

National Policies for International Talent Attraction and Retention in Estonia







2014

Part-financed by the European Union (European Regional Development Fund)

This study was compiled as part of the ONE BSR Project, an umbrella project for branding the Baltic Sea Region (BSR). The project is financed by European Regional Development Fund, INTERREG IVB, Baltic Sea Region Programme 2007–2013.

Authors:

Laura Kirss, MA, is the Head of the Education Policy Programme at Praxis Center for Policy Studies. She has been involved in analytical work and research at Praxis since 2007 working on various education policy projects. Prior to becoming the Head of the Programme, she was employed as an Analyst at Praxis. She has also worked at the Estonian Ministry of Education and Research. Laura graduated from the University of Tartu, obtaining her degree in Public Administration and Social Policy with majoring in Education.

Kadri Kuusk, MA, is an independent Economic Policy and Evaluation Expert and a former Analyst of Praxis. In Praxis, she undertook research and analysis in the area of Economic Policy and Public Finance. She has also been employed at the Centre for European Policy Studies in Brussels, the Estonian Ministry of Finance as well as the Estonian Savings Bank. Kadri is currently finishing her MA at Lund University on Economic Growth, Innovation and Spatial Dynamics, Economic History. She already has an MA degree from University of Michigan, Ann Arbor on Public Policy Economics.

Helena Rozeik, PhD, is an Analyst and an Acting Head of the Economic Policy Programme at Praxis Center for Policy Studies. Her work at Praxis has dealt with various economic policy issues. Helena has also worked as a Researcher at the University of Tartu, Teacher Fellow and Research Assistant at the University College London School of Slavonic and East European Studies and as an Economy Analyst at the Ministry of Economic Affairs and Communications. She obtained her doctorate at the University of Tartu in Economics.

Hanna-Stella Haaristo, MA, is an Analyst of the Education Policy Programme at Praxis Center for Policy Studies. She specialises in doing analysis and research on higher education policy topics but has also worked on other education and training policy issues. Prior to joining Praxis, Hanna-Stella worked as a Social Policy Officer at the Federation of Estonian Student Unions. She has an MA degree from the University of Tartu in Social Policy and Social Work.

In addition to the authors, this work has been made possible with the contribution from:

Andrew Rozeik, Eve Mägi, Mihkel Nestor, Eneli Mikko, other analysts at Praxis as well as the transcribers.

Praxis Center for Policy Studies is an independent non-profit think tank in Estonia that supports engagement and analyses-based policy-making. The mission of Praxis is to improve and contribute to the policy-making cycle by conducting independent research and promoting public debates.



Praxis Center for Policy Studies
Tornimäe St 5
10145 Tallinn, Estonia
Phone +372 640 8000
www.praxis.ee
praxis@praxis.ee

Praxis has the copyright. Please reference when using any information from this publication: Kirss, Laura, Kuusk, Kadri, Rozeik, Helena, Haaristo, Hanna-Stella, 2014. National Policies for International Talent Attraction and Retention in Estonia. Praxis Center for Policy Studies. Tallinn, Estonia.

Abstract

This study explores talent policies in Estonia with the aim of mapping the current status of affairs in this horizontal policy field. The study addresses talent policy from three particular perspectives: a) foreign employees and entrepreneurs, b) foreign students, and c) foreign living Estonians (the diaspora). The report begins with providing a background literature review of the major respective talent policy issues, highlighting relevant country experiences where possible. This is followed by a situation analysis reflecting the talent policy state of affairs according to different statistical data and Baltic Sea comparisons. The third part of the report delves into particular talent policy issues regarding the foreign employees and entrepreneurs, academic sector and the diaspora in Estonia. The study concludes with policy conclusions and recommendations.

Table of Contents

List	List of Abbreviations6						
Int	roduct	ion		7			
1.	Defir	nitions ar	nd methodology	9			
2.	Talent attraction and retention: literature review						
	2.1.	war for talents	11				
	2.2.	Talent	attraction policies	14			
		2.2.1.	Migration policy approaches	16			
		2.2.2.	Identifying skill levels and needs	22			
		2.2.3.	Location decision of talents	24			
		2.2.4.	Attracting entrepreneurs	28			
		2.2.5.	International students	30			
		2.2.6.	Diaspora policies	35			
	2.3.	Talent	retention policies				
		2.3.1.	Temporary-to-Permanent Visa Pathways	41			
		2.3.2.	Retaining international students	42			
		2.3.3.	Integration policy	44			
	2.4.	Conclu	sion	45			
3.	The context of talent policy in Estonia			47			
	3.1.	Estonia	a in the BSR context	47			
	3.2.	Demog	graphic changes	49			
	3.3.		sing demand for highly qualified labour				
	3.4.	•	ion patterns				
	3.5.	Workir	ng abroad	63			
	3.6.	Interna	ational Students	65			
	3.7.	Conclu	sion	67			
4.	Taler	nt policy	in practice in Estonia	69			
	4.1.		policy management in Estonia				
	4.2.	Highly	qualified foreign labour	77			
		4.2.1.	Regulative framework				
		4.2.2.	Measures for planning highly qualified foreign labour				
		4.2.3.	Measures for attracting highly qualified foreign labour	80			
		4.2.4.	Measures for developing and retaining highly qualified foreign labour	83			
		4.2.5.	Conclusions	86			
	4.3.	Interna	ational students	88			
		4.3.1.	Policy context	88			
		4.3.2.	Current talent attraction and retention issues				
		4.3.3.	Conclusions	95			
	4.4. Diaspora policies						
		4.4.1.	Estonian diaspora programme				
		4.4.2.	Talent attraction through the 'Talents Come Home' project	105			

