exception of just one five-year cohort (1954-1958). Concerning the 1990s, evidence based on Estonian FFS suggests some declining trend in tertiary education enrolment among immigrant population.

3.7. Economic activity

During the previous societal regime the concept of full employment was implemented in Estonia, however, the years since the beginning of the 1990s have witnessed particularly large transformation in economic activity of the population, including the decline in employment levels, emergence and expansion of unemployment and other forms of labour market slack, massive re-allocation of labour between economic sectors, diversification of work patterns etc. Therefore, with respect to demographic integration, the analysis of economic activity should be focused on the developments during the recent decade.

Compared to native population, foreign origin population has been somewhat less successful in adapting to rapid changes in the labour market. During the period of initial economic adjustment, employment decline has accounted for 18-19 percent from the previous level among foreign origin population, compared to 13 percent employment decline among native population. The time series of basic labour market indicators demonstrates that greater employment reduction among immigrants reflects systematically higher unemployment level (Figure 18). Excess unemployment started emerged in spring and winter 1991, in early 1995 unemployment rate of foreign origin population accounted for 12 per cent, among native population the rate has been limited to 8 per cent. Although there has been some general increase in unemployment levels since 1999, the difference between immigrant and native population has not undergone major change.

An essential reason behind the excess unemployment among foreign origin population stems from its specific employment composition. Prior to transition, immigrant population had been concentrated in large industrial enterprises producing for the Soviet market. In the course of transition, large industrial enterprises, particularly in heavy industries, lost their old markets and apart from other sectors, proved less successful in finding replacement. The referred structural changes have been mainly responsible for inferior labour market performance of immigrant population, other characteristics, including language skills have proven of much lesser importance [Puur and Sakkeus, 1999; Puur 2000].

3.8. Values and attitudes

It appears difficult to measure values and attitudes consistently over long periods of time, however, to capture the main personality traits, the *locus of control* concept could be applied. The concept, first introduced by Julian Rotter, distinguishes between the two opposite poles — internal and external locus of control —, which represent a personality orientation apparently manifesting itself in all major life decisions. The individuals who feature an internal locus of control tend to be self-contained and convinced of their ability to control their own life-course. The individuals with external locus of control are characterised by a lack of confidence: they are inclined to think that external forces determine their destiny. The concept has by now become classical in psychological studies and has been applied in different fields of social research [Laird and Thompson 1991].

It is interesting to observe a fairly distinct division between the native and foreign origin population relating to prevalence of alternative types of locus of control. In the older cohorts the proportions of internals among native and foreign origin populations are 41 and 32 per cent respectively, while 80 per cent of the youngest native and 67 per cent of the foreign origin fall in the corresponding category (Figure 19). The differences between two subpopulation displays noticeable stability, despite relative large transformation across cohorts, which seems to reflect a regular age-pattern.

The ideal number of children displays a noticeable homogeneity compared to many other attitudinal indicators related to demographic behaviour. There are systematic differences in the ideal number of children between the native and foreign origin populations: the preference for three children comprises the highest proportion among the native while the corresponding share in the foreign origin population is about three times lower. The latter population has a distinct preference for a two-child family (Figure 20). Summing up the differences, on average the ideal number of children amounted to 2.7 among native population and 2.2 among foreign origin population. It is important to note that such difference has been maintained across the cohorts despite noticeable transformation in both subpopulations.

Among related indicators, it is interesting to consider measures reflecting the perception of gender roles. Figure 21 reflects the division of homework in the family as judged by women.

4. DISCUSSION AND CONCLUSIONS

Integration is a widely used term to describe participation/exclusion and/or social cohesion in a broad scale of societal organisation which encompasses virtually entire spectrum of human life. With respect to foreign origin population, the term of integration has been applied rather commonly in sociological, political, economical etc disciplines. Against that background, it is reasonable to ask whether demographers should define their approach to integration of immigrant populations?

From the viewpoint of demography, integration is not something that can be observed at the level of individuals but rather a phenomenon which takes place among the population, i.e. at group level. In other words, integration can be regarded as a specific process — a convergence of native and foreign origin populations in terms of major processes and structures which is captured by various indices. If such a convergence is not occurring, and/or the differences are widening, there is a reason to speak about non-integration or even disintegration. To distinguish such interpretation of integration from other approaches, it could be termed as *demographic integration*.

