European Centre of Expertise (ECE) in the field of labour law, employment and labour market policy

Labour Market Policy Thematic Review 2018: An in-depth analysis of the emigration of skilled labour

Estonia

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1 Introduction: the demographic and labour market situation in Estonia

The Estonian labour market has been highly volatile. The Estonian economy has shown extreme contractions and fast recovery: in 2010, there was 14 % less employment than in 2007 due to the deep crisis, but by 2015, 81 % of the employment that disappeared during the crisis was recovered (Estonian Statistical Office database[1], author's calculations). The unemployment rate has fluctuated accordingly: it rose dramatically from 4.7 % in 2007 to 16.8 % in 2010 and has since been falling steadily, reaching 6.2 % in 2015 and 6.8 % in 2016. In parallel, since 2010, the employment rate of 15-74 year-olds has increased steadily. Currently, the employment level (70.4 % in 2016) is even higher than before the crisis.

Based on Cedefop's skills forecasts up to 2025 (Cedefop, 2015), strong economic growth in Estonia was expected to have a limited impact on job growth, and employment in absolute numbers was not expected to reach its 2008 pre-crisis level by 2025 due to decreasing population. But by 2016, employment had reached its pre-crisis level in absolute numbers.

Thus, Estonia is an ageing society, experiencing a fall in the working age population; the increase in absolute employment has been obtained mainly, therefore, through a higher employment rate of the working age population. An important contributor to the workforce is the high employment rate of older workers, particularly the increase of participation of women aged 50-74 (Statistical Office, TT330) due to the increased retirement age which was especially rapid for females.

2 Emigration of skilled labour

This section provides an overview of migration flows in Estonia, focusing on the emigration of skilled labour.

In most cases, brain drain is associated with people with tertiary education. However, for this report, a broader approach is taken and skilled labour is defined as everyone having 1) ISCED 3 (upper secondary education), ISCED 4 (post-secondary non-tertiary education) or 2) ISCED 5 or higher (tertiary education)[2]. Here, ISCED 3-4 will be referred to as 'medium education' and ISCED 5 or higher as 'high education.'

Next, some limits of the current overview are outlined. The estimates of how many people have emigrated from Estonia differ. Most likely those based on the Population Register of Estonia underestimate emigration, particularly for earlier periods. The main reason for underestimating emigration is lack of data in registries since people going abroad do not de-register themselves in their country of origin.

To retain Estonian Residency status, a person has to be in Estonia at least 183 days, but, in reality, due to free travel inside the EU, it is hard to track the time people spend abroad. There is also a considerable amount of commuting and return migration. There have been several improvements to provide better quality data - for example, the data exchange between Population Registers in Estonia and Finland (the main migration destination). Those emigrants settling permanently in Finland receive emigrant status in the Population Register of Estonia even if they do not deregister themselves. Thus, since the early 2000s, Statistics Estonia has compiled several more accurate registers and since 2015, Statistics Estonia calculates external migration (the

[1] Source: Estonian Statistical Office database, Employed persons, annual statistics.
[2] See details of ISCED. Internet:
http://www.uis.unesco.org/Education/Documents/isced-2011-en.pdf

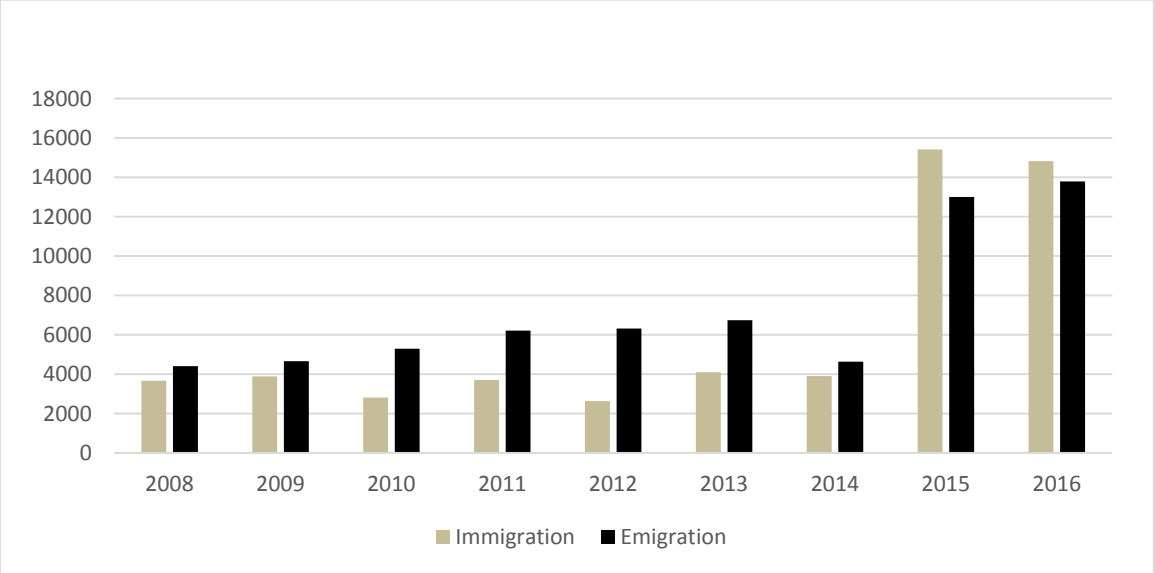
transition of someone from a resident to a non-resident and vice versa) using the residency index based on 28 registries. One limitation of analysis of emigration patterns is also that registries do not yet collect occupational information. Occupational information of emigrants and commuters can be obtained from surveys, from census 2000 and 2011 and from registers of destination countries such as Finland.