4.4.3.	Conclusions	6
Conclusions and r	ecommendations 10	8
Bibliography		3

List of Abbreviations

BSR Baltic Sea Region

HEI higher education institution

ICT Information and communication technologies

UK United Kingdom

US United States

Introduction

This study was initiated as part of the 'Talent Retention' activity of the ONE BSR project. The Talent Retention activity aimed to improve the image of the Baltic Sea Region (BSR) as an open, international and skilled higher education and employment area. In order to achieve this, key stakeholders need to become engaged in making the image (brand) true. Both talent attraction and retention policies form the foundation for the successful BSR branding.

The specific aim of the work package is to increase triple helix cooperation in talent retention by facilitating better policy-making processes and providing tools that will allow cities, development agencies, businesses, universities and ministries to work better together. Mutual trust is built throughout the talent retention cooperation between various stakeholders. This may also ease the future cooperation in the matters of talent attraction, where even more conflicting interests might lie.

The Baltic Sea Region currently faces a particular challenge: even though the major challenges surrounding international talent retention are quite well known and many of the retention tools are actually already at the disposal of the employers, both public and private, attention in many countries and metropolitan areas concerning the local cooperation policies in providing these services has been neglected. There is not a broad understanding on how the triple helix approach could meet the different challenges of talent retention in the BSR. Therefore, this work package intends to increase understanding on triple helix mechanisms in talent retention and provide better tools for addressing the issue in different parts of the region.

Estonia was selected as one of the country cases to be analysed as part of the Talent Retention work package in addition to Finland (Helsinki) and Sweden (Stockholm). In contrast to its Nordic neighbours, Estonia is facing somewhat different challenges in its labour market. While all of the case study countries are experiencing a shortage in highly skilled labour, Estonia presents a case of a country that is at the same time struggling with emigration. In addition, its labour market developments are among other things considerably influenced by the closeness of the welfare states of the Nordic countries that very often act as a pull mechanism for Estonian labour force. In view of the demographic decline, population aging and the objectives of striving towards the knowledge economy, the issues of smart human resource management are an absolute key in meeting the expected goals. Thus, this study on Estonian talent policies was initiated.

The study departs from the perspective that while the local labour market is unable to meet the need (both qualitatively and quantitatively) for highly qualified labour, it has become more apparent that the supply of necessary labour could be possibly increased with foreign residing employees. To what extent this has been done so far and what could be feasible in the current policy setting are the questions asked in this report. Notwithstanding the importance of addressing the problems of the local labour market and the economy to meet the need for highly qualified labour, the study looks at the labour supply issue from a foreign labour perspective. Underscoring the importance of the local education and training system as a primary source of labour production, and the state and employers as major actors in facilitating more attractive working (and living) environments in the country, the case study is limited to analysing the issue of increasing the necessary labour supply on the part of foreign labour. Foreign labour therefore refers to international talents, i.e. highly qualified labour (including students) located or residing outside Estonia.

The study explores talent policies in Estonia with the aim of mapping the current state of affairs in this horizontal policy field. The study addresses talent policy from three particular perspectives (or groups

of talents) that concern highly skilled human resource of foreign origin: a) foreign employees and entrepreneurs, foreign students and researchers, and foreign living Estonians (the diaspora). The issue of local talents (Estonians living in Estonia) is addressed through a separate small case study that deals with the availability, development and retention of labour force in the Estonian medicine sector. Talent policies in this study include aspects of talent attraction, development and retention.

The report begins by providing a background literature review of the major respective talent policy issues, highlighting relevant country experiences where possible. This is followed by a situation analysis reflecting the talent policy state of affairs according to statistical data and Baltic Sea comparisons. The third part of the report delves into particular talent policy issues regarding the foreign employees and entrepreneurs, academic sector and the diaspora. The study concludes with policy recommendations and suggestions for different stakeholders.

1. Definitions and methodology

The study uses several terms that could have various meaning in different contexts. Therefore, here the major terms are shortly explained and described:

- Talents are defined as skilled professionals with at least tertiary education. In addition, national and international students engaged in higher education are included in this group (Tendensor, 2014).
- b. International talents refer to highly skilled professionals and higher education students residing or located outside Estonia regardless of their citizenship and nationality. Also referred to as foreign labour, highly qualified labour or foreign students.
- c. Talent policy refers to specific efforts aimed at attracting, welcoming and integrating and thereby facilitating mobility of talents (Tendensor, 2014). This also includes talent development activities.
- d. **Diaspora** is a non-resident population who shares a national, civic or ethnic identity with its homeland through being born in the homeland and migrating or being the descendants of emigrants (Newland 2010, cited through Kuznetsov, 2013). They are people of any skill level or education but the focus here is mostly on those of high qualification.

