ECONOMIC ACTIVITY IN TRANSITION: POPULATION OF FOREIGN ORIGIN IN ESTONIA IN THE 1990s

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The working paper examines the changes in the economic activity of foreign-origin population in Estonia during the period of economic transition, relative to the experience of native population. The paper includes a concise overview of the emergence of foreign-origin population, based on population censuses. To outline the labour market position of foreign-origin population on the eve of transition, microdata from the 1989 census are used. The data for transition period are derived from the first round of national labour force survey, which supplied detailed work histories for 9,608 individuals between 1989-1995. The analysis covers the developments of employment, unemployment and economic inactivity, sectoral composition of employment, size of workplace, multiple jobholding, self-employment etc. In addition to time series of labour market indicators, consideration is given to flows between labour market states.
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The Baltic countries regained their national independence in 1991, the last units of Soviet armed forces had moved out by 1995. These long-awaited developments brought an end to over a half-century period of occupations which had started in 1939-1940. Although from the legal point of view the restoration of statehood has marked the return to preceding conditions, it could by no means imply the simultaneous liberation from the legacy of occupation. Among its diverse implications, dramatic changes in the composition of population have perhaps the most far-reaching and prolonged consequences. Most importantly, the period of Soviet rule has left the Baltic countries, particularly Estonia and Latvia with unprecedentedly extensive populations of foreign origin.

Differently from the formation of immigrant populations in other European countries, local authorities did not usually have any influence over the referred process, which, *inter alia* involved the moves of military personnel. Moreover, international migration flows to which the Baltic countries had been subjected for decades, were officially regarded as internal. As the expectations of large-scale repatriation and return of immigrants have faded, the questions of future development of these new populations have arisen. What to do with these populations, which tend to have their background, behaviours, capacities and values different from the host population, and often, an uneasy relationship with them? The demographic legacy of the Soviet occupation presents Baltic nations with challenges which will occupy their governments for decades to come.

To meet these challenges calls for the advancement of studies on the condition and characteristics of immigrant populations. In Estonia, demographic research on the population of foreign origin dates largely back to the early 1990s. Until 1987-1988, virtually all statistics on migration was closed for publication. Taking advantage of the cessation of data restrictions, postwar trends of Estonia's international migration were summarised [Sakkeus 1991; 1993; 1996]. The basic characteristics of foreign-born population have been outlined on the basis of the 1989 census which for the first time since WW II recorded also the birthplace [Katus and Sakkeus 1993]. Adding a new source of information, the population of foreign origin has been systematically covered by a series of national surveys, launched in the 1990s [EKDK 1995a; 1995b; Noorkõiv and Puur 1996; Leinsalu *et al* 1998]. Over a wider range of demographic and social processes, the patterns of native and foreign-origin population have been distinguished in national reports into two major European research projects, the *Family and Fertility Survey in the ECE Region* and the *Dynamics of Population Ageing in the ECE Region* [UNECE 2000; UNECE 2001]. Most recently, Estonia has been selected for participation in a comparative study on the situation of immigrant populations (PO-S-MIG), commissioned by the Population Committee, Council of Europe. In the framework of the project, case studies for ten countries will be prepared by 2001.

The present article focuses on the experience of foreign-origin population in the Estonian labour market during the 1990s. Being a country of transition, Estonia has undergone a major transformation from central planning to market economy. This adjustment has implied re-allocation of human resources from declining old to developing new sectors, considerable shrinking of job opportunities, worker displacement and emergence of other forms of labour market slack. General features of recent labour market developments in Estonia have been addressed by several authors

[Noorkõiv *et al* 1998; Puur 1997a; 1997b; Eamets *et al* 1997]. However, their differential impact on foreign-origin population has not been systematically addressed. A few studies carried out in the referred direction have focused on a rather limited range of labour market indicators [Pavelson 1997; Eamets and Philips 1997].

The data for the paper are derived mainly from the Estonian Labour Force Survey, supplementary statistics comes from the 1989 population census. The paper consists of five sections. It starts with a concise overview of the formation of foreign-origin population in Estonia, data sources and definitions. The third and fourth sections outline respectively the labour market position of foreign-origin population at the eve of transition and the changes that have occurred during the recent decade. The concluding section presents a summary of findings and the discussion.

1. GROWTH OF THE POPULATION OF FOREIGN ORIGIN

The formation of the population of foreign origin is rooted in the demographic development of Estonia and its neighbouring countries, as well as in the change of geopolitical realities. Following the decline in population mortality and fertility, in the last quarter of the 19th century Estonia entered the stage of mobility transition. Consistent with the theory [Zelinsky 1971], the acceleration of population growth in the course of demographic transition brought about the accumulation of migration potential which in the case of Estonia resulted in intensive emigration, and to a relatively lesser extent, internal urbanisation. The destinations of emigrants from Estonia included the sparsely populated frontiers of the Russian Empire, such as North Caucasus, Crimea, Siberia and Far East. The greatest outflow, however, involved the neighbouring areas, the provinces of Pskov, Novgorod and particularly the province and the city of St.Petersburg [Kulu 1994; Pullat 1981]. The First World War marked the cessation of large-scale emigration and after the war the already decreasing migration potential was channelled towards the development of the country's urban settlement system. By the eve of WW II, the migration potential of Estonian population became gradually exhausted. During the second half of the 1930s, some immigration of labour already occurred.

The postwar period Estonia, like other countries sharing 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 the country into the Soviet Union, immigration processes to Estonia started a decade earlier. Immigration originated from the European part of Russia which by that time had entered the stage of mobility transition and featured high migration potential which was partly channelled to the newly incorporated territories. The immigration was strengthened by forced societal rearrangements and deportations of local population. In terms of long-term migration development, Estonia therefore displays a rather typical pattern of the immigration stage emerging after the prolonged period of emigration. The characteristic feature of the referred immigration, however, has been its remarkably high volume.

Regarding the trend of Estonia's international migration in the postwar period, two major waves can be distinguished. The first, particularly intensive wave of immigration

occurred in the immediate postwar decade and included a large component of administratively directed migration. In the years 1945-1947, for example, the annual inflow consisted of 45 thousand persons, which in relative terms accounted for 4-5 per cent of the total population [Sakkeus 1991]. By the mid-1950s the migration exchange between Estonia and the Soviet Union somewhat decreased. The intensity of migration still remained rather high. A new increase in migration was introduced in the late 1960s; during that period the migration flows reached about 80 per cent of the first wave. Between the mid-1970s and the late 1980s a gradual decrease in migration flows occurred. At the beginning of the current decade, the external migration flows shrunk rapidly for Estonia with official statistics displaying negative balance since 1990 [ESA 1998].

The emergence of the second wave of immigration and the maintenance of high migration volumes for several decades is related to the enlargement of Estonia's immigration hinterland [Katus 1989]. The first wave of immigration originated mainly from the neighbouring regions of Russia. At the end of the 1960s - beginning of the 1970s, the hinterland was expanded towards more distant regions, involving eastern and southern parts of the Soviet Union with still high migration potential. Compared to earlier immigrants, the new ones had few, if any, historical contacts with their host country. Another noticeable feature of Estonia's external migration has been its very high turnover. For instance, over the period of 1956-1991, the turnover of external migration comprised of 1,400 thousand persons, whereas the number of net migrants was only 200 thousand [Sakkeus 1991]. In other words, for a considerable number of immigrants Estonia served as a temporary destination.

As a result, long-term immigration has introduced dramatic change in the composition of once homogeneous population and led to one of the highest proportions of foreign-origin population in Europe. While the 1934 census indicated less than 4 per cent of the total population born outside the country, the proportion of foreign-borns had increased to 26.3 per cent of total population by 1989. By the same census, the estimate of the population of foreign origin had reached 38.9 per cent of total population [ESA 1998]. Although justified from the statistical viewpoint, the latter number could be adjusted for return migrants consisting of the descendants of Estonian settlers to Russia, the returnees from the territories which were taken over by the Russian Federation in 1944 and the children of deportees from the 1940s and 1950s [Kulu 1997]. The subtraction of return migrants brings the proportion of foreign-origin population to 36 per cent. Of that number, the first generation of immigrants has been estimated at 26 per cent and the second generation, 10 per cent.