According to Anniste et al. (2012) '[e]migration from Estonia to the old EU Member States increased in 2000s compared to 1990s', and particularly quickly in 2005 after Estonia joined the EU in 2004, similar to other Central and Eastern European (CEE) countries. By the peak of the economic boom in 2007, immigration and emigration flows were almost equal, but the net migration remained slightly negative. During the economic crisis, emigration flows increased and immigration flows decreased. The exact number of emigrants is hard to assess since the numbers are likely underestimated.

The Statistical Office changed its methodology in 2015, creating a break in time series. But it is still possible to see that, lately, the inflow migration has increased largely due to returning Estonians. Therefore, in terms of net migration, **Estonia is no longer a 'sending country',** as in 2015 and in 2016, net migration was slightly positive – immigration exceeded emigration (see Figure 1 and Figure 2). The gap between inflow and outflow migration in Latvia and Lithuania closed considerably following the recovery of their economies after the crisis, but net migration is still clearly negative in both countries (Figure 2). Estonia is, therefore, exceptional among the CEE countries and among the Baltic countries.

The main destination country has remained the same since the early 1990s – Estonia is geographically and linguistically close to Finland. By 2011, Estonians became the largest immigrant group with Finnish citizenship partly because other CEE country emigrants do not consider Finland a destination country[3].

Figure 1. Immigration and emigration (000s)