This study employs a mixed methodological approach mostly relying on qualitative data analysis methods to map the current state of affairs in talent policy regarding international talents. The following will describe in detail what data was used and how it was analysed in each stage of the analysis process:

I. Literature review

The purpose of this section was to provide a theoretical background and information on other countries' experience on talent attraction and retention practices to frame the analysis and inform the Estonian case study research. Therefore, a literature review of the relevant existing literature on talent attraction and retention and the related topics was carried out. Where possible, examples of other countries practices was sought and presented. The chapter mainly focused on attraction issues as these are generally more specific policy actions or activities while the retention has more often to do with more general living and work environment factors that are affected by a complex group of interrelated factors. However, where possible, specific retention aspects have been addressed.

II. Talent policy context

This chapter provides an overview of how Estonia compares to the other Baltic Sea countries in terms of relevant talent policy and related indicators. It covers indicators from the overall living environment to demographics, migration, labour needs and working abroad. Data from different international and local databases are used to illustrate the issues. The primary data sources were Eurostat, OECD, Statistics Estonia and the Estonian Education Information System. The section presents a descriptive analysis of the state of affairs regarding the relevant issues to inform the case study research.

III. Talent policy mapping in Estonia

The talent policy mapping section addresses the overall national strategic approach to talent policy management. It provides a description of various policy elements in the area, reviews the relevant

stakeholders and their roles in the policy management and implementation and addresses the general effectiveness of the policy as well.

The analysis was carried out using two sources of information: a) documents and b) interviews with relevant stakeholders. Documentation analysis was based on different policy documents (e.g. strategies, development plans, etc.) and previous studies and analysis in the field. The interviews were conducted with relevant policy-makers, researchers, experts and representatives of the researched stakeholder group. In total, 24 interviews were conducted. The interviews addressed specific talent policy issues with each stakeholder (depending on the experience and responsibility of the interviewee and/or his/her organisation). Additionally, overall talent policy management issues that were relevant were discussed. The specific talent policy issues encompassed topics like the experience and activities in the area of the interviewee, implemented activities and their effectiveness, challenges and obstacles in implementing measures, gaps in state policy, expectations to state policies, areas of improvement, etc. The more general talent policy issues entailed discussion points such as current state of talent policy management, roles and responsibilities of different stakeholders and bodies in talent policy implementation, recommendations and suggestions for improved talent policy management, etc. In general, since the interviews were explorative by nature and the discussed topics greatly varied depending on the expertise and experience of the interviewees, the prepared interview schedules outlined the main points of discussion and the interview processes proceeded according to the data and information provided by the interviewees.

The interviews were transcribed afterwards for analysis purposes. The overall framework of analysis follows the outline of mapping the current situation and policy approach taken reading foreign employees, international students and the diaspora in their attraction, and development and retention policies. Due to the fact that the talent policies are generally evolving in the country, it is expected that the majority of policies and steps taken have been mostly focused on attraction aspects and less attention has been paid to development or retention issues. Development and retention issues are, however, discussed in more detail in the mini case study on local retention of medicine personnel which supplements this study.

2. Talent attraction and retention: literature review

2.1. Global war for talents

The global war for talent has been a widely discussed topic for almost two decades. When Stephen Hankin of McKinsey&Co coined this term in 1997 he referred primarily to the intensifying competition for the most talented employees between the companies. Today the "battlefield" has become much wider as countries and regions have joined in and talent covers all the (highly) skilled employees. One can even say that winning the global talent war has become a policy competition among countries (Harvey, 2014). Some authors go as far as claim that we are entering the era of talentism or new Human Age when human capital will dominate over financial capital (Schwab, 2012; Manpower, 2011).

Soon this battle is expected to reach a new level due to the retirement of large population cohorts in developed countries. By 2030, the United States and Western Europe is forecasted to be short of 25 million and over 45 million new talents respectively (BCG & WEF, 2011). This trend coincides with the rise of Asian and Latin American economies putting additional pressure on global talent supply and demand. Many of their 'lost' talents are expected to return and the younger generation prefers staying in their home countries more and more.

At the same time, talents will be the key to innovativeness and success of companies in the future. Consequently, the lack of talents is the major obstacle for economic development and advancement (Romer, 1989; Lucas, 1988; Florida, 2002). A nation's global competitiveness will depend on its capability of retaining, attracting and developing talents (Janczak, 2011; Manpower, 2010).

In the past, many countries and firms have tried to alleviate their talent shortage with migrants (i.e. global talent). For example, in past decade new immigrants contributed to 70% and 47% of the increase in labour force in Europe and the United States respectively (UN, 2012). While globally mobile talent pool is growing and migrants will continue to be an important talent source this strategy of importing knowledge and skills will not be sufficient in the future. Therefore, companies and governments who have historically relied on migrants to cover their talent shortage will have to rethink their talent policies and approaches. They have to provide new incentives to attract talents and design these specifically for each talent pool segment.