From the substantive viewpoint, it is useful to note that foreign-born population *per se* forms a marginal group which main characteristics cannot not be reproduced in the second and following generations. Life courses of foreign-born population are always split into two distinct parts, between the country of origin and host country. The study of demographic integration, therefore, involves the need to compare three populations — population of the host country, population of the country of origin and the immigrant population itself. In terms of research methodology, this triangle calls for increased international cooperation and parallel studies in several countries as immigrant population in the host country stems usually from more than one origin. The emerging studies of that kind have already shown very interesting findings [Lesthaeghe 2000].

Research on demographic integration could also tackle selectivity — between the emigrants and those staying in the country of origin — as it could be among major factors underlying the specific features of different immigrant groups which likely have long-term effects manifested also in the second generation. Understandably, the analysis of selectivity requires a relatively rich and comparable data from receiving as well as sending countries. Moreover, in case of the latter the information is needed with regional breakdown.

Judging upon the results that have become available, the analysis of demographic integration tends to challenge some stereotypes or fallacies related to foreign origin population, circling in particular among the non-demographic community. For example, it appears rather common to ascribe immigrant populations in Europe higher mortality and higher fertility levels compared to natives of the host country. Of course, such thinking is rooted in dissimilar timing of population development, including the timeframe of demographic transition, which introduced a distinct time-lag between native and foreign origin populations.

Understandably, under such circumstances the differences can be expected to decrease or even disappear in the future, however, the convergence cannot be taken for granted. Sometimes, to the surprise of non-demographers, differentials in mortality and fertility levels as well as in other processes may change direction and depart from common patterns observed during the past decades. For example, in France life expectancy of Maghreb origin population has become higher compared to life expectancy among native French population which is one of the highest in the world. And it goes without saying that mortality level of Maghreb immigrants in France is much higher compared to the countries

of their origin [Courbage 2003]. Similarly, in Estonia fertility of foreign origin population dropped below the level of natives already in the late 1960s. Systematically lower fertility level was maintained for nearly two decades, until an increase of fertility among immigrants. Fertility analysis has indicated a direct connection between fertility trends of immigrant population and the counties of origin, and much lesser similarity with developments prevailing among natives of the host country [Katus, Puur and Põldma 2002].

Another stereotype related to foreign origin population concerns labour force participation. Often immigrants are regarded as cheap labour (moreover, host countries do not need to make investments in its education and training). Immigrant workers are seen as accepting occupations which have become unattractive for natives, and in general, their presence is thought to withhold the worsening dependancy ratio.

In general, this is true for the first generation of immigrants. Among the second generation of immigrants, however, the labour market characteristics offers a rather different picture in most European countries. The unemployment rate, for example, is amounting as high as 50 per cent among foreign origin population in some EU countries [Courbage 2003]. In other words, immigration which is commonly regarded as economic advantage to receiving countries, is transformed into opposite — economic disadvantage — in the second generation.

Yet another misconception relates to the effect of immigration on population ageing. Usually immigrants belong to younger age bracket when they arrive in the host country. This elementary fact has created an impression, particularly among economists and business community, that immigration has a capacity to slow down or even reverse the ageing of populations. While true over short- and medium-term, the effect of immigration will turn into opposite over longer run when the large cohorts of immigrants enter the old age (let us say retirement age). This occurs about 40-45 years after the onset of immigration, and at this point, the age structure will lose the younger outlook, in comparison of with native population, characteristic to earlier periods.

Moreover, large inflow of immigrants in the past tends to accelerate population ageing in receiving country. For example, starting from the middle of the 1990s Estonia has features one of the highest tempos of demographic ageing in Europe namely because of such impact of past immigration. Needless to say that the situation is in strong contrast to preceding decades when immigration nearly halted population ageing in the country. Among demographic community there is a common understanding that immigration will destabilise the age structure of population and generate repeating cohort waves. However, this fact is usually not considered when the benefits of replacement migration are discussed.

In terms of research, the situation in Europe can be characterised as a discrepancy between the growing importance of challenges related to foreign origin population and relatively poor state of the data, without clear prospects for noticeable improvement in the near future. In a way it is surprising how deficient are the data on foreign origin population against the background of good and very good quality of statistics on total population in most European countries. The usual reason for that kind of situation stems from non-systematic application or even absence of relevant characteristic — origin of population which allows to distinguish properly between native and immigrant population — in national data collection systems. At pan-European level, the comparative data on foreign origin populations could be stated as non-existent. At the same time, the understanding of deficiency of citizenship-based data on immigrants is widely shared among demographic community.