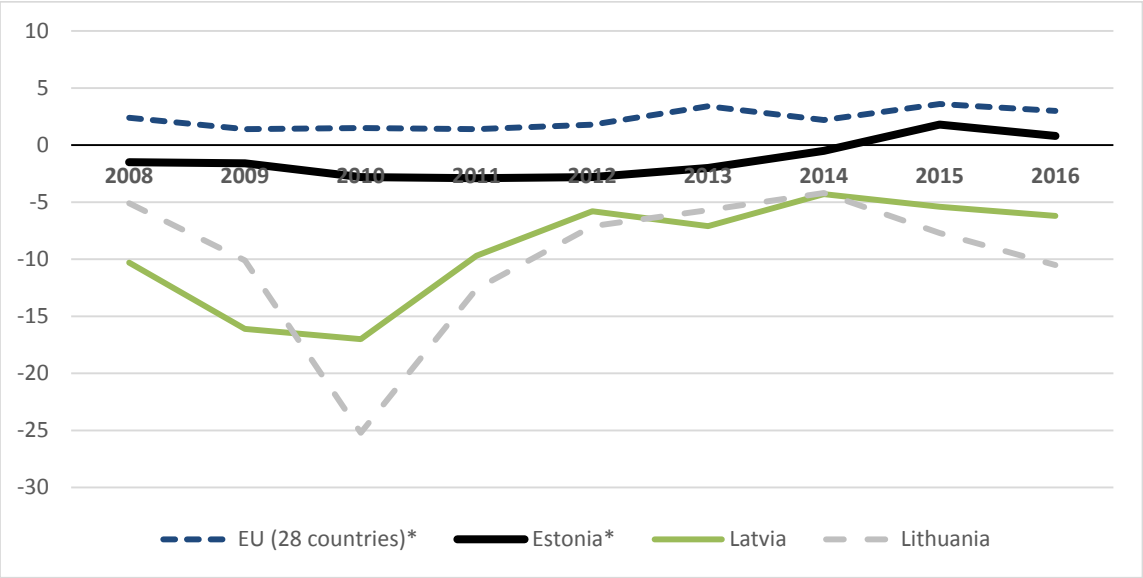


Source: Estonian Statistical Office, based on RVR04

**Break in time series in 2015*

[3] Source: www.migri.fi/download/44063_35733_maahanmuutto_eng3107lr.pdf *p.4.*

Figure 2. Crude rate of net migration per 1 000 inhabitants



Source: Eurostat, based on tsdde230

Next, the characteristics and patterns of the movement of skilled workers is outlined. Contrary to the evidence from most other CEE countries, 'it appears that in comparison with the total population, **migrants [from Estonia] are significantly younger and somewhat less educated' in the period 2000-08** (Anniste et al 2012). Data also show that 'the proportion of university-educated people in the emigrant population is much less than in the total Estonian population and that the proportion of emigrants who are highly educated has further decreased since Estonia joined the EU' [Ibid]. Much of the increase in emigration between 2000 and 2008 is attributed to the growth of emigration of people with primary and upper secondary education (ibid).

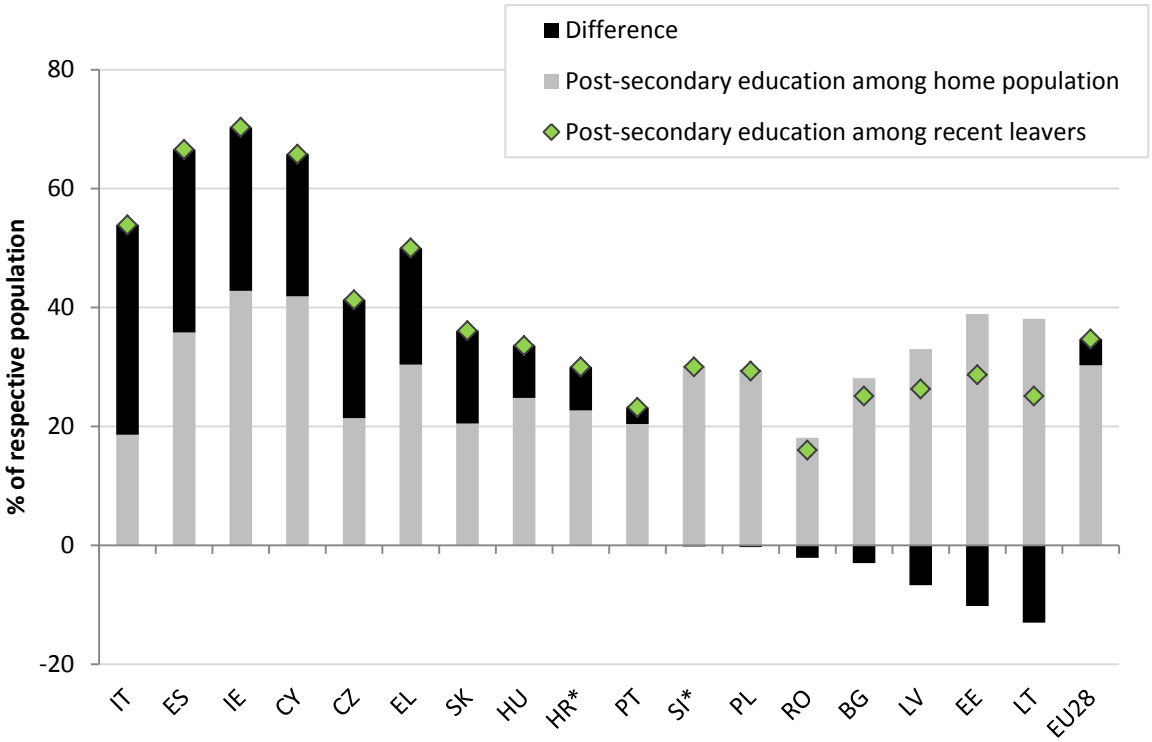
Based on Labour Force survey (LFS) data, Hazans and Philips (2011) highlight that before enlargement, Estonian emigrants were more educated than those who didn't emigrate which is different from the conclusions based on the 2011 census. However, analysis based on LFS confirms the trend that from all three Baltic countries, post-accession, **emigrants 'are significantly less educated than stayers and the gap tends to increase over time'** (ibid, p.10).