The reason is that the problem is no longer the oversupply of talents in some parts of the world and lack in the others. All regions will face a shortage of high-skilled labour in the coming decades (BCG & WEF, 2011). Both developed countries like the United States (US) or Japan but also emerging economies like India or China will increase the demand for talents. Moreover, some countries (like Japan) will face a shortage in most sectors, whereas in most countries it is confined to specific sectors like ICT, education, professional services, etc. (BCG & WEF, 2011). Therefore, various institutions (e.g. WEF, Bruegel) have emphasised that there is a crucial need to deepen the talent pool. For example, the talent potential of older people, women and immigrants is often underutilised (BCG & WEF, 2011). According to official statistics, 30% of migrants classified as high-skilled ended up in low-skilled jobs in UK (Cerna, 2011).

The Migration Policy Institute points out, however, that part of the talent war intensification is a misconception. There is a real battle for super-skilled (Papademetriou et al., 2008b). Super skills are those held by a small number of individuals who are critical to economic success in industrialised countries as creativity and innovation become central to value creation (Collett & Zuleeg, 2008). The

economic activity, value creation and international competitiveness are already disproportionately driven by the super-skilled¹ and the battle for them has been on-going for some time already. However, for other talent categories the real race is for attracting generic skilled workers with a lower wage and not simply large numbers of college graduates for any 'price' (Papademetriou et al., 2008b).

This global talent war is driven by large shifts in both supply and demand. The key drivers influencing a globally mobile talent pool include:

Low birth rates and aging population

On the supply side, low birth rates in developed countries lead to talent shortages. In Europe, 2010 marked the turning point as the first year when labour market entrants fell lower than retiring workers (Ernst & Young, 2011). Other large economies like Russia, Canada, China and South Korea are expected to reach this point by the end of the decade. In the European Union, over 70 million workers or almost a third will leave the labour market in next ten years (CEDEFOP, 2010). By 2030, the United States and Western Europe will need 25 million and over 45 million new talents respectively (BCG & WEF, 2011). Although to some extent, the average higher qualification of younger people entering the labour market will partly make up for their overall smaller numbers. The first signs of looming talent crises due to shrinking labour force and skill mismatch are already reflected in the fact that 70% of companies are having trouble finding suitable job candidates in Germany (Manpower, 2010).

Mass higher education

Twenty years ago there were 68 million students in the world. Today, this figure has more than doubled increasing the potential global talent supply (OECD, 2008). This goes hand in hand with increasing global mobility of students. The number of foreign students is expected to rise by over 6% per year by 2020 and reach 6 million (Estonian..., 2011). However, not all these graduates will have an education with the required quality. The unequal quality of education remains a problem for the Southern hemisphere (BCG & WEF, 2011). The qualification of many graduates will not be sufficient to compete in the global market. For example, according to McKinsey Global Institute (2005), only 25% of Indian and 20% Russian specialists meet the requirements of global companies.

Increasingly internationally mobile human capital

In the last few decades, global migration has increased with the number of migrants growing about 50% since 1990 (Münz, 2013). As highly educated have a greater propensity to emigrate this has also deepened the global talent pool (Hercog, 2008). It can be expected to keep rising with the Millennial Generation² entering the labour force in larger numbers. Most of them wish to gain some international work experience (PWC, 2011). However, the general labour mobility is still quite low, especially in Europe. The share of EU workers residing in another member state was only 3.3% of total labour force totalling 8 million workers in 2013 (Andor, 2014). And although this means 70% increase in the number of mobile workers after the 2004 enlargement, the annual mobility rate between EU countries was still only 0,2% of the total EU population in 2011–12. This is over 10 times lower than inter-state mobility rate in the US (2.7%). The lower mobility level holds also for highly skilled in European labour markets (Asheim, 2009).

¹ For economic development it is also important that they consume a high level of goods and services (Collett & Zuleeg, 2008).

² The Millennial Generation or Generation Y is defined as people born between 1982 and 1999 (Kuusk, 2011b).

Transition to knowledge society

In his classic work Michael Porter (1990) classified nations into factor-, efficiency- and innovation-driven stages of development. Every year more countries are moving closer to or joining the rank of innovation-driven stage. Based on Global Competitiveness Reports 37 countries can today be classified as innovation-driven and the group of economies in transition to this stage has grown by 50% (from 14 to 22) in past four years (WEF, 2010; WEF, 2014). This shift means that economic success depends more and more on the creation of new knowledge which raises the demand for high-skilled workers, especially for people with technical and management qualifications. It is the most important factor shaping the demand side of the talent market.

The effects can already be seen in labour market statistics. In the past two decades, information and communication technologies (ICT) have increased the demand for high-skilled workers and during the next ten years 45% of created jobs in US will require high qualifications (e.g. social work, health care, management, etc.) (Mürk, 2012). A similar trend prevails in Europe (CEDEFOP, 2010). Demand for low-skilled workers has also increased. Meanwhile, middle-skilled and standardisable jobs (e.g. accountants) have suffered due to pressure from computerisation. In addition, employers are increasingly looking for soft (everyday) skills beyond technical skills and expertise, like interpersonal skills, the ability to create networks and work in teams, problem solving, research and analytical skills, time management and communication and the ability to learn and adapt (Collett & Zuleeg, 2008). Often, a lack of these soft skills is likely to be behind the perceived scarcity of talent.