The very high proportion of foreign-origin population, but more importantly, its divergent development dating back to the timing of demographic transition requires consideration, whatever process is being tackled at the moment. The analyses have indentified systematic difference from native population in migration and spatial distribution [Katus and Sakkeus 1993; Kulu 1998], fertility and family planning, family formation and dissolution [Vikat 1994; UNECE 2000], mortality [Katus and Puur 1991], population ageing [Katus *et al* 1999; UNECE 2001] and housing [Puur 1995]. Additionally, the expansion of migration hinterland referred above has introduced a huge diversity in the foreign-origin population itself. The 1989 census, for example, enumerated individuals of more than 120 ethnic backgrounds in Estonia. Differently

from the West European immigration countries, immigrants and particularly their second generation has displayed few signs of integration [Katus and Sakkeus 1993; Viikberg 1999]. As a result, in case of Estonia the trends and patterns for the total population tend to form a misleading assembly of two different, sometimes opposing components.

2. DATA SOURCES AND DEFINITIONS

The data for the present paper are mainly derived from the Estonian Labour Force Survey[1]. Compared to institutional and administrative sources, the survey-based information is considered the most appropriate to ensure the coverage of different population groups and labour market statuses [Hussmans *et al* 1990]. Apart from a conventional labour force survey, the programme of the Estonian LFS included an extensive retrospective section building on event history design [Tuma and Hannan 1984; Blossfeld, Hamerle and Mayer 1989]. In the survey, each respondent's labour market experience was recorded from January 1989 to the date of interview in January-April 1995. With monthly precision, the information was collected on three basic types of labour market spells: employment, unemployment and out-of-labour force. For each spell the starting and ending dates, mode of entry and exit as well as relevant spell-specific characteristics were recorded. To provide individual work histories with dynamic context, parallel event information was collected also on studies, changes in marital status, childbirth and geographic mobility.

The applied design and the six-year period covered by the survey data allows to follow the change in the economic activity of the population over different stages of transition. The starting point of observation in 1989 refers to the situation where the societal changes had already commenced, but had not reached the stage of radical economic reform. In Estonia, the latter were launched shortly after the restoration of national independence in 1991 and the following couple of years were characterised by the most rapid transformation [Taaler 1995]. The ending point of the observation in 1995 refers to the situation which emerged after the initial labour market adjustment. Accordingly, the second and third round of the LFS in 1997 and 1998 have shown only limited modification in the labour market indicators [ESA 1999]. For the purpose of the current paper, however, the data from the follow-up rounds have not been used, mainly due to decreased sample size and alterations in survey methodology. To provide a more comprehensive account of foreign-origin population at the eve of economic transition, the Estonian LFS has been supplemented by the data from the 1989[2] population census.

Regarding the definition of the population under study, stock statistics on international migration applies several different concepts. The frequently used demarcations of legal nature emphasise citizenship, distinguishing the persons of foreign nationality from nationals. However, for several reasons the referred approach tends to be misleading. Under the legal definition, the statistical visibility of foreign-origin population becomes dependent on naturalisation. Starting from the simplest indicators such as the total number, naturalisation can create an odd impression that the population of foreign origin is diminishing whereas higher fertility levels and selectively younger age structure have rather the opposite impact in the majority of immigration countries.

Additionally, in comparative perspective various groups of immigrants may have different propensities in acquiring citizenship and the rates of naturalisation also varies across countries [Reinans and Hammar 1995].

To follow the development of immigrant population consistently, the definition based on country of birth/origin is introduced. The latter definition, applied also in the current paper, regards the population of foreign origin as consisting of immigrants or the first generation, born outside the country, and their descendants or the second generation. The application of the referred definition builds on the information about birthplace, covering at least two successive generations. In the data sources used in the present paper, however, the referred information was not available to full extent. Consistent with the anticipated fusion of population into the unified Soviet people [Konstitutsija SSSR 1977], birthplace/country of origin were considered irrelevant and not recorded under the Soviet statistical system. Only the programme of the 1989 census, reflecting the emerging societal change, included the question on a person's birthplace [Goyer and Draajer 1992]. The Estonian LFS included birthplace information as standard, not extending to the respondent's parents.

The absence of information on parents' birthplace in the applied sources prevented the distinction between native population and the descendants of immigrants. To make up for that, an approximation based on individual ethnic self-identification was introduced with Estonians referring to native and non-Estonians to population of foreign origin. The validity of such indirect definition builds on rather precise coincidence of ethnic division with the distinction between native and foreign-origin population. In the course of WW II, Estonia lost four out of its five national minorities — Germans, Swedes, Jews and Latvians. In 1945, ethnic Estonians accounted for 97.3 per cent of the total population [Katus 1989]. The remainder consisted of about 23 thousand Russians who constituted the only surviving national minority, although reduced to one fourth of its prewar size by border redefinition and deportations. Given the small number of historical minority population, the applied definition yields quite accurate approximation of foreign origin population. In the following sections, the terms immigrant population and the population of foreign origin are used interchangeably.

3. PATTERNS OF ECONOMIC ACTIVITY ON THE EVE OF TRANSITION

3.1. Large number of foreign origin labour force

Against the background of European immigration countries, postwar Estonia has been characterised by extremely high proportion of foreign-origin population in the labour force. According to the 1989 census, the population of foreign origin formed 40.7 per cent of the country's total labour force or 358.8 thousand in absolute terms[3]. Consistent with the over-representation of working age population among immigrants, the proportion of foreign-origin population in labour force slightly exceeded that in total population.

Comparison of successive population censuses reveals the growth of foreign-origin labour force having been the most rapid during the second half of the 1940s and 1950s. Taking the beginning of 1945 as the starting point (immigrants who had entered in the

last months of 1944 hardly exceeded a few per cent of the country's total workforce), by 1959 census the number of the employed with foreign origin had exceeded 25.3 per cent of the total or 157.4 thousand (Figure 1). The relatively rapid increase continued also during the next intercensal interval, adding more than one hundred thousand foreign workers. Accordingly, the 1970 census reported the proportion of foreign-origin labour force being 35.3 per cent (258.7 thousand).

Figure 1 FOREIGN-ORIGIN LABOUR FORCE
Estonia 1945-1989

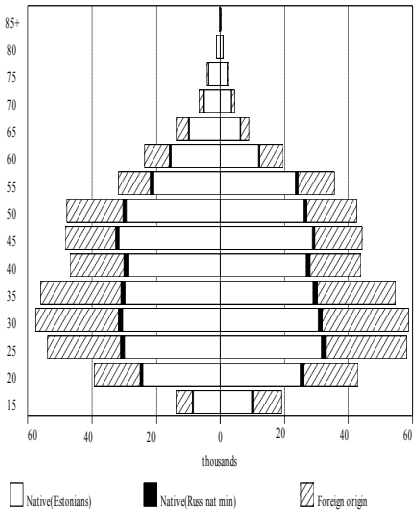
In the 1970s and 1980s, the growth of foreign-origin labour force started to slow down, and accordingly, the intercensal increase declined to 24.3 per cent (62.8 thousand) in 1970-1979 and 11.6 per cent (37.2 thousand) in 1979-1989. The deceleration has been related to the decreasing intensity of immigration, reflecting the gradual extinction of migration potential in the hinterland and the diminishing role of centrally directed migration [Sakkeus 1991]. The examination of age-profiles reveals additionally the shift in the composition of immigration flow: the decline in the working-age component and increase in dependent migration. Evidently, the referred shift towards the growing importance of family migration forms a certain parallel to chain migration documented in a number of studies of migration to industrialised countries (e.g. [Gurak and Caces 1992]). In relative terms, the deceleration of growth in the proportion of foreign-origin labour force was also supported by the slight increase in native labour force, particularly in the 1980s.