Taking into account the state of data collection and poor comparability across countries in particular, a strong emphasis should be put on the development of common concepts and procedures for statistics on immigrant populations, at least in receiving countries in Europe.

Of course, the need for better data is not new, however, it has been clearly strengthening when summarising the developments over the past decade or two. To meet the need, among others, the European Population Committee has initiated two comparative studies related to the topic: (1) Demographic development of national minority populations in Europe 1910-1995, and (2) Demographic characteristics on migrant populations in Europe. The expert groups for the studies have taken up theoretical discussions regarding the concept of *national minority population* and *immigrant population*, in order to undertake in-depth studies across Europe. The expert group has reached a theoretically solid and politically agreeable framework and applied the concepts in a number (totalling 15 in two studies) comparative studies in various European countries [Haug, Courbage and Compton 1998-2000; Courbage and Compton 2002].

Both EPC studies have shown interesting results and could be regarded innovative in several aspects. In particular, the distinction between first and second generations of immigrant population, which together corresponded to general term of foreign origin population, has proven useful in defining the group, and understandably, can be applied in the analyses of demographic development and integration of immigrant populations. The characteristic of citizenship, widely used to define immigrants in the countries of low and/or moderate immigration has proven rather inadequate under the transformed conditions, particularly for the studies of integration. The results of these projects have been discussed and approved by the European Population Committee — a body of country representatives from virtually all European nations — as well as the Council of Ministers at the Council of Europe. In other words, the conceptual framework for national minorities and immigrant populations have undergone scientific as well as political evaluation.

In addition to EPC studies, the conceptual framework for immigrant populations and national minorities and has been increasingly — the corresponding concepts have been, understandably, used earlier as well — applied. In this connection the NIEPS (Network for Integrated European Population Studies) seminars on international migration and integration should be referred. Some papers to these meetings clearly demonstrates how urgent it is to apply these concepts across Europe [Courbage 2003, Poulain and Herm 2003]. Also, some country reports, e.g. Norway and Estonia have given evidence of systematic application of these concepts in national studies [Østby 2001, Katus, Puur and Sakkeus 2001]. The discussions in the NIEPS led to the formulation of a proposal to Eurostat to initiate data collection on immigrant populations, including the second generation, defined by the characteristics of origin.

Regarding the future of foreign origin populations in Europe, in many respect the their demographic and social development reflects the features characteristic to their demographic stage. If the development brings the patterns of immigrant population closer to native population, one could speak about convergence as often demonstrated by fertility trends, for example. Nevertheless, even a full convergence at a certain point does not necessarily imply the completion of demographic integration, as differences may re-emerge in the following stage. Therefore, demographic integration should not be considered a process going smoothly into one direction.

And finally, success or failure of demographic integration will be decided in the second and third generation of immigrant populations rather than in the first generation. There is a growing evidence from several countries that the second generation of foreign

origin population could be even less integrated compared to their parents in important dimensions of social and demographic development, labour market participation forming an example of that type.