The survey of business managers in 2008 carried out by the Bank of Estonia also confirmed that 'employees with a low level of education were more likely to emigrate than highly educated workers' in 2007 (Randveer and Rõõm, 2011). The greater tendency for low-educated people to emigrate from Estonia particularly after joining the EU is related to the removal of restrictions for the low-educated and the structure of labour demand for immigrant workers in Western Europe. People without tertiary education also experienced the larger relative growth in earnings from moving abroad.

Thus, people with high education are significantly less likely to emigrate, but the medium educated are more likely to emigrate. In terms of occupational groups, **highly-skilled blue-collar workers were more likely to leave the country**. The propensity to emigrate was higher in the private sector, **men comprised 70 % of the emigrants and two-thirds were below the age of 35 in 2007**. According to Randveer and Rõõm (2011) '[t]he tendency to emigrate was **the strongest among construction sector employees'**. Emigration was relatively more intense from South

and North-East Estonia, the regions with the highest unemployment, and less so from Tallinn (ibid).

Figure 3. Share of a country's population with a post-secondary degree among all people and among those who recently settled abroad (living for less than 10 years in another EU MS), 2013



Source: DG EMPL calculations based on Eurostat EU LFS, Employment and Social Developments in Europe, 2015, Ch 2. Chart 25, selection of countries by author

Recent data from the Labour Force Survey (Figure 3) for 2013 also indicate the peculiarity of Estonian emigration patterns. In most Eastern and Southern European countries, the recent settlers are more educated than the home population or roughly the same - only in the Baltics are emigrants less educated than the home population.

Migration patterns have become more diverse with new, temporary and transitory patterns appearing alongside the traditional ones. **Estonia has one of the highest rates of commuters in Europe** (25 000 commuters or 18.8 commuters per thousand inhabitants based on 2011 Census). Thus, 4.4 % of Estonian employees work abroad, mostly in Finland (Krusell, 2012). As the route between the two capitals has good ferry connections and are only 85 km apart, many people commute and do not aim to settle permanently in the other country. The profile of Estonian citizens commuting to work abroad[4] **is very similar to emigrants.** Men strongly outnumber women (83 %), mostly those aged 30-49 years (56 %) and come more likely from the Southern region of Estonia where the salary level is lower. However, people mainly from the Russian speaking North-East region, where average salaries are also lower, are the least likely to commute. Census data from 2011 confirm the lower likelihood and even the **decreasing trend of highly educated to commute** between 2000-08 (ibid).

[4] This does not refer to *daily* commuting.

What is the willingness and motivation for the movement of skilled labour? 40 % of people in Estonia have considered working abroad according to Eurobarometer 2011. The share of those thinking the same is 46 % in Finland and 43 % in Latvia –also making it a very common idea among the population in neighbouring countries. Still, only 8.5 % said they had taken concrete steps towards emigration. The main motivation to work abroad is related to higher salary expectations, plus the opportunity to develop language skills, acquire work experience and better work conditions are also mentioned as motivational factors (ibid). Thus, the salary gap between Estonia and other countries has contributed a lot to the intention to migrate. Income inequality is also lower in Nordic countries compared to Estonia, meaning lower educated and also skilled blue-collar workers benefit more from emigration. The full set of motivations are probably still manifold; concerning Finland as the main destination country, the importance of geographical proximity can be underlined, together with affordable and good commuting opportunities to the home country, few language barriers and the growing size of the Estonian diaspora.

What is the role/share of student/researcher mobility in the brain drain? As we saw from general statistics above, the highly educated are underrepresented among the groups who emigrate or commute. Still, student/researcher mobility has been strongly promoted in Estonia. At EU level, the aim is that at least 20 % of students will study abroad during their studies (first in Leuven declaration, also one of the aims of Horizon2020).