New technologies and working processes

ICT enables working globally without changing one's location. Work has become more weakly connected to geographic location. It has also allowed implementing more flexible work models, such as telework. It is likely that in the future there will be more freelancer-type people who work when and where they want (Patune, 2011). For example, in the United States the share of freelancers and temporary workers of workforce that remained constant since 1993 has doubled in past five years reaching 15% and is expected to rise to 20% by 2020 (Wald & Leventhal, 2014). This widens the overall global talent pool. First of all, for companies this means access to global talents in other countries. Secondly, it allows talents to compete for jobs outside their own country. Encouraging temporary and virtual work is one of the seven recommendations by World Economic Forum for managing the global talent risks (WEF & BCG, 2011).

■ The rise of Asia and Latin America

The increasing economic power of Asia and Latin America influences the global talent shortage through both the supply and demand channels. Firstly, these regions will attract more and more global talents as the wage levels in their major cities rise and fast economic growth provides attractive career and business opportunities. Already today 40% of Asian companies have problems with finding suitable job candidates (Manpower, 2010). Their big cities will become magnets to globally mobile talents who previously used to have an eye solely on advanced Western countries. For local talents of many traditional migrant-sending countries these are already attractive domestic alternatives to moving abroad (Münz, 2013). For example, Mexico's and Turkey's workers from rural areas who used to move to the US and Europe respectively now often prefer domestic urban areas. Increasing numbers of university graduates also choose to stay at home countries after finishing their studies (Mürk, 2012).

Secondly, there is already a switch from brain drain to brain circulation underway. Several Asian countries have talent programmes targeting the best global talents (e.g. students) and luring back their own talents. In China the latter are called sea turtles. In 2008 the government introduced a "Thousand Talent Program" aimed at attracting back 2 000 world-class experts, scholars and entrepreneurs by offering substantial government-supported funding and resources (e.g. top salaries, housing, research grants) (Gwynne, 2012). Thailand implement its Reverse Brain Drain programme in 1997 offering grants to high potential science and technology projects (Harvey & Groutsis, 2014). Some doubt that these policies will be successful citing the troubled business environment (e.g. corruption in China), difficulties in adapting to changed social environment in the home country and decreasing share of top talents among returnees (The Economist, 2013). Nevertheless, although the number of returning sea turtles is currently low it can increase in the future.

Thirdly, several emerging economies (e.g. Brazil, Chile, Ivory Coast, Malaysia, South Africa) have already become an attractive regional alternative neighbouring countries' migrants who earlier might have moved to more distant developed countries (Münz, 2013).

There are various other factors shaping the global talent landscape. For example, more and more countries are gradually starting to open up their professional services sector making it easier for people with foreign qualifications to work there (Doomernik et al., 2009). This will provide an extra talent source for many advanced countries while creating the risk of labour shortage for some others. Furthermore, as countries redesign their migration policies in response to the above mentioned drivers this will keep the global talent rally in continuous transformation. Due to the convergence of migration regulations via policy spillovers this can lead to the race to the bottom in policies for highly skilled and race to the top for low-skilled labour (Harvey, 2014). To counter the potential negative consequences of spillovers to countries experiencing brain drain, presumably developing countries, countries should aim to design their talent policies in responsible ways, in cooperation with other countries if necessary (Münz, 2013; WEF, 2012).

2.2. Talent attraction policies

Policy-makers are used to thinking of themselves as selecting talents through their policies. However, since the talent pool of highly skilled individuals is finite the talent war is escalating and individuals are the ones who can choose their location (Hercog, 2008). The countries in need of an additional highly skilled labour force tend to approach talent attraction so that they lay down the migration rules (qualification criteria) and the role of talent policy becomes identifying and attracting these talents (Collett & Zuleeg, 2008). Therefore, it is important for policy-makers to take into account both push and pull factors³ in designing talent policy.

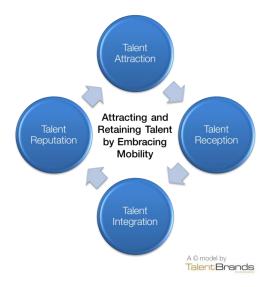
Andersson et al. (2014) have conceptualised talent attraction management through four different components (see Figure 1): direct talent attraction activities (e.g. marketing); talent reception (e.g. welcoming and soft landing activities); talent integration (e.g. inclusion through a professional or social network); and talent reputation (e.g. branding efforts). These four components constitute a

_

³ Lee's (1966) basic push-pull model (in itself a modified version of Ravenstein's (1885, 1889) 19th century laws of migration) has been a classic explanation of migration flows. It consists of a) negative or push factors in home country causing people to move away and b) of positive or pull factors attracting migrants to a receiving country (Eurostat, 2000).

holistic, integrated approach to efforts at the local and regional level aimed at attracting and retaining talents.

FIGURE 1. THE CORNERSTONES OF TALENT ATTRACTION MANAGEMENT



Source: Andersson et al. 2014.