The concentration of immigrant labour varies substantially across major demographic divisions. The typical pattern of spatial distribution characteristic of immigrant populations, observed also in Estonia, implies the concentration of foreign-origin workforce in urban settlements. Already in 1959 the immigrants and their descendants formed 39 per cent of the urban labour force in Estonia, and notably, during the 1980s the labour force of foreign origin outnumbered the native one. According to the 1989 census, its proportion had reached 50.9 per cent of the total urban labour force (325.6 thousand). Moreover, as a significant immigration inflow was channelled to the limited number of urban settlements, several cities and towns of destination such as Sillamäe, Narva, Kohtla-Järve and Paldiski became overwhelmingly immigrant. In terms of settlement system, such selective immigration introduced a second wave of urbanisation and disbalanced the proportions between its levels of hierarchy [Kümmel and Roosve 1986].

In rural areas the number of foreign-origin labour force is more limited, still exceeding the general level of many well-known immigration countries in Europe [Brinkmann 1987]. In 1989, immigrants and their descendants accounted for 13.7 per cent of rural labour force (33.2 thousand). Comparison with earlier censuses reveals that differently from urban setting, the growth of foreign-origin labour force did not continue beyond the 1960s. Throughout the 1970s and 1980s, the size of immigrant labour force remained virtually unchanged in rural areas. In relative terms the proportion of foreign-origin labour force among rural population had even declined when comparing 1989 to

two earlier censuses. Quite dissimilar from the trend in urban areas, the latter development results from several circumstances. From population perspective, native population entered a stage of deurbanisation in the 1980s, reversing a century-long concentration of population in the cities and returning the population growth in rural areas [Katus *et al* 1998]. From economic point of view, in agricultural production more authority was granted to local management, and differently from urban sectors, the development of agriculture did not rely on imported labour [Kahk and Tarvel 1997]. Indeed, the highly uneven urban/rural distribution of foreign-origin labour force has strong implications on its sectoral, occupational etc composition.

Figure 2 AGE PYRAMID OF LABOUR FORCE
Estonia 1989



Consistent with the findings from other receiving countries, the prevalence of young individuals in the inflow has implied a distinct age composition of immigrant labour (Figure 2). Although somewhat less strongly expressed than in earlier decades, its main feature has continued to be the highly irregular proportions between the size of different age groups. In 1989, the biggest concentration of foreign-origin labour force appeared in ages 30-34 and 35-39, outnumbering other age groups by up to 40 per cent. The age pyramid of workforce for native population looks rather smooth; in 1989 the variation between prime age groups was limited to 10 per cent. In relative terms, the proportion of foreign-origin labour force accounted for 47-48 per cent of the total in age interval 30-39. Among the urban population immigrant labour had outnumbered the native in all age groups below 40, in ages 30-39 its size exceeded the native population by almost 30 per cent. Regarding the 1990s, the referred irregularity has persisted to shape the composition of workforce in Estonia. By today the referred large cohorts of immigrant labour have moved to ages 40-49, implying the progressive ageing of labour force.

Besides the labour force of native and foreign origin, Figure 2 also distinguishes between the native labour force belonging to ethnic Estonians and Russian national minority population. Data on the latter build on the results of the recently conducted National Minority Survey[4] which for the first time in the postwar period allowed the distinction of national minority and the population of foreign origin for basic demographic characteristics. Above all, the figure gives an idea of the small size of national minority population in modern Estonia, particularly when compared to immigrants. In terms of labour force, its proportion appears under three per cent of national total. The systematic introduction of the referred distinction into all labour force statistics collected during the postwar period goes beyond the scope of the present paper.

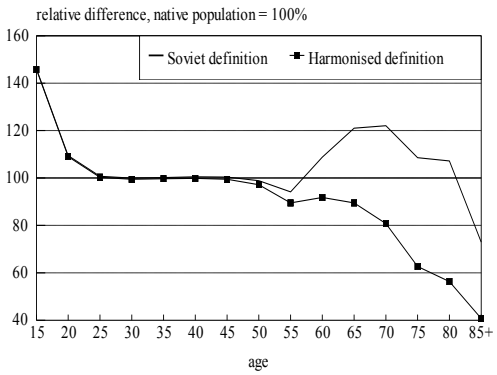
3.2. High level of economic activity

The size of immigrant labour force, discussed in the previous section, is largely determined by the past migration flows and demographic processes. To address specifically the labour market behaviour, attention should be focused on the degree of workforce participation. The experience of West European countries in the 1980s and 1990s reveals that usually the foreign-origin population tends to have lower participation rates than native population, despite its somewhat younger age structure [Brinkmann 1987; Coleman 1999; OECD 1998]. Against such background, prior to transition several measures indicated rather higher than lower level of workforce participation among the foreign-origin population in Estonia.

In 1989, the crude rate of economic activity accounted for 59.6 per cent among the population of foreign origin, in native population the proportion of economically active was 54.3 per cent. Notably, the difference between two subpopulations had been even higher during earlier decades. Limiting the comparison to working age population, the excess economic activity of immigrants was maintained, although somewhat reduced in scale. In working ages (here 15-59 for males and 15-54 for females), the proportion of economically active was 87.2 per cent among foreign-origin population, whereas it accounted for 83.4 per cent among natives. The observed difference is related to somewhat higher proportion of students and dependent family members in native population. Considering these figures, however, one should note that both referred measures are influenced by the dissimilarity of age structures. Higher proportion of prime age groups, discussed above, tends to inflate activity rates for immigrants. To avoid such effect, age-profiles of labour force participation are examined (Figure 3).

In prime working age, the level of economic activity appeared very similar in foreign-origin and native population. Between ages 25 and 50, the difference in activity rates did not exceed one per cent. Characteristic of centrally planned economy with demand for labour exceeding supply, both subpopulations featured a very high degree of workforce participation, accounting for 96-97 per cent. At lower and upper ends of the age scale supply factors gained importance, and respectively, the data reveal a greater variation in activity levels.

Figure 3 ECONOMIC ACTIVITY RATE
Estonia 1989



In younger ages, the population of foreign origin displayed significantly higher attachment to workforce than native population. In relative terms, in age group 15-19, the activity rate of immigrant population exceeded the natives by nearly 50 per cent, in age group 20-24, the relative difference was smaller. As namely in these age groups, the population undergoes a transition from school to work, the explanation for the observed pattern should be sought from educational system. Most importantly, throughout the postwar period there has been a constant institutional difference in the duration of secondary education: in schools with Russian language of instruction the duration of studies was set one year less than in Estonian schools. As an overwhelming majority of foreign-origin population graduated from Russian-language schools, this implied earlier entry into employment and consequently higher rates of workforce participation.

Additionally, frequent admission of immigrant youth in higher educational establishments outside Estonia, primarily in Russia, could have contributed to the observed pattern.

In older ages, the level of economic activity appears somewhat lower among the population of foreign origin. The difference emerges around age 50, stays at the level of around 10 per cent until age 70 and continues to increase thereafter. Given the fairly low attachment to workforce in advanced ages, however, the latter increase is of limited relevance. From the life course perspective, the lower level of economic activity translates into somewhat earlier separation from labour force of immigrant population. For males, the difference with native population is relatively small (0.3 years), however, among females of foreign origin the cessation of economic activity occurs about three years earlier [Katus *et al* 1999]. The relatively smaller difference among males is probably related to remarkably high educational attainment of older immigrant males: for example, in the 1899-1924 immigrant birth cohorts the proportion of university graduates constantly exceeded the level of 10 per cent. Indirectly, this points to considerable selectivity of the first postwar immigration wave.

Considering the referred differences, one should note the dependence of the results on the applied definition of economic activity. Notably, the application of former official definition of economic activity (excluding the employment in auxiliary farm sector) would have yielded an opposite pattern with the population of foreign origin having higher attachment to the labour force also in older ages. The excess of economic activity would have been the largest between ages 65 and 74, in relative terms exceeding the level of native population by more than one fifth. Separate examination of urban and rural population reveals the referred excess activity being largely caused by the concentration of immigrants in urban areas where the employment level tended to be higher according to the Soviet definition.