In 2012/13, 7 % of Estonian students were enrolled in foreign universities. The most popular destination countries were the UK (26 %), Finland (12 %), Germany (11 %), Denmark (10 %) and Russia (9 %)[5]. **The real share of mobile students is probably higher** as many students study abroad for less than an academic year and therefore might not be included in the list of students in foreign countries. Eurostudent V survey demonstrates the high interest of Estonian students in studying abroad. In 2013, **14 % of students have been abroad and 36 % plan to go abroad during their studies**. That is considerably more than in previous years, **indicating a general increasing trend of student mobility in Estonia[6].**

Concerning funds used to finance student mobility, the Eurostudent V survey indicates that 61 % of those who have studied abroad used funding from EU projects such as Erasmus, Mundus, Tempus, Leonardo da Vinci and 18 % used other stipends. Only 21 % did not use the mobility programmes, but even among these many used the funding of receiving institutions, particularly Ph.D students. Some also receive support from families, mostly as a second source of support in addition to the stipend. Working while studying abroad is not common. Overall, the biggest obstacle for student mobility is the cost of mobility, but also the prospect of losing their job, plus separation from family. Although general mobility has increased, it is still strongly inclined towards students from advantaged backgrounds since they are much more likely to be mobile[7].

There have been concerns about Estonian researchers emigrating to universities with better infrastructure and funding opportunities and then not returning; or, even if they do return later, their children stay in the destination country (Pajumets, 2017). However, there are no assessments of brain drain due to

[5] Internet; http://uis.unesco.org/en/uis-student-flow; Eurostat tps00064
[6] Internet: *https://skytte.ut.ee/sites/default/files/ec/eurostudentv_lopparuanne.pdf*
[7] ibid

researcher mobility and therefore we cannot provide information about non-return rates or the profile of these people.

Hopefully, information about the mobility of returners will still shed light on the topic. While in doctoral studies, the mobility of men and women is equal, the gender gap increases along the career. 22 % women and 30 % of researchers and academics with a Ph.D working in Estonia have international mobility experience, only slightly below the EU-28 average (25 % and 34 % respectively) (ibid).

Considering responses to a survey among academics, the motivation behind mobility for researchers clearly differs from the dominant motives among the general population to work abroad. The most important motivation for emigration among Estonian employees is wage-related. For researchers, wage level is ranked in 11th position as a motivational factor for international mobility. **The most important motivations for researcher mobility are career building, opportunity to cooperate with leading specialists, better access to research funding, research infrastructure** etc. (ibid).

In political and media debates, the population size and shrinking labour force is receiving significant attention. In 2017, the Human Development Report was presented at Parliament and received a lot of media attention. It stated that 'Estonia will not be able to maintain its population size without immigration if high rates of emigration continue and birth rates remain low'. It was recognised that Estonia needs to address proactively measures to further decrease emigration, but also further develop the policies for immigration and integration.

3 Emigration of skilled labour and its impact on domestic economies beyond the labour market

While emigration particularly of young and educated people may seriously hinder the domestic economy, temporary migration may also benefit the sending country by remittances, transfer of knowledge, technology or investments and return migration (Katseli et al, 2006).

According to Atoyan et al., (2016) '[r]emittances are difficult to measure at the aggregate level as not all […] remittance flows are recorded'. In Estonian families, it is unusual to expect relatives to contribute to the income of extended families. Most remittances can be expected to be given to nuclear families (spouse, children). But since it is very common to commute where the family is living in the homeland, it makes the tracking of remittances even harder.

Hazans and Philips (2011) state that '[i]n 2007, Estonian migrant workers sent back $329[8] per every Estonian resident', while the figures were considerably lower for other Baltic countries. Even this amount, which might be underestimated and accounts for 2-2.5 % of GDP, is substantial for families. There are different explanations why Estonian emigrants sent more money home than other Baltic countries in the early 2010s. According to Hazans and Philips (2011), 'it is possible that Estonian migrants in Finland enjoy higher earnings on average than other Baltic emigrants located mainly in Ireland and the UK'. But by **2014, Estonians already sent home $418[9] per every Estonian resident**, while in Latvia and Lithuania, the remittances have increased and are now higher than in Estonia (World Bank, 2016).

[8] EUR 245 based on the exchange rate in June 2007.
[9] EUR 307 based on the exchange rate in June 2014.

The IMF (Atoyan et al. (2016)) concludes that 'net emigration has been associated with higher social spending in the Baltics and SEE[10] countries in relation to GDP'. The outflow particularly of young people has exacerbated the share of the elderly in the population. As a result, **pension and healthcare outlays have increased in relation to shrinking output** (ibid).