Andersson et al. (2014) have also reviewed country approaches to talent attraction management, identifying differences in regard of talent management leadership and organisations. While the European and Nordic approaches tend to be mostly public sector driven, i.e. public sector actors are the main initiators of talent management policies, the Singapore and US/Canadian approaches tend to rely more on the private sector. In total, the authors have identified at least seven different talent attraction management models used by different countries:

- Public sector driven model public sector organisations take the lead in promoting country employment opportunities, e.g. Work in Bavaria, Germany. The private sector can play the role in legitimising these public sector efforts. For instance, large companies use the public sector recruitment platform to seek employees (instead of establishing its own recruitment channels).
- The market and sponsor driven model this is usually a public-private partnership where the provision of services is carried out in cooperation with the business community, i.e. through sponsorship or service fees. The Brainport International Community serves as an example here, where the base funding for the service coordination is done by academia but 28 member companies are financing the service provision. In this model, the needs of the service users can be taken into account more.
- The division of work model relies on the idea that private and public sector take distinctively different and complementary roles. In case of Singapore, the public sector has assumed the role of promoting the branding of the country through the 'Talent Capital' strategy while the private sector is responsible for the implementation of this strategy.

- Social entrepreneurship model builds on the voluntary and needs based service provision which is functioning through the work of volunteers and social partnerships (e.g. funding from major beneficiaries such as universities or companies or fees). The Stockholm Global Expat Centre serves as an example here, i.e. a non-profit association founded by an expat who has set up a successful professional support programme for arriving talents in cooperation with the major receiving organisations. Using the talents themselves guarantees high quality and targeted services.
- The network model this is an arrangement between different actors such as business and entrepreneurs, academia, public bodies and social entrepreneurs, etc. This is a participatory model that is based on the idea that talents coming to a country can enter through different 'entry points' and hence do not need one single entering service. The different parties welcoming and supporting talents work in cooperation or under one platform, e.g. Copenhagen Talent Bride which offers a regional collaboration platform for employers as well as services to talents and their families.
- The talent attraction arena-centric model these are mostly geographically concentrated innovative milieus or arenas that attract people sharing the same lifestyle or interest, e.g. science parks or clusters like EnergyVaasa.
- The single forerunner approach is a model where the talent attraction management is initiated and carried about by a single person or company.

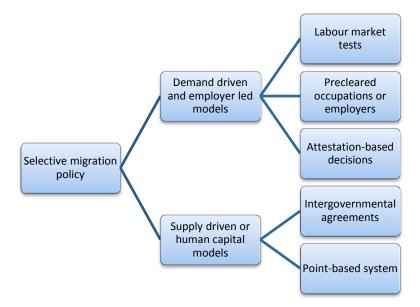
All of these models have different advantages and disadvantages and they fit different contexts and policy settings. However, they provide good guidance to countries, cities or regions on how it would be possible to set up talent management policies and what format the cooperation could take. The following will address more specific talent policy aspects related to either policy or certain target groups and their needs.

2.2.1. Migration policy approaches

There are two competing models of selective migration policies (see Figure 2, Papademetriou et al., 2008a):

- supply-driven (i.e. human-capital-accumulation focused) and government-led focusing on broader and perhaps also long-term human capital needs with the public sector identifying and assessing both the needs and selecting the people admitted to the country.
- demand-driven and employer-led focusing on satisfying the immediate needs of the labour market by allowing employers to select individuals for specific vacancies and then requesting a visa from the government.

FIGURE 2. TWO MODELS OF SELECTING ECONOMIC IMMIGRANTS



Source: Papademetriou et al. 2008a.

I. Supply-driven models

The most common supply-driven model is the points-based system. It aims to screen out the potential immigrants with skills in short supply at the moment, in future or with potentially wider positive

impact on the economy (Papademetriou & Sumption, 2011b). The system was introduced in Canada in late 1960s. It was replicated in Australia in 1979 and later considered by some (European) states but finally implemented by New Zealand, the United Kingdom (UK), the Czech Republic, Singapore, Hong Kong and Denmark (Papademetriou et al., 2008a). Some countries like Sweden and Norway have decided not to adopt points system and the US failed in its attempt in 2007 (Papademetriou et al.,

In 2001, the Czechs opened their borders to highly skilled migrants. Preferential access was given to the nationals from some countries (e.g. European countries that were not (yet) members of the EU, Canada and India) when these applicants scored a minimum of 25 points on a number of criteria (Doomernik et al., 2009).

2008a). Austria introduced its points-based system in 2011 (Temesvári, 2012).

The essence of the points-based system is to let everybody apply for a visa but accept only the ones who score above the threshold mark in the test where a person is given points by various attributes. The five most common attributes are (Papademetriou et al., 2008a):

- 1. Education measured by the number of years of study or one's level of education (Bachelors, Masters, or PhD degree).
- 2. Work experience usually awarded for years in the primary occupation or profession in which an applicant seeks to work.
- 3. Age younger people (e.g. aged under 40) usually get more points.
- 4. Language skills all systems take language ability into account, but in different ways.
- 5. Prior experience in work or studies at host country this is considered to facilitate economic (finding employment) and social integration (understanding cultural and social norms).