Figure 1. **International migration flows**
1945-2000

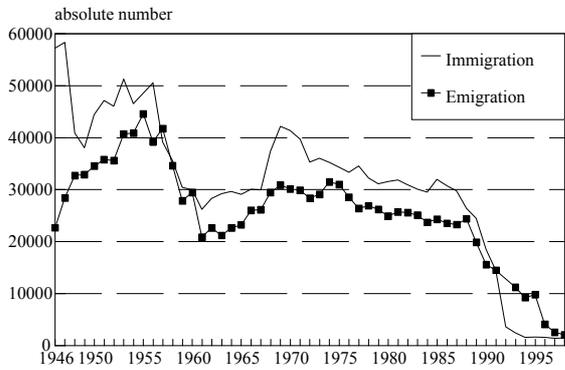


Figure 2. **General international migration rate**
1959-1991

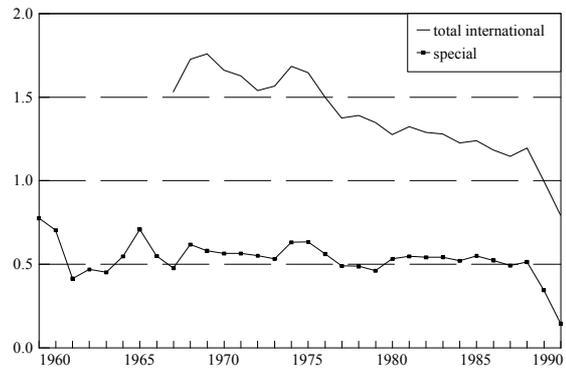


Figure 3. **Age-specific international migration rate. 1960s-1980s**

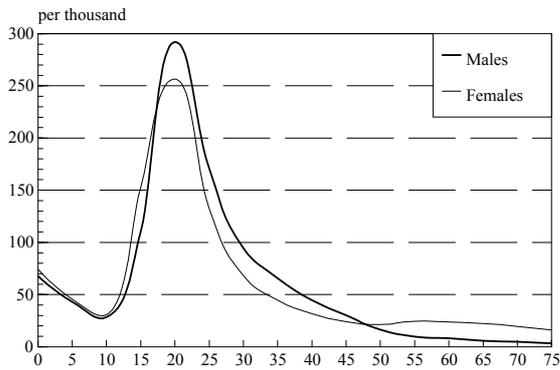


Figure 4. **First and second generation of foreign origin population**

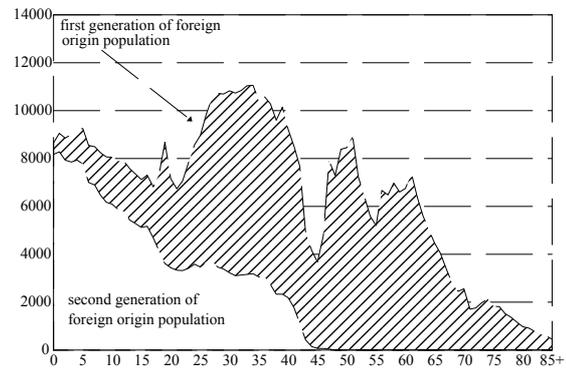


Figure 5. **Population number**
Estonia 1945-2000

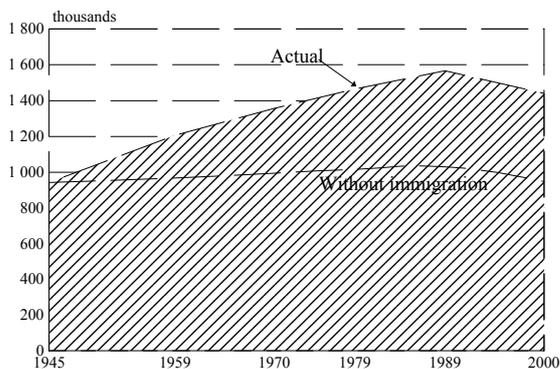


Figure 7. **Country of origin of foreign-born population**

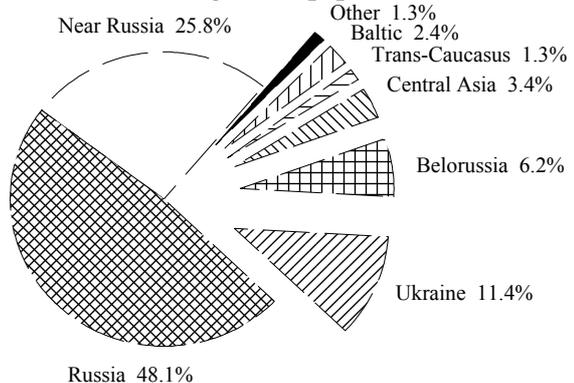


Figure 6a. Age pyramids of total and native population. Census 1959



Figure 6b. Age pyramids of total and native population. Census 1970



Figure 6c. Age pyramids of total and native population. Census 1979

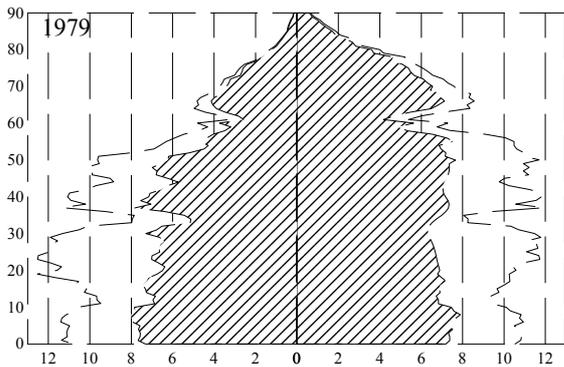


Figure 6d. Age pyramids of total and native population. Census 1989

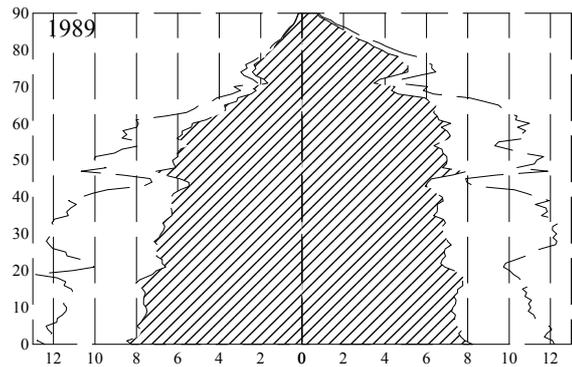


Figure 8a. Number of children in parental generation. Native population, birth cohorts 1924-1973