Lately, inward migration has counterbalanced the impact of outward migration and the high share of immigration is due to return migration. In 2016, 52 % of immigrants had Estonian citizenship and 45 % come from Finland (Estonian Statistical Office RVR08). Thus immigrants mainly come from EU countries, but also from Ukraine and Russia. Estonia receives very few asylum seekers or third country nationals. Also, as shown below (Part 5), there is a high willingness to return: 89 % young people who emigrated from Estonia state that they would be willing to return, but the obstacle might be finding work that guarantees the same standard of living as abroad. Since the economic situation is currently good, this promotes further return migration and hinders outward migration. Particularly lately, Estonia has therefore benefitted from positive net migration mostly due to return migration.

4 Emigration of skilled labour and its impact on labour market conditions

First, we need to consider the **context** that differentiates Estonia from most CEE countries - in Estonia the **highly educated are less likely to emigrate**. However, **the emigration of skilled blue-collar workers,** with mainly upper secondary and vocational secondary education, is clearly what **affects the Estonian labour market**.

Is the unemployment at least partially absorbed by emigration? According to Hazans and Philips (2011) the '[proportion of former unemployed and inactive individuals among migrants serve as important indicators of the type of labour market experience they bring to the host country as well as provide lower bounds to the migration effect on unemployment and participation rates in the sending countries. In the first two years after the EU enlargement of 2004 11 % to 13 % of migrants from Lithuania and Estonia […] were unemployed in the home country in the previous year and about 7 % were either students or pupils'. Thus, emigration has absorbed at least part of unemployment in homeland.

Similar to many other European countries, the risk of unemployment and NEET among school leavers in Estonia remains strongly related to the attained level of education – more than half the graduates from lower secondary education are NEET during the early career stage whereas among the highly educated the figure is about three times less. In contrast to the general European trend, the educational gap has not widened much in Estonia recently. One explanation for why the **low-educated in Estonia have managed relatively better than their European peers** is the rapidly decreasing youth cohorts and the recovering economy that have created labour shortages in low-paid, low-skilled positions. In addition, **one tenth of low educated Estonia youth has found a workplace abroad** (Krusell 2015 based on Labour Force Survey data).

The decrease of medium educated in the labour force has created **shortages of skilled workers which has been one of the drivers of rising unit labour costs**

[10] South Eastern European (SEE) countries including Albania, Bulgaria, Croatia, and Romania]

in recent years. In 2013, the growth in labour unit costs was higher than the growth in productivity. In 2016, the growth in unit labour costs slowed down and productivity growth has been seen. The forward-looking indicators for labour demand and wage pressure are worrying, though, having risen in the second half of 2016 (Soosaar et al, 2017).

Where are the biggest shortages? There have been shortages in construction, manufacturing, land transport, health and police which resulted in wage pressure between 2004-2007 (Hazans & Philips, 2016). The real wage growth during the same years was 41 % in Estonia. The economic crisis affected the labour market profoundly, but by 2015 the work force is almost as big as before the crisis. It was forecast in 2016 that the future labour demand in agriculture, manufacture of wearing apparel and in wholesale and retail trade will continuously decrease. In contrast to trends in the past, the decrease in public sector is forecast, partly due to the decrease in the number of pupils in education. **Growing sectors are those related to programming as a continuous increase is expected in professional, scientific and technical activities.** Due to the ageing population, an i**ncrease is expected in human health and social work activities**. Inside sectors, the general projection foresees the increase of professional groups and a decrease for other occupational groups in all sectors.

Pressure to re-assess the use of the workforce arises due to the decrease in the working age population and increases in salary. **The polarisation of workplaces is foreseen**, where the demise of workplaces with the lowest salary is not as evident in comparison to the demise of low-medium level workplaces (Lambing, 2016). As changes in sectors are expected to be small, most demand is driven by replacement demand.

Currently, due to the expansion in higher education, the supply of skills is higher than demand for skills at the labour market. However, in the near future, the absolute number of graduates is expected to decrease and not all graduates are entering the labour market. **Due to the shrinking youth population and emigration, the shortage might occur in medium level professionals in the health sector and among skilled workers** (ibid: 6).

For example, in 2016, half of commuters were working in the construction sector, creating a strong wage pressure in that sector. At the same time, the construction sector is not expected to need more workers in the near future. According to the broadcast of OSKA, the construction sector in Estonia will decrease further by 2 % in the coming decade.