The level of economic activity can be summarised in the gross number of economically active years, calculated as the sum of age-specific activity rates [Durand and Miller 1968]. The referred measure is independent from the impact of population age structure and can be interpreted as the hypothetical expectation of working-life, assuming no loss of economically active years due to mortality. This summary measure confirms the close similarity of workforce attachment between native and immigrant population in Estonia prior to transition. Considering the age interval 15-59, the number of economically active years for the population of foreign origin (37.8 years) slightly exceeds that of the native population (37.4 years). On the other hand, extending the calculation to the very end of age scale, the result becomes reversed with native population exceeding the immigrants by 1.1 years.

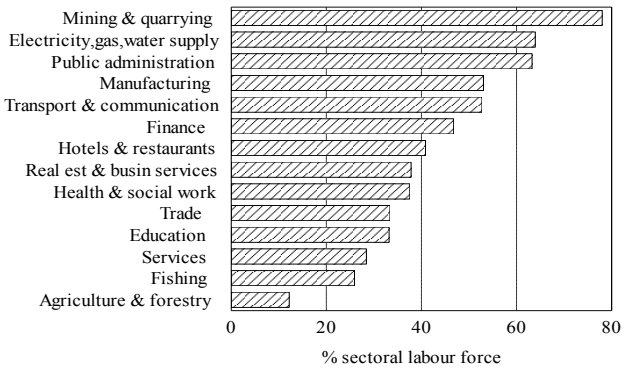
3.3. Concentration in selective economic sectors

Apart from the level of economic activity, the employment composition of foreign-origin population has been markedly different from the native. The division into three broad economic sectors[5] reveals the greatest concentration of immigrant labour in the secondary sector: in 1989 the proportion of employment in manufacturing, electricity, gas, water supply and construction accounted for 46.5 per cent of the total. The

secondary sector was closely followed by tertiary branches (44.0 per cent) whereas the proportion of primary sector was limited to 9.5 per cent. Regarding native population, the distribution across economic sectors appeared more even. Differently from immigrants, the largest concentration of native labour force was found in tertiary sector (42.4 per cent). The most important feature of native population is, however, the almost equal share of primary (27.1 per cent) and secondary sector employment (30.4 per cent).

The referred pattern of employment composition is rooted in the Soviet development strategy for Estonia. Following the incorporation of the country into the Soviet Union, the expansion of industry was given high priority. Compared to the all-Union average, industrialisation was accomplished at twice higher rate in Estonia [Kahk and Tarvel 1997]. The rationale behind such strategy was basically twofold. From the economic point of view, it was motivated by the availability of skilled labour and significant infrastructure which had not been destroyed during the war, or which could be reconstructed relatively easily. Hence, investments in Estonia yielded tangible results in a shorter period than in other parts of the former Soviet Union. Regarding non-economic motives, the labour-intensive industrialisation offered a path for settling a large number of population in Estonia from other parts of the Soviet Union, mainly from Russia. The latter motives were particularly strong in the immediate postwar decade when the most intensive immigration inflow occurred [Taagepera and Misiunas 1983].

Figure 4 FOREIGN ORIGIN LABOUR FORCE IN ECONOMIC SECTORS
Estonia 1989



From another perspective, the immigration has introduced significant heterogeneity in the composition of labour between economic sectors. In 1989, the proportion of foreign-origin labour force ranged from 19.4 per cent in primary sector to 51.2 per cent in secondary sector. In tertiary branches 41.2 per cent of workforce was of foreign origin. When applying a more detailed classification of economic activities, the degree of heterogeneity is further increased (Figure 4). Across main tabulation categories of ISIC, the highest proportion of foreign-origin labour force was found in mining and quarrying where close to four fifths of workers were of foreign origin (78 per cent), followed by electricity, gas and water supply (64 per cent). Further disaggregation of branches yields even higher proportions of immigrant labour: the extraction of non-ferrous metals relied on immigrant labour to the extent of over 90 per cent, around 80 per cent of labour was foreign in water transport, non-ferrous metal production, machine-building industry and railway transport. In some branches, for example in water transport, the immigrant labour had been favoured by means of special personnel policies, restricting the access of the untrustworthy natives [Kala 1992].

In addition to mining and quarrying, all secondary branches, as well as transport and communication, the above-average proportion of foreign-origin labour force can also be

found in hotels and restaurants, financial intermediation and public administration. The high proportion of immigrant labour in the two latter, particularly its dominance in the public administration (including law enforcement institutions) differs clearly from the patterns observed in the immigration countries of Western Europe. In the latter, the foreign-origin labour force has tended to be strongly concentrated in less prestigious jobs, often avoided by natives (sometimes called as the 3D-jobs, for dirty, dangerous and degrading) [Brinkmann 1987; Coleman 1999]. In the case of Estonia, also the occupational composition of employment indicates a lack of such segregation: the difference between native and immigrant workforce in the proportion of manual jobs did not exceed one per cent in 1989.

It is interesting to note that regardless of the concept of the unified Soviet people, differences in the foreign-origin population and native population appeared rather persistent. To demonstrate that, a set of indices has been constructed from the 1979 and 1989 census data, indicating the proportion of foreign-origin labour which should have changed jobs in order to reach the complete identity of employment structure with native population. According to the calculation, the dissimilarity between employment structures rather increased somewhat than decreased during the 1980s. In the context of the current paper, the specific employment composition of immigrant population appears a determinant of its transition experience. To an important extent, namely the structure of economically active population translates the impact of economic adjustment into differential population outcomes.

4. CHANGES OF ECONOMIC ACTIVITY DURING TRANSITION

Prior to reforms, the labour markets of today's transition economies featured remarkably high levels of labour force participation. The blend of soft budget and rigid planning constraints generated an excess demand which, together with inefficient utilisation of workforce, maintained chronic labour shortage. The introduction of market-oriented reforms brought these mechanisms to an end, resulting in a sharp reduction of economic activity and employment. In the case of Estonia, the scale of required adjustment turned to be more extensive than in several countries of Central and Eastern Europe, including the Czech Republic, Hungary, Poland and Slovenia.

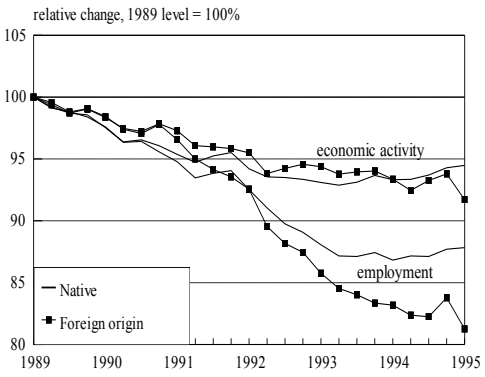
As one of the former Soviet republics, Estonia was more closely tied to economic cooperation within the Eastern bloc. Collapse in this rather closed market generated an even greater shock, particularly as Estonia and two other Baltic countries stayed outside the CIS. On the other hand, Estonia opted for quite radical free market policies in terms of international trade, privatisation, foreign ownership, bankruptcies and low payroll tax [Lugus and Hatchey 1995]. Due to scarcity of resources, liberal economic policies were paralleled with less generous social safety net and low minimum wage. Additionally, the transition coincided with the restoration of independence and relevant national institutions had to be developed at the same time as the framework for market economy.

4.1. Decline in economic activity and employment

Time series of labour market indicators reconstructed[6] from the Labour Force Survey reveal that between 1989 and 1995, the number of employed declined by more than 22 per cent in Estonia. Considering the increase in part-time employment, the volume of employment has probably fallen to an even greater extent. The decline escalated gradually, culminating in 1992. Paralleling with macro-economic stabilisation and reorientation of trade flows, reduced demand accounted for the net loss of more than 7 per cent of jobs in one year. In subsequent years the reduction slowed down, reaching the level of just one per cent already in 1994. Reflecting the need for greater adjustment, the decline in Estonia appeared more extensive than in the advanced reformers of Central Europe [UNECE 1995-1997].

The observed temporal pattern of labour market adjustment appears closely consistent with the dynamics of GDP which showed progressive decline until 1992. After peaking at -14.2 per cent, the fall in GDP gradually diminished in 1993-1995. In 1996 statistics showed for the first time moderate economic growth which progressed in subsequent years and peaked in 1997 at the level of 11.7 per cent. Close links between production volumes and employment suggests quite flexible labour market response and rapid elimination of redundant jobs. Although surely hard on those involved, the latter forms a prerequisite for the development of new opportunities. Among others, the referred response appears quite different from the experience in several CIS countries which have, despite much more extensive recession in output, displayed considerably smaller declines and relatively high levels of excessive employment.