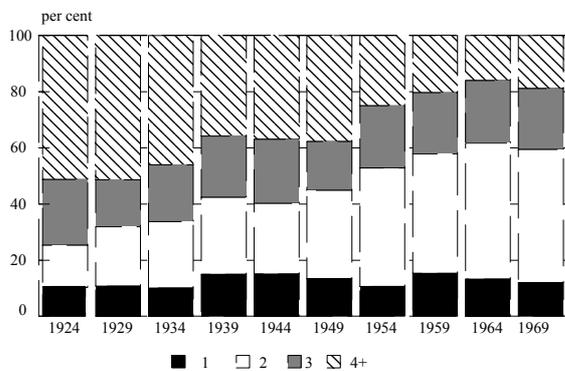


Figure 8b. Number of children in parental generation. Foreign origin population, birth cohorts 1924-1973

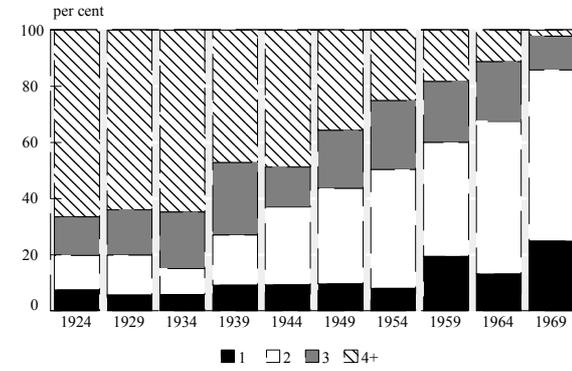


Figure 9. Experience of political repressions in parental generation. Birth cohorts 1924-1973

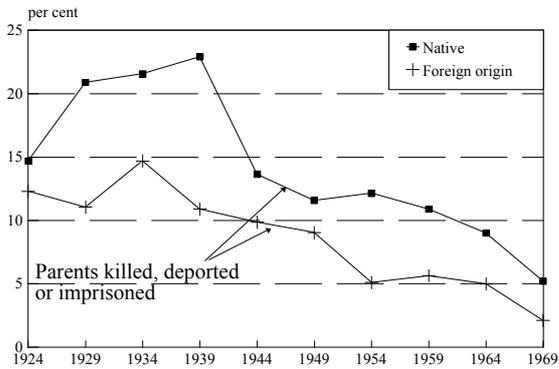


Figure 10. Total marriage rate Birth cohorts 1924-1973

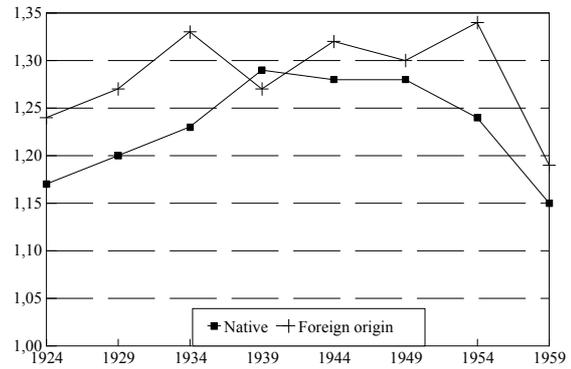


Figure 11a. Type of first union Native population, birth cohorts 1924-1973

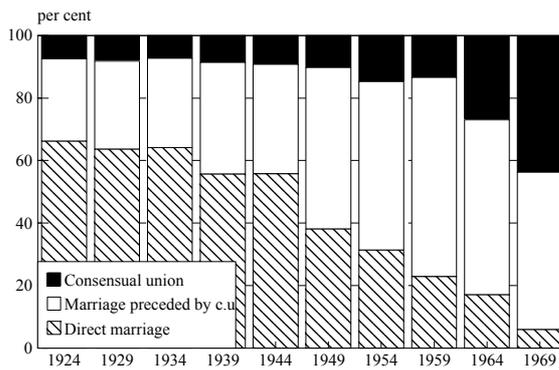


Figure 11b. Type of first union Foreign origin population, birth cohorts 1924-1973