Next, **the health sector is strongly affected by emigration**. Due to the ageing population and increase in living standards, the health sector is expected to grow. More specifically, the labour forecast expects **a strong increase (more than 20 %) in the demand for nurses, pharmacists, midwifes, and only a slight decrease of up to 10 % for doctors in next decade in Estonia** (Mets and Veidre, 2017)**.**

Currently, the health sector employs 6 % of all employees, **dominated by women (89 %)** and the age structure is considerably older. While the share of those **over-50** is 32 % of the total labour force, **in the health sector it is 45 %.** The number of employees has been increasing slightly in the health sector, but the size of the sector is considerably smaller than in most advanced countries. Based on the Population Health Strategy for 2009-20, the aim is to reach a situation where per 1 000 inhabitants there will be 3.2 doctors and nine nurses. It means that per each doctor

there should be three nurses. In 2014, there was an adequate supply of doctors, but an acute shortage of nurses.

But this is the sector that competes heavily for workforce with neighbouring countries. There are several companies offering support and language courses to entice health sector specialists to move to Finland, particularly dentists and doctors.

More than 90 % of doctors and nurses consider emigration a problem for the health sector in Estonia (Themas et al 2015). The main reasons for emigration are related to higher wages, better working conditions abroad and too great a workload in Estonia. For nurses, the wages dominated, while for doctors the main reasons were related to the more hierarchical work environment in Estonia and less chances for professional development without a Ph.D. The wage differences are important since wages can be up to five times higher abroad. The main reasons for returning are related to family and willingness to live and work in Estonia.

The probability of nurses emigrating in 2008-11 was between 0.4–2 % per year, higher among the younger age group. Therefore, there is strong pressure to increase the number of students who enter nursing courses to compensate both for the shortage of nurses in specific areas and the effect of emigration. An additional problem is that some graduates never enter the labour market as nurses (ibid:15). Some hospitals, particularly those outside the two main cities and university towns of Tallinn and Tartu, face acute shortages in nurses.

Some hospitals have started courses to train nurses in cooperation with Public Employment Office support to ease vacancy problems. Unfortunately, the shortage of nurses puts extra pressure on working nurses, with many dealing with very high caseloads and in different hospitals at the same time. This very intense and stressful work situation generates dissatisfaction with working conditions and increases willingness to migrate, which creates a vicious circle.

How does emigration influence wage inequality? It is hard to separate the impact of economic growth and emigration. In Estonia, **earnings from upper secondary and secondary vocational education have increased more than those from less than upper secondary education since the crisis**. The earnings from higher education have remained steady since the crisis. The wage gaps between people with secondary and higher education narrow at times of high demand for labour and widen when the economy experiences a downturn. This is because the fluctuation in the demand for qualified specialists is smaller across the economic cycle than that for jobs that require secondary education; it is also probably because of the increase in the share of employees with higher education (Soosaar et al 2017). The higher emigration rate of people with medium level education also puts this segment in a better position to negotiate the salaries in the home country during periods of economic growth, which contributes to the decrease in wage inequality among the medium and highly educated.

The long-term population forecast includes as its main indicators the birth rate, the mortality rate and migration. The Estonian migration balance has improved much faster in recent years than estimated by the population forecast by Statistics Estonia, Eurostat or the OECD. Due to positive net migration, the population forecasts have changed. In 2017, Eurostat published new long-term population forecasts that puts the expected **decline for 2015-40 at only 2.2** %, considerably lower than previous estimates by Statistics Estonia which forecasted population shrinkage of 9 % (Soosaar et al 2017). This should also have a direct impact on the labour market, generating a more positive outlook for the Estonian economy.

5 Actions undertaken by Member States to address the outflows of skilled labour

Koleša, I. and Jaklic, A. (2016) summarise the actions taken by Estonia: 'Not recognising the potential economic value of emigrants, Estonia has focused its activities on cultural components like language. Estonia with its culture-centred and correspondingly centralised approach to migrants fails to address the business or scientific diaspora more effectively as the designated ministry lacks the skills related to effective communication and cooperation with that particular migrant segment'.

The main programme targeted at Estonians living abroad is the **Compatriots Programme** which began in 2004 and **focuses on cultural, informational and linguistic aspects** with the current project covering 2014-20[11]. The programme does not have direct links to the issues which promote return migration of the skilled labour force since it has been run by the Ministry of Education and Research which also directed its scope. In 2014, before the new programme period began, the Ministry of Interior also suggested including measures to support the input of Estonians living abroad to Estonian development, and to have some measures directly related to economic affairs such as a network of entrepreneurs living abroad, establishing cooperation with other programmes such as 'Talents back home', etc. But these suggestions were not taken on board since they are not the responsibility of the Ministry of Education and Research nor did the Ministry of Interior want to take responsibility for them (Kirss, 2014). But although there are no direct links to attract or connect to highly skilled emigrants, there are indirect measures which may indirectly facilitate return migration.