Figure 5 ECONOMIC ACTIVITY AND EMPLOYMENT RATE
Estonia 1989–1995



Regarding the population of foreign origin, according to the LFS the level of economic activity in working age has declined from 86.5 per cent to 79.4 per cent between 1989 and 1995. Consistent with the general experience of economic transition in Estonia, the largest reduction in labour force participation occurred until 1992; in subsequent years the scale of reductions diminished. The decline in employment has been somewhat more extensive, among the working- age population the employment rate has decreased from 85.8 per cent to 69.7 per cent over six years. Figure 5 presents the change in both economic activity and employment in relative terms, applying the 1989 level as a baseline. Compared to economic activity, the decline in employment did not decelerate but rather accelerated during 1992. The signs about the stabilisation of employment level can be observed only towards the end of the observation period, in the mid-1990s.

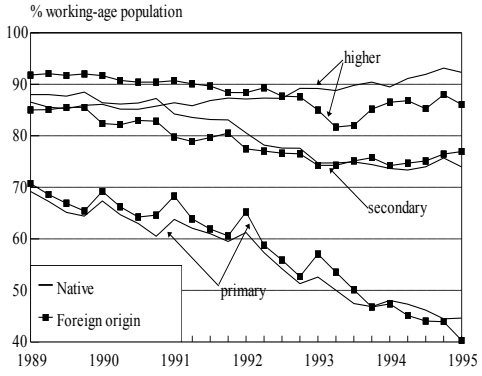
The difference between the graphs for economic activity and employment refers to the emergence of unemployment, discussed further below. From the population perspective, the close similarity of the graphs until 1991-1992 and rapid departure thereafter indicates a change in the mechanism of job losses. Evidently, at early stages of transition, the reductions concerned primarily the groups which were likely to leave the labour force without instant attempts to return. The largest of such groups were

pensioners who prior to transition used to continue working several years beyond the statutory age of retirement [Katus *et al* 1999]. As transition progressed, the reductions gradually reached the core of labour force which could not afford dropping out of the labour market, forming an increasing pool of unemployed.

Figure 5 also presents comparative information for the labour market experience of native population. The data reveal quite similar declines in economic activity: in working ages both native and immigrant population have maintained 92-94 per cent of their previous activity level. Regarding employment, the difference between subpopulations is more visible with native population experiencing somewhat lesser reductions. In relative terms, the employment of native population had decreased 13 per cent from its 1989 level, whereas the population of foreign origin had experienced the reduction of 18-19 per cent. On the other hand, however, despite greater relative declines the rates of economic activity and employment among the immigrants have not dropped significantly below the level of native population. The level of employment has become more or less equal between the two whereas the rate of economic activity has remained higher among foreign-origin population.

The referred comparison between native and foreign-origin population reflects not only the differential labour market attachment but also the composition of the two subpopulations. For example, the previous sections addressed a significant irregularity in the age structure of immigrant population which, though moving to older groups, has persisted during the 1990s. To obtain a more detailed account of the changes in economic activity and employment, the analysis should be extended to various subgroups of immigrant population. Of various patterns, Figure 6 presents the change in economic activity by population origin and education. Consistent with well-documented findings from other transition economies, education has proven an important determinant of labour market experience also in Estonia. Stressing the role of training and professional skills, the scale of job losses appears clearly dependent on the duration of schooling.

Figure 6 EMPLOYMENT RATE
Estonia 1989–1995



Comparing the population of foreign and native origin, it is interesting to note the close similarity in the experience of those with primary and secondary education. The activity level of primary education population has decreased by more than a fifth for both subpopulations, the decline has followed exactly the same seasonal fluctuations with repeated cross-overs between the curves. Even greater similarity can be found among secondary education population which today dominates the working age. Quite unexpectedly, the only noticeable difference between the populations of foreign and native origin can be found among those with higher education. Regarding the immigrants and their descendants, data reveal almost no change of activity level net of the six-year period. Between 1991-1993 there was a decline of 2-3 per cent but further the rate was recovered. Quite differently from

immigrants as well as general expectations about economic transition, activity rates for university graduates of native background increased up to 10 per cent.

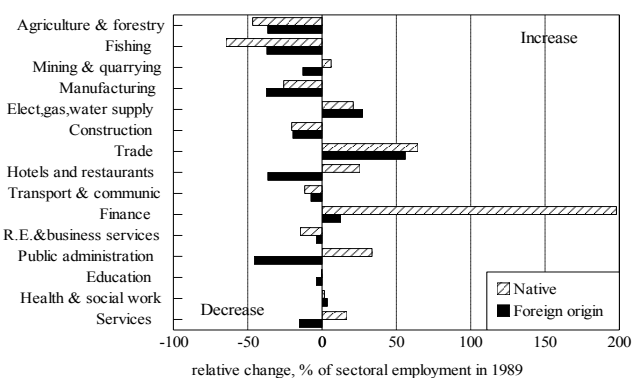
Partial explanation for the inferior relative performance of foreign-origin population with higher education could be sought from greater heterogeneity of their training. Compared to native population which has graduated mainly from two-three universities in Tartu and Tallinn, the geography and type of educational establishments attended by immigrant population displays much greater variation, with possibly hundreds of different universities and institutes represented, including those of military and communist party profile. On the other hand, the explanation should perhaps be sought in the increase in labour market attachment among university-educated natives rather than in the net stability among the immigrants. Further examination of this specific issue, however, goes beyond the scope of the current paper. Still, to put various activity differentials into comparative perspective it is useful to note that the impact of education has manyfold exceeded that of population origin.

4.2. Shift in sectoral composition of employment

Besides large declines in employment, another characteristic feature of labour market transition has been the structural adjustment. Relative to industrialised market economies, in Estonia the most specific feature of employment structure has been the remarkably high share of primary sector. Reflecting the specialisation on agricultural production for the Russian market, it accounted for 21.6 per cent of total employment in 1989, and differently from general trend, the proportion had even increased during the 1980s. Among transition economies, only much southern Romania and Poland had greater proportion of employment in primary sector. Another specialisation of Estonia in all-Union economic cooperation concerned industrial sector, ranging from energy production, metalworks and machine-building, electronics and chemical industry to textiles and food-processing. Understandably, the collapse of the old economic system and re-orientation to new markets brought the existing sectoral structure to a rapid change.

Somewhat paradoxically, the most extensive restructuration has been required namely in branches which were considered the most advanced and vital under the former regime. In Estonia, the number of employed in primary and secondary sector dropped by 48 and 29 per cent between 1989 and 1995 respectively [Puur 1997a]. According to similar estimation, tertiary sector experienced cumulative net growth of 4 per cent over the same period. Across individual branches, the biggest relative decline concerned fishery where more than a half of jobs were lost. The net losses in agriculture accounted for little less than a half. In the secondary sector, 35 per cent of jobs were lost in manufacturing and slightly more than 20 per cent in construction. The clearly expanding branches include the formerly underdeveloped finance (doubled), wholesale and retail trade as well as public administration. The rest of

Figure 7 EMPLOYMENT CHANGE
BY ECONOMIC SECTOR
Estonia 1989



branches have displayed relati
vely small changes in either direction.

Regarding the population of foreign and native origin, the data on sectoral adjustment are presented in Figure 7. Comparing the two subpopulations, employment changes have proceeded in the same direction for most of the sectors with extensive adjustment. This holds true for agriculture and forestry, fishing, construction and manufacturing from declining and trade from expanding sectors. Understandably, the extent of growth or decline is not exactly equal across specific branches. Thus, in agriculture and forestry, fishing, construction, transportation and communication the decline has been deeper for native population. On the other hand, in manufacturing the employment opportunities have shrank to somewhat greater extent for immigrants and their descendants. A more detailed breakdown of economic activities reveals the latter resulting largely from the specific industrial mix among foreign-origin labour. In energy production, the employment increase among immigrant population has exceeded native population whereas the situation in wholesale and retail trade has appeared the opposite.