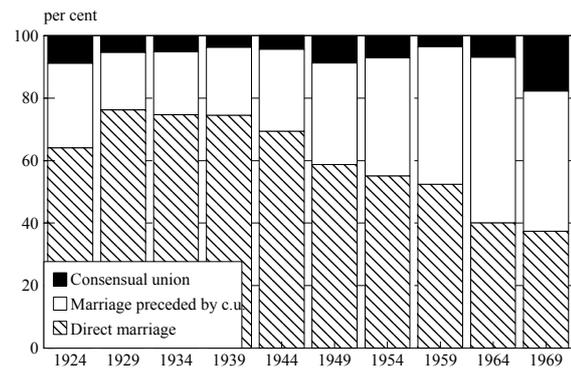


Figure 12. Total fertility rate Birth cohorts 1900-1960

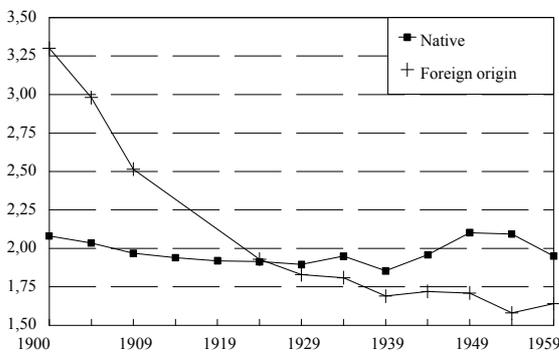


Figure 13. Parity progression ratio Birth cohorts 1924-1973

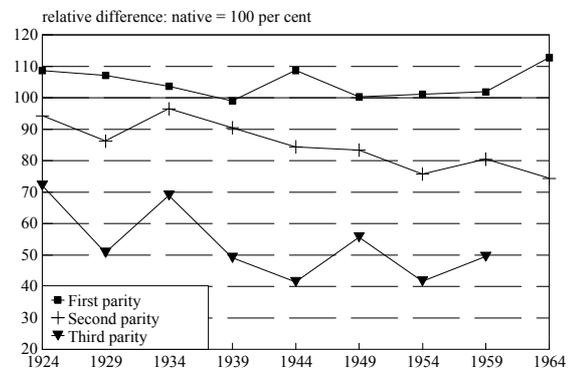


Figure 14. **Proportion of non-marital births**
Birth cohorts 1924-1973

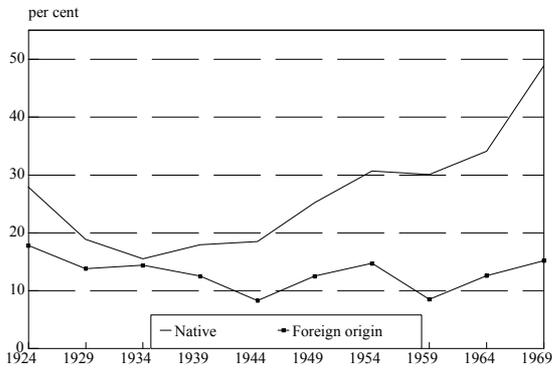


Figure 14. **Total abortion and stillbirth rate**
Birth cohorts 1924-1973

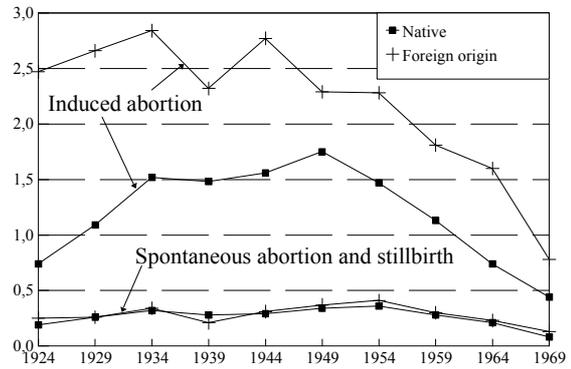


Figure 15a. **Total fertility and abortion rate**
Native population, birth cohorts 1924-1973