Second-tier variables that vary by country include: job offer, occupation in demand, partner characteristics, previous or proposed earnings, relatives in the country, location in certain regions, job creation or funding own retirement (Papademetriou et al., 2008a). The systems vary considerably

concerning how these criteria are measured, their relative weight and level of pass score. For

example, Australia gives the highest value to prior experience in work or studies in the country. Denmark, on the other hand, places a high emphasis on education, so that the maximum score on this variable alone (105) is sufficient to get a passing score (100) in the test (Papademetriou et al., 2008a). Some countries have mandatory minimum levels for certain variables — for example, the UK and New Zealand require minimum language proficiency (Papademetriou & Sumption, 2011b).

At their core, points systems are education and skills accumulation mechanisms (Papademetriou et al., 2008a). They are in constant transformation to reflect changes in the labour

In 2002, the UK introduced its "Highly-Skilled Migrants Programme" which provides for one-year permits that can be renewed indefinitely. Selection is based on a points system where age and years of education are the key criteria. In February 2008, a new points system was launched that "combines more than 80 pre-existing work and study routes into the United Kingdom into five tiers; points are awarded on workers' skills to reflect aptitude, experience, age, and also the demand for those skills in any given sector" (Doomernik et al., 2009).

markets, political preferences, evaluations of previous systems, etc. This dynamism of constant finetuning is a valuable trait since the global environment also changes very quickly. Papademetriou et al. (2008a) list five prevailing trends:

- 1. Most systems prioritise education. Though its popularity has increased and decreased in some systems, the recent trend is an increase. Indeed, the educational level of immigrants has increased over time in countries using points systems (Papademetriou et al., 2008a).
- 2. Language proficiency has become increasingly important in most countries. For example, its ratio of maximum score to pass mark in Canada has increased from 24% to 37% between 1978 and 2008 (Papademetriou et al., 2008a).
- 3. The importance of age has risen in some countries due to demographic concerns but its comparative significance has never been higher than 25%.⁴
- 4. Awarding points for work experience has become more popular.
- 5. In recent years, a new variable has been added: the occupation in demand. Or in some instances, prospective workers in future growth occupations (like in New Zealand) (Papademetriou & Sumption, 2011b).

However, studies have shown that even the best combination of criteria explain only small share of immigrants' lifetime earnings and, therefore, also the value to the society (MAC, 2009). Mostly their 'success' is determined by unobservable factors. Hence, points systems are difficult to implement in practice and selection criteria do not necessarily lead to desired policy outcomes. Some problems points systems encounter are:

• Often, high-skilled immigrants are not able to put their skills to full use. For example, many workers who entered Canada through the points system have been under- or unemployed (Hawthorne, 2008). The response has been stronger consideration of factors that might identify future success and finding a job instead of more general human capital traits (e.g. language ability, previous study or work experience at the country, spouse's education level etc.) (Chaloff & Lemaitre, 2009; Cully, 2011). The idea is to place higher emphasis on the adaptability criteria, instead of trying to accurately predict future needs of the country (Platonova & Urso, 2012).

⁴ New Zealand is an exception and has decreased the importance of age.

- Points-based systems do not guarantee that immigrant workers meet the needs of the country.
 - The composition of migrant inflows by occupation category (even for those belonging to the shortage list) can be biased (e.g. too many construction workers and very few IT specialists).
 - High-skilled migrants can displace low-skilled residents. Several countries have now implemented measures to ensure that highly educated immigrants do not end up in low-skill jobs or are moving away from supply-driven models altogether (OECD, 2011a).
 - There is also a more general problem that skill lists can be outdated (see below).

Some potential talents are left out since they do not qualify under formal regulations (e.g. qualification requirements; see under Hybrid systems). Sometimes, current policies might not be

flexible enough to accommodate the need to look outside of the hiring sector, the importance of on-the-job training that make formal qualification assessment less effective to identify the most productive workers (Collett & Zuleeg, 2008). Therefore, some authors have argued for a forward-looking approach (e.g.

There are about 60 pre-cleared occupations that nationals from countries with bilateral agreement with France can access (Papademetriou et al., 2008a).

providing incentives, focusing on the immigrant's future potential rather than backward-looking assessments of needs, etc.) (Collett & Zuleeg, 2008).

The second type of supply-driven models is agreements between sending and receiving governments allowing the employment of foreign workers in specific sectors or jobs, sometimes with reciprocity. These systems vary widely with the large role of employers making it sometimes more similar to demand-driven models (Papademetriou et al., 2008a).⁵

II. Demand-driven models

These systems allow employers to decide which skills and qualifications are most useful or in demand. They are used in the US, Sweden, Spain, and Norway etc. There are three major variations (Papademetriou et al., 2008a) of demand- driven models:

- Labour market tests before a company can hire a foreign worker they have to demonstrate
 that they have searched for a worker in the local, national or regional labour market and
 failed to find a suitable candidate. However, this process can often take months (Chaloff &
 Lemaitre, 2009). As a recent best example Chaloff & Lemaitre (2009) suggest Sweden with its
 simplicity, clarity, transparency and efficiency (sometimes an employer and employee match
 can be made in one day).
- 2. **Pre-cleared occupations and employers** ⁶ certain 'trusted' employers (e.g. university faculties) are pre-certified and selection is thereby based on the procedures they apply. In the case of occupations or skills on 'shortage' lists, employers can bypass most of the procedures required under the first option (labour market test).