Noticeably divergent development of employment opportunities can be observed in four economic sectors. In hotels and restaurants the foreign-origin population has experienced a net reduction of employment by 36 per cent while native population has displayed cumulative growth exceeding 25 per cent. Most of the decline in the referred sector can be attributed to public catering, particularly the closure of canteens and diningrooms at large and medium enterprises which have ceased operation. The latter process has concerned both subpopulations. It seems, however, that immigrants have to a lesser extent moved into newly-established catering enterprises. Likely, this also reflects the spatial distribution of new entrepreneurship which has been lower in the areas populated prevailingly with immigrant population. Similar mechanisms could be responsible for diverse dynamics of employment in personal and social services (net employment change -15 and 17 per cent respectively).

The biggest diversity in the development of sectoral employment can be found in public administration and defence where the employment of foreign-origin population has decreased -45 per cent and native employment increased by 34 per cent between 1989 and 1995. Understandably, the observed patterns relate to principal changes which have occurred in the functions of respective institutions. As noted earlier, prior to transition the referred sector served largely the needs of the Soviet administration, including the Communist party, army, KGB, Ministry of Inferior etc. The restoration of Estonian statehood implied the dismantling of these structures and the development of new institutions, naturally relying on new personnel. Institutional changes are probably responsible also for diverse employment outcomes in financial intermediation. In the Soviet system, commercial banking in the sense of market economy was nonexistent and additionally, banks in Estonia were exclusively the branch offices of Moscow. During economic transition, the latter ceased operation and a completely new banking sector was developed. The change in employment reflects largely the recruitment policies of newly-established commercial banks.

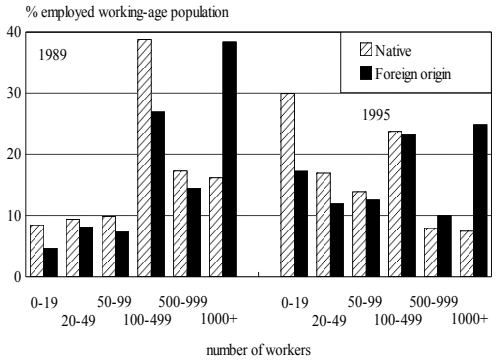
Considering the sectors with diverse employment experience, it should be noted, however, that their proportion in total labour force has been rather low to determine a

general pattern. Thus, in 1989 hotels and restaurants, public administration, financial intermediation and services were limited to just 14 per cent of total employment among foreign-origin population. On the other hand, the excess of female workforce in these sectors is probably related to relatively weaker performance of women among immigrant population. To sum up the changes, among immigrant population the proportion of primary sector employment had decreased to 8.2 per cent and secondary sector to 41.1 per cent by 1995. The share of employment in tertiary branches had increased to 50.7 per cent respectively. Among native population, the extent of sectoral shift has been somewhat more rapid, mostly due to sharp reductions in agriculture. Between 1989-1995 the gross sectoral shift[7] accounted for 30.6 per cent for native population, compared to 25.9 per cent for foreign-origin population. In the first half of the 1990s, native population has surpassed the immigrants and their descendants in the proportion of tertiary sector employment (56.6 per cent in 1995). Although the sectoral structures of both subpopulations have evolved in the same direction, their dissimilarity has largely persisted.

4.3. Other features of employment composition

Another important aspect of immigrant labour force relates to the size of workplace. In Estonia, like other centrally planned economies the production tended to be concentrated in very large enterprises whereas small firms, dominating the enterprise stock in established market economies, were clearly underdeveloped. Understandably, the transition has implied a major transformation towards more even distribution and reallocation of labour from large to small firms. The process has been mediated by excessive employment reductions in large enterprises, either through closure, bankruptcies, privatisation and/or partition into smaller units, and rapid job creation in the small business sector. Indirectly, the referred shift of labour parallels reallocation from declining to expanding sectors.

Figure 8 SIZE OF WORKPLACE
Estonia 1989 and 1995

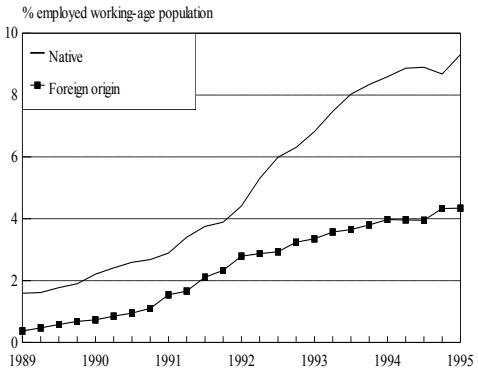


The data from the Estonian LFS reveal that the centralisation of employment in large enterprises has been much more expressed among the population of foreign origin (Figure 8). For immigrants, the distribution of the employed by size of workplace displays the biggest concentration in enterprises with over 1000 employees (close to 40 per cent of total of employment in 1989). Among natives, the peak concentration appeared in the category of firms with 100-499 workers. The proportion of workforce in very large enterprises was respectively 2.4 times lower. Over the period covered by the survey, the distribution has been modified for both subpopulations. Among foreign-origin population, however, the changes have been clearly less extensive. Although lower than previously, in 1995 the biggest concentration of immigrant labour was still found in enterprises with over one thousand employees. For native population, the peak had shifted to firms with less than 20 workers. In other

words, the dissimilarity in terms of the size of workplace has rather increased than decreased during transition.

From the viewpoint of economic development, different pace of changes among the population of foreign and native origin can be partly explained by the stages of economic reform [Ministry of Economy 1996]. As elsewhere, in Estonia the privatisation started from smaller enterprises and large enterprises, particularly those in infrastructure and energy production, were scheduled later. Correspondingly, in the first years of reform privatisation concerned foreign-origin population to somewhat lesser extent whereas the concluding stage towards the end of the 1990s affects selectively the immigrant workforce. Besides such structural factors, there have also been differences relating more closely to labour market behaviour, including for example, the self-employment and multiple jobholding.

Figure 9 SELF-EMPLOYMENT
Estonia 1989–1995



Closely related to the (re)emergence of private entrepreneurship, self-employed are distinguished from paid labour for their greater scope of responsibilities and degree of involvement. Including also the employers, in certain sense the self-employed population could be regarded as the core of ongoing economic innovation. The time series reconstructed from LFS reveal that in the case of Estonia, self-employment has risen more rapidly and reached higher levels for native population (Figure 9). For example in 1995, self-employed accounted for 9.3 per cent of total employment in native working-age population. Among immigrants and their descendants, the respective proportion was 4.3 per cent, i.e. more than twice lower. Interestingly, the observed pattern appears different from that documented in several Western countries where the proportion of self-employed tends to be higher among immigrants [Fernandez and Kim 1998]. Separate analysis for urban and rural population showed that the difference in self-employment cannot be reduced to lower urbanisation level among the native population.

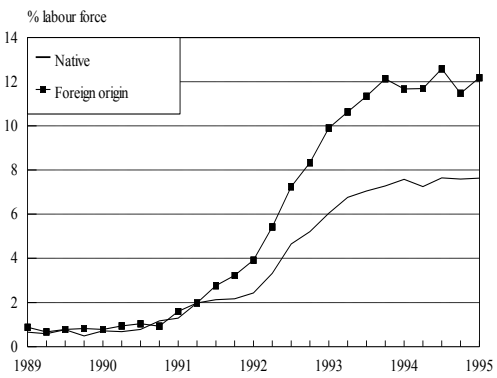
In quite considerable contrast to general decline in employment opportunities and emergence of unemployment, transition in Estonia has witnessed substantial growth in multiple jobholding. On the one hand, the referred trend reflects the selectivity of employment reductions with less competitive segments of workforce driven out of labour force. On the other, however, there has also been a trend towards the intensification of work, particularly among those with advanced qualification [Katus and Puur 1998]. Regarding the population of foreign origin, the data also reveal a growth of multiple jobholding, but the level remains systematically lower. Between 1989 and 1995 the proportion of multiple jobholders grew from 4.4 to 7.0 per cent of employed immigrant workforce. However, over the same period, the rate of multiple jobholding for native population increased from 12.1 to 17.7 per cent. Thus, although in relative terms the levels have become closer, the absolute difference has rather increased. Similarly to self-employment, the referred pattern persists after adjustment for dissimilar spatial distribution.