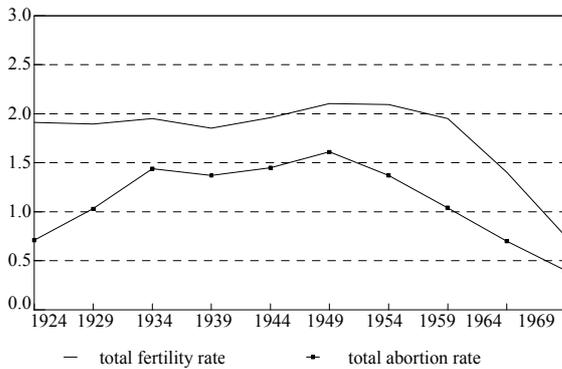


Figure 15b. **Total fertility and abortion rate**
Foreign origin population, birth cohorts 1924-1973

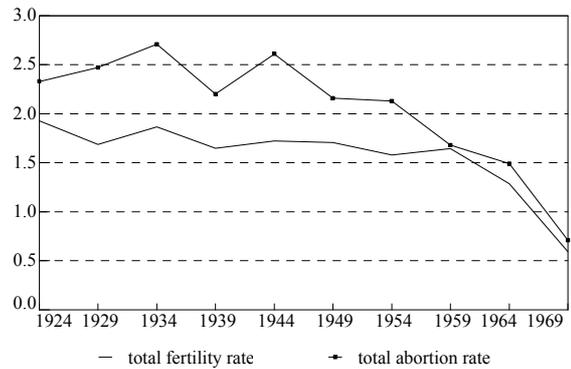


Figure 16a. **Total abortion rate by stage of reproductive career.** Native population, birth cohorts 1924-1973

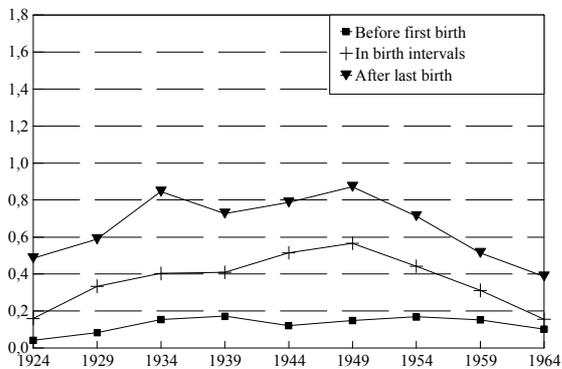


Figure 16b. **Total abortion rate by stage of reproductive career.** Foreign origin population, birth cohorts 1924-1973

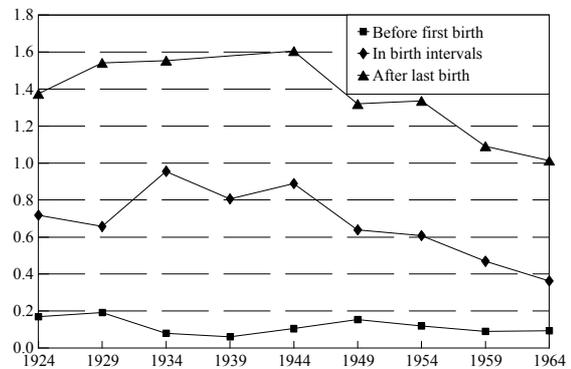


Figure 17a. **Educational attainment**
Native population, birth cohorts 1894-1964

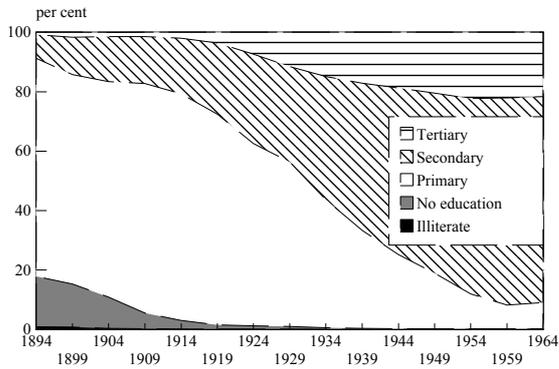


Figure 17b. **Educational attainment**
Foreign origin population, birth cohorts 1894-1964