The main aim is to help Estonians living abroad to understand the situation at home. There are concrete activities on offer: the **study scholarship**, available to students wishing to enrol in the study programmes taught in Estonian. If the candidate's command of Estonian is insufficient for studying, they can apply for a language scholarship before taking up their degree studies. **Return migration is supported** for those living away for more than 10 years or born abroad. The support is minimal – up to EUR 2 000 and annual numbers of those supported after 2008 range from 42-97. Thus, it is marginal support with most likely no influence on highly skilled labour return decisions.

The second programme is initiated by the private sector, entitled 'Talents back home' and funded by the European Social Fund 120 000 EUR in 2010. This was aimed at attracting talented youth back to Estonia, who left to study or work abroad, to reduce the brain drain and turn the foreign experience into brain gain. By 2012, 27 people have returned[12] related to this project, which shows its marginal role in terms of direct effect. According to the survey, 89 % of youth who were working or studying abroad wanted to return where they might find a salary guaranteeing a good living standard and a good working environment. But the timing of the project was unfortunate since 2010 was the peak of the crisis and youth unemployment reached one of the highest levels in Europe during the financial crisis (32.9 % in Estonia *vs* 21 % in EU-28 in 2010). By the time of the economic recovery the project was over. However, the indirect effect might have been much wider and it also showed the great interest of

[11] Internet: http://haridus.archimedes.ee/en/compatriots-scholarships

[12] «Talendid koju!» projekt tõi Eestisse tagasi 27 inimest["Talents back home!" project brought 27 persons back to Estonia]" Postimees, 18 October 2012

youth to return. For example 743 people from abroad added their CV to the portal bringing together emigrated youth and Estonian employers.

6 Conclusions

Estonia stands out rather unexceptionally among the new Member States for three reasons. First, **the highly educated have been less likely to emigrate** since the beginning of the 1990s, further decreasing after Estonia joined the EU in 2004. Emigration has been more likely for those with lower educational attainment, but also for the medium educated, which has caused the outflow of high skilled blue-collar workers but has also helped to absorb at least some of the unemployment of lower educated people, particularly the young. Second, **due to Estonia's proximity to Finland, there is very high proportion of 'incomplete' migration.** Finland is the most popular destination country accounting for more than half of all Estonian migrants (Statistics Estonia 2015). The short distance between the two countries, only two hours by ferry, allows commuting and regular contacts with the country of origin. These options clearly diversify migration patterns. According to the 2011 census, 25 000 Estonian residents, which is 4.4 % of employees, work abroad. It is common to work abroad and then go back at the weekend to families at home. However, even people who have their whole family in Finland, regularly come back to attend the dentist and use other services. Because people often do not deregister themselves from the Estonian Population Register, it is not always clear-cut how to estimate the migration flows. **Since 2015, Statistics Estonia has included unregistered migration in its migration estimate.** For 2015-16, Estonia experienced slightly positive net migration. Thus, third, **Estonia is one of few CEE countries which is not a sending country due to the positive net migration.**

In summary, while in most Central and Southern European countries the recently emigrated population is on average more educated than the home population, for Estonia in 2013, the tendency was the opposite (Graph 3); 40 % of home population had post-secondary education in 2013, but among the recent leavers only a quarter did so. Thus, **Estonia is not facing the serious problem of a brain drain of highly skilled (ISCED over 5). Estonia still faces the outflow of skilled workers** who mostly have vocational or upper secondary education.

Estonian employers face labour shortages and there is heated political debate about relaxing immigration barriers to open more up for immigration. One opportunity would also be to attract more Estonians living abroad to return. Estonia is lacking a coherent strategy and policies to turn brain drain into knowledge gain. So far, as highly skilled people are less likely to emigrate, it does not seem a priority.

But since there are already approximately 15 % of Estonians living abroad (150 000-200 000), it is extremely important to use this great asset and make efforts to encourage their input into Estonian society and culture. Estonia is the first country to offer e-Residency, a government issued digital identity that empowers entrepreneurs around the world to set up and run a location independent business[13]. This initiative among others could also serve as a step to create a virtual community, binding emigrated Estonians together and promoting investment in Estonia.

[13] Internet: https://e-resident.gov.ee/

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