Differential work involvement of foreign-origin population is reflected also in the duration of working hours. According to the Estonian LFS, 22 per cent of foreign-origin workforce reported weekly hours above the normal duration (40 hours). Among native population, more than a third was working extended hours. Notably, the referred difference between the two subpopulations almost doubles when the cut-off level is increased to 60 hours per week, i.e. to 1.5 times the full-time equivalent. The difference in average duration is not so visible because the part-time employment appears also less common among the immigrant population. To sum up, the examination of working hours and particularly multiple jobholding shows that the differences in employment patterns observed in the 1990s are rooted deeper than the conditions characteristic of the current economic transition.

4.4. Emergence of unemployment and rise in economic inactivity

Similarly to other countries of Central and Eastern Europe, the transition to market economy has introduced unemployment as a principally new feature of population's economic activity also in Estonia. Being one of the major social costs of transition, persistent unemployment tends to be associated with considerable amount of social stress and adaptation pressure. A large number of job-seekers with inadequate reintegration to work form a likely threat to social support gathered around reforms.

Figure 10 UNEMPLOYMENT RATE
Estonia 1989–1995



In the case of Estonia, monitoring the trends and levels of unemployment has been sometimes confused by a notably large discrepancy between official registration and survey-based measures. The reasons for such a discrepancy are rooted in the prevailing scheme of unemployment insurance which appears one of the most scantiest applied in transition economies [Venesaar 1995; Puur 1997b]. The duration of eligibility for unemployment benefits has been limited to six months, with up to three months extension under specific circumstances. More importantly, however, the amount of unemployment benefits has been very low and revised only on irregular basis. For example, unchanged between 1992 and 1996, the benefits paid at flat rate dropped to just 26 per cent of minimum wage. Compared to average wage the deterioration has been even more dramatic, leaving unemployment benefits with a largely symbolic value.

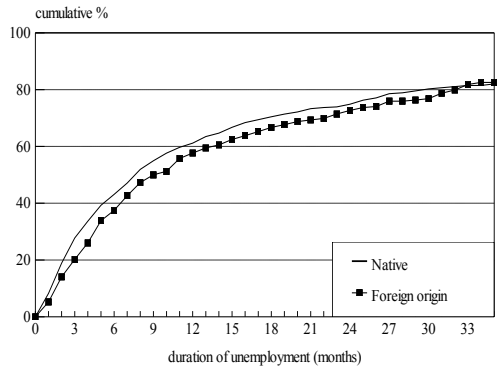
Not surprisingly, the adopted scheme has kept registered unemployment in Estonia very low. First reported in May 1991, the number of benefit recipients grew rapidly until April-May 1993. Peaking at close to 23 thousand (less than 4 per cent of labour force), this level remained unbeaten until early 1999. The number of registered job-seekers (persons registered at employment offices, but not eligible for benefits) reached 45 thousand (7 per cent of labour force) during spring 1994, fluctuating between 30 and 40

thousand since that. Estimates based on internationally comparable definition[8] applied in LFS reveals unemployment rate close to 10 per cent. Transitional upsurge in unemployment began in Estonia in the early 1991. A major increase in the level of joblessness occurred between the early 1992 and mid-1993. Starting from 1994, the growth of unemployment gradually decelerated, since that the rate has fluctuated around the levels of 10-11 per cent in subsequent years [Puur 1997b; ESA 1999]. In the context of transition economies, such level of unemployment should not be regarded very high, particularly in relation to sectoral shift.

Regarding the population of foreign origin, data reveal higher unemployment levels compared to natives (Figure 10). Excess unemployment emerged in relatively short period between spring and winter 1991, and in relative terms, the pattern has remained practically unchanged since that. In 1995 unemployment rate for immigrants and their descendants accounted for 12.2 per cent, among native population the rate was limited to 7.6 per cent. Adding the discouraged workers[9] increases the level of joblessness by another 1-2 per cent for both subpopulations, not altering the general pattern. Against the background of West European immigration countries, the excess unemployment of foreign-origin population appears rather moderate in Estonia. In Western Europe, the unemployment rate of foreigners is typically between two and three times the host country average. In the mid-1990s, it was lower than in Estonia only in Spain, Italy and Luxembourg [OECD 1998].

From the analytical perspective, the level of unemployment presents an outcome of two processes. First, it depends on the intensity at which the population enters the state of unemployment, and second, on the speed it exits joblessness, either by starting a job or quitting job-search. For the individuals involved, the latter deserves particular attention as it determines the time-span under which the person is out of job and seeks employment. Short-term breaks between jobs are generally more easy to tolerate, particularly in case of unexpected displacement. On the other hand, long-term unemployment, typically defined as lasting for a year or more, implies substantial social and economic strain. The longer a person stays unemployed, the smaller will become his/her chance of finding employment: gradually losing skills, the person becomes less and less attractive for potential employers. Relying on longitudinal design of the Estonian LFS, it proved possible to follow the return of unemployed persons to employment.

Figure 11 TRANSITION FROM UNEMPLOYMENT TO EMPLOYMENT
Estonia 1989–1995



Summarising the information from more than two thousand spells recorded in the survey, Figure 11 visualises the cumulative outflow from unemployment to employment. Curvilinear shape of the profile indicates gradual decline in the probability of finding a job, particularly during the first 10-12 months. Among the population of foreign origin, after 10 months of jobsearch half of those who had become unemployed had managed to find a job. After two years, nearly three fourths of the unemployed had succeeded to (re)enter employment, and after

three years, the success rate had reached close to five sixths. Differently from unemployment rate, the speed at which persons return to employment appears only somewhat lower among immigrants, compared to native population. The difference in median duration of unemployment episode does not exceed two months between two subpopulations, and more importantly, at higher durations the outflow converges.

The presented data suggest that the chance of finding a job is not significantly inferior among the population of foreign origin and the higher unemployment rate stems mainly from higher mobility between labour market states. Similar conclusions can be drawn from transitions between economic inactivity and employment. To eliminate the impact of different age composition and hence the reasons for inactivity, the comparison was made separately for age groups 15-29, 30-44 and 45-59. At lower durations, foreign-origin population exits from inactivity to employment at somewhat lower pace. At higher durations, however, the cumulative outcome converges. On the other hand, in age group 45-59, immigrant population displays even greater success in entering employment. Fairly similar labour market experience is also suggested by the registration at employment offices, receipt of benefits and participation in labour market training.

Besides unemployment and discouragement, another widespread form of labour market slack is involuntary part-time work or visible underemployment[10]. The involuntary nature of work is usually determined by examining the reason why a person is working less than normal duration. To be counted as underemployed, reasons like the period of economic slack, temporary shortage of materials, lack of clients etc are considered. Applying the threshold of 35 hours per week, the data on usual working hours reveal a relatively low level of underemployment in Estonia. Regarding the population of foreign origin, in 1995 persons at involuntary part-time jobs, currently looking and/or available for additional work accounted for 1.6 per cent of the employed. Adding the individuals who preferred full-time employment, but were currently not looking/available for additional work, increases the proportion to 2.5 per cent. Consistent with a generally higher prevalence of part-time employment, the referred estimates for native population appeared somewhat higher (2.6 and 3.6 per cent respectively).

5. SUMMARY AND DISCUSSION

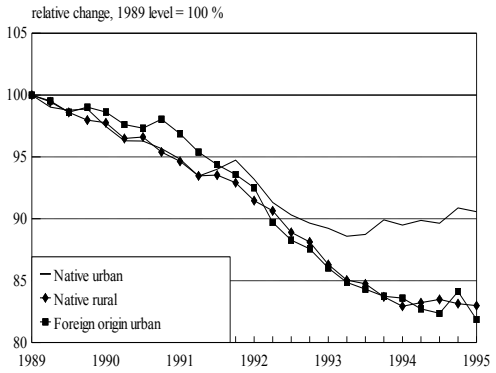
In Estonia, the 1990s have been marked with extensive transformation of political, social and economic realities. Regarding the labour market, transition has been accompanied by large-scale displacement and emergence of unemployment, reallocation of labour from old to new sectors etc. The impact of these changes has not been even across population groups, and besides age, gender, education, place of residence and other characteristics, differential experience can be observed also for populations of foreign and native origin.