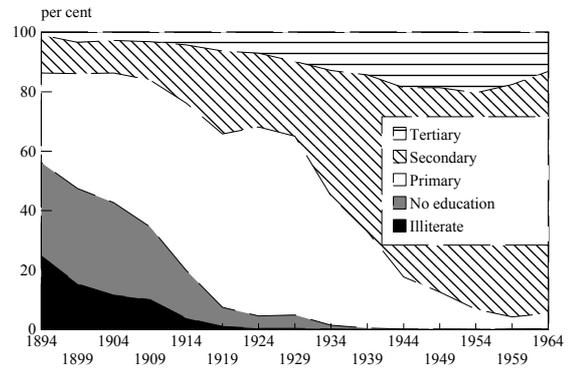


Figure 18. **Unemployment rate**
1989-2002

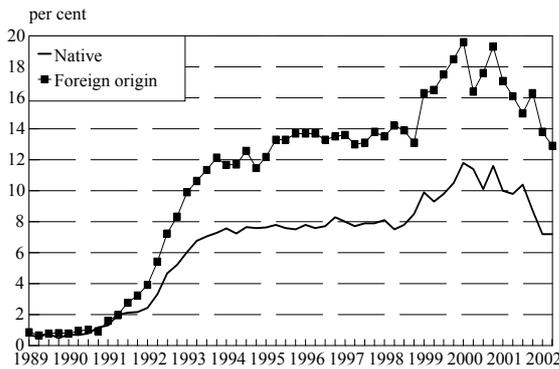


Figure 19. **Internal locus of control**
Birth cohorts 1924-1973

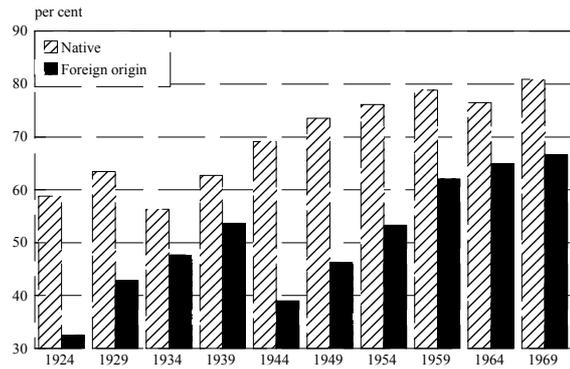


Figure 20a. **Ideal number of children**
Native population, birth cohorts 1924-1973

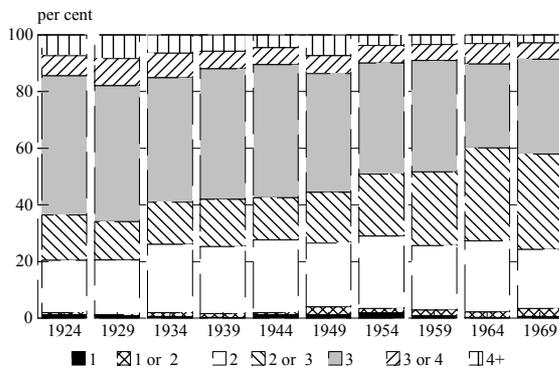


Figure 20b. **Ideal number of children**
Foreign origin population, birth cohorts 1924-1973

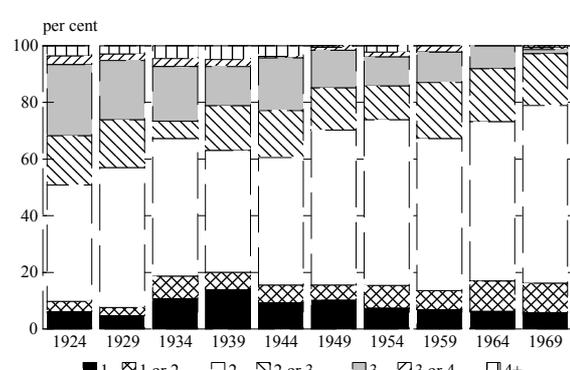
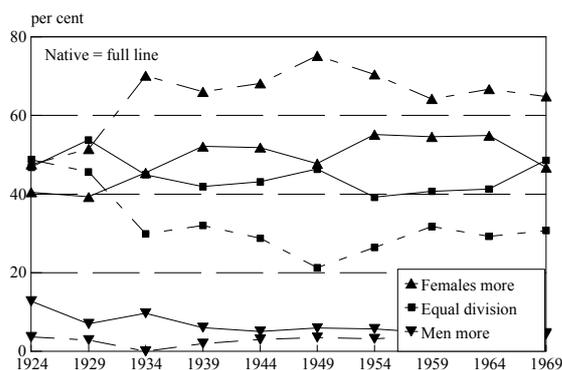


Figure 21. **Attitude towards the division of homework by gender.** Birth cohorts 1924-1973



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