The analysis has revealed the emergence of several features in Estonia, characteristic of labour market conditions of foreign populations in European immigration countries (faster reduction of employment level during recession, higher rates of unemployment

etc). Also the mechanisms generating these differences appear rather similar. As summarised by Coleman, in Western Europe immigrant labour force had been recruited to specific jobs and industries during the 1960s and 1970s. When their jobs disappeared through modernisation of the economy, immigrant workers, on the whole, did not return home. And because of their employment composition, immigrants have suffered disproportionate job losses [Coleman 1999]. In the case of Estonia, this has held primarily to large industrial enterprises, specialised for the needs of Soviet market.

The role of sectoral composition is illustrated by Figure 12 which compares the relative employment decline among foreign-origin and native population by urban and rural residence (due to very small number of rural immigrants in the survey population the group has been dropped). The data reveal a virtually identical pattern of labour market transition for native rural population, which has suffered from extensive job losses in agriculture, and urban immigrant population. The close similarity between the transition experience of the two referred subpopulations is repeated across a range of labour market indicators. Preliminary results, not included in the paper, suggest that the impact of Estonian language skill on the labour market experience should not be overestimated, particularly when compared to knowledge of foreign languages.

Figure 12 EMPLOYMENT RATE
Estonia 1989–1995



In the case of Estonia, it is important to note that sometimes the differential patterns among the population of foreign origin and native population have been interpreted as ethnic differences between Estonians and Non-Estonians, or Russians (e.g. [UNDP 1998; Järve 1997]). From the viewpoint of population development, such misinterpretation has been facilitated by close numerical correspondence between native population and Estonians on the one hand, and foreign-origin population and Non-Estonians on the other. As noted earlier, the referred correspondence stems from the sharp reduction of national minority population in Estonia, related to WW II. The choice of framework tends to determine the general viewpoint of research, and not rarely, the neglect of population perspective has led to conclusions about the discrimination against Russians. Such conclusions tend to be particularly likely when the ignorance about the characteristics, origin and formation history of Non-Estonian population is combined with limited range of analytical methods and/or poor data (e.g.[Kroncke and Smith 1997]).

Regardless of the perspective, however, the labour market adjustment of foreign-origin population has developed into a major labour market and social problem in Estonia. In Europe, recent decade has witnessed an increasing focus on the integration of immigrants. These policies are intended in various ways to enable the immigrants and their descendants to move freely in the economic and social space of their host countries, to alleviate social, cultural and administrative disadvantages, thereby reducing unemployment, housing problems etc. In the 1990s, the debate has centered around the terms such as pluralism, multi-culturalism, and whether the integration

should be facilitated passively or promoted actively. In some cases, such policies have gone rather far and extending particular privileges in employment and housing to immigrants, started to discriminate in their favour [Coleman 1994].

Estonia's return to the community of European nations, including the ongoing negotiations on EU accession, has raised the issue of harmonisation of legislation and practices with Western countries. Apart from several other domains, in the field of migration and integration, the transfer of experience does not seem straightforward. Above all, the proportion of immigrants and their descendants in Estonia dramatically exceeds the level observed in major European immigration countries where the introduction of integration policies has been paralleled with rigorously enforced inflow controls. The situation is further complicated by very limited integration of immigrant population, inherited from the past. The concept of the unified Soviet people, the promotion of Russian as official language and a largely transient nature of immigrant community has resulted in the situation where the integration of the second generation did not display significant difference from the first.

Additionally, integration policies tend to be quite costly and involve substantial public expenditure. Needless to say, under scarcity of resources characteristic of transition economy the competition for resources is hard, particularly when considering the fragility of general societal environment, undermined during the half-century of totalitarian regime and the need to restore civic society and develop national institutions. In other words, quick and easy solutions to the problems of immigrant population will hardly be available, and as in other similar situations, much of the responsibility remains with the individuals and population groups involved.

Notes

1. The target population of the Estonian LFS consisted of permanent residents of Estonia who were 15-74 years old in the beginning of 1995. A nationally representative sample was drawn from the 1989 census, national and local address registers were used to locate the respondents. Altogether, 10,955 cases were assigned to county statistical bureaux to be interviewed. Of those, ultimately 9,608 individuals (87.7 per cent) were interviewed. Non-response was attributable mostly to non-location (5.1 per cent), emigration (3.7 per cent) and refusals (1.9 per cent). On the whole, the distribution of respondents approximates closely the target population. Quality checks have indicated good internal and external consistency of the data [Noorkõiv and Puur 1996; Puur 1997b]. The methodological report and standard tabulations of the survey were published in 1997 [ESA 1997a; ESA 1997b].

2. The microdata of the 1989 and 1979 censuses have been transferred to PC-format, checked for consistency, harmonised with international definitions and documented by the Estonian Interuniversity Population Research Centre [Katus and Puur 1993; Puur 1994]. Harmonised census, vital and survey statistics are assembled into Estonian Population Databank, maintained and developed by the Centre.

3. Regarding the postwar period, the number and composition of Estonian labour force can be followed most reliably on the basis of decennial population censuses. Compared to censuses, the annually compiled labour force statistics does not ensure the coverage of economically active population as several large enterprises/organisations did not present their reports to local

statistical institution. The number of census labour force also includes persons engaged in a privately run sector of small-scale agriculture, the so-called individual auxiliary farms. This definition of labour force has been applied throughout the paper except for the 1959 census which tabulations did not allow the distinction of labour force in auxiliary farms by native/foreign origin. It should be noted that according to the official Soviet definition, these individuals were not classified as economically active despite rather essential economic contribution of private agricultural production.

4. The Estonian National Minority Survey (EPU) was prepared and implemented in the framework of the study on demographic situation of national minorities in Europe 1910-1995, coordinated by Population Committee, Council of Europe [Haug, Compton and Courbage 1998]. The aim of EPU was to apply the internationally harmonised definition of national minorities, not supported by postwar vital and census statistics, and building on event history methodology, to restore retrospectively the trends of basic demographic indicators of national minorities in Estonia for the postwar period. For detailed information on procedures and results of EPU, readers are referred to Methodological Report [EKDK 2001a], Standard Tabulations [EKDK 2001b] and the country report [Katus, Puur and Sakkeus 2000].

5. The sectoral and occupational composition of employment at the 1989 census has been mapped from Soviet to international classifications, respectively to Standard Industrial Classification of Economic Activities (ISIC, rev. 3) and Standard Classification of Occupations (ISCO-68). The description of mapping scheme is available in [Puur 1994].

6. The reconstruction of time series builds on the capacity of event history data to establish the labour market status of each surveyed individual continuously at any time point during the observation period. When aggregated, these individual statuses allow for cross-sectional distributions of survey population. In turn, these distributional data can be used for the calculation of indicators like rates of economic activity, employment and unemployment etc. The present paper uses quarterly time series, for computational considerations each quarter is represented by its central month.

7. Gross sectoral shift refers to the sum of reductions in the proportion of declining economic sectors and increases in the proportion of expanding sectors. Calculations for other transition economies are based on ILO Yearbooks [ILO 1989-1997].

8. Unemployed are considered persons who during a specified reference period were without work, currently available for work and seeking work [ILO 1988].

9. Discouraged workers refer to persons who would like to work and who are currently available for work, but who have given up any active search for it [OECD 1995]. According to international guidelines, discouraged workers are counted as out of the labour force since they are not looking for work. However, because they would like to work, discouraged workers are often viewed as being closer to labour force than other non-participants. To get a more complete account of labour market slack, they are sometimes added to the unemployed.

10. According to international definition, persons visibly underemployed comprise individuals in paid or self-employment working less than normal duration for the activity, who were seeking or available for additional work [ILO 1988].

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