⁵ A recent overview of bilateral agreements by EU member states can be found in European Migration Network study (EMN, 2013).

⁶ Systems of registered, trusted or precleared employers enable governments to differentiate between employers who present higher and lower risks. In addition, groups of employers who pool resources creating high quality sector specific training programs for both immigrants and locals could be rewarded with simpler immigration rules.

3. **Attestation-based decisions** – this is a US innovation where an employer can recruit foreign workers without a labour market test or other procedural constraints by signing a legally binding declaration known as attestation which stipulates the employment terms and submit to random post-recruitment auditing by government officials.

Germany has taken a demand driven approach, but one supply driven element – job-search visa – was introduced in August 2012. Their holders can qualify for longer term residency only if employed at occupation belonging to special list (OECD, 2013).

All three of these demand-driven models aim to fill a country's specific employment need, often in All three of these demand-driven models aim to fill a country's specific employment need, often in particular sectors where the local qualified labour supply is inadequate or labour demand is very high. At the same time, they are also sensitive to the need to protect both the jobs and the wages of native workers (Papademetriou et al., 2008a). Usually, these approaches provide temporary visas with a possibility to apply for permanent residency in a few years (i.e. provisional visas). The decisions are not left completely up to employers as states still set restrictions like minimum education or salary level (Papademetriou & Sumption, 2011b). In addition, some countries require the retraining of existing workers and scrutiny of the employer if the share of foreign workforce is above certain threshold.

Additionally, countries are constantly trying out new approaches. For example, a recent innovation has been to let employers pay fees per foreign worker hired as a way of identifying the value of the worker to the firm (Papademetriou & Sumption, 2011a). Proponents of this measure believe that there is no better indicator of an employer's need for a foreign employee than its willingness to pay a premium for that employee's visa. Moreover, many employers are willing to pay extra in return

In the last decade, the government of Australia established a preference order in processing skilled visa applications: 1) employer sponsored visas, 2) state or territory government sponsored visas, 3) occupations on the critical skills list, 4) occupations on the Migration Occupations in Demand List and 5) all other applications. Moreover, their point system now prioritises according to the test score (Cully, 2011).

for a fast, predictable, and consistent admission decision. This is one way to sidestep using various caps or complex selection criteria to pick the brightest or most in-demand migrants.

The main problems with demand-driven approaches are the risk of exploitation if an employee is tied to a certain employer and the risk of illegal immigration if a job is lost. An important issue for many countries is that employers are not considering hiring abroad because they think it is too expensive (OECD, 2013).

Compared to the points system, employer-selected immigrants fare better on average, though this difference fades with the length of stay of immigrant. On the other hand, points systems have clearly produced a more educated immigrant intake based on the experiences of Canada and Australia. Overall, the key predictors of long-term economic success are individual traits and not the specific method of entry (Papademetriou et al., 2008a).

III. Hybrid systems

Recognising that neither pure supply nor demand-driven systems can serve all their talent needs, countries have started experimenting with models containing advantages of both models – these are the so-called hybrid systems (Papademetriou et al., 2008a). These prioritise employer demand but also use a points test or another criterion to distinguish between the quality of different potential immigrants/applications (Papademetriou et al., 2008b). In a way, these take into account the broad immigrant characteristics that policy-makers are concerned with and specific vacancies that employers need to fill (Papademetriou et al., 2008a). They mark the tendency to combine elements of both systems by innovative and parallel use of multiple avenues of recruitment. For example, Australia,

Canada and the US have increased the share of employer-led and temporary visa paths since the 1990s, in Denmark a points system is just one route to country, many countries with a demand-driven approach have introduced a new visa category – job search visa – which is a supply-driven instrument (Cully, 2011).

An important driver to changing the current immigrant selection mechanisms is the issue that they do not capture the full range of skills required for jobs sought by employers, such as interpersonal, networking and team working skills, problem solving, time management, or the ability to learn (Platonova & Urso, 2012; Kuusk, 2011a; Mürk, 2011). Moreover, identifying potential talents is becoming more difficult since employers do not simply hire skills but also attitude or potential (Manpower, 2010). These are much harder to identify by formal qualifications. These challenges are best addressed by employer decisions. However, one should bear

Job-search visa "Green Card" allows high-skilled immigrants to come to Denmark to search for a job. Person can qualify through points system considering education, language skills (both in a Scandinavian language and/or in English or German), experience, age, prior wages and professions on the Danish Job Card Scheme shortage list. They then have six months to find a job on the shortage list (generally masterslevel occupations) or a job paying at least DKK 463,000 (€ 63,000) annually (Chaloff & Lemaitre, 2009).

in mind that while private recruitment agencies and large businesses use a wide range of assessment techniques, small and medium-sized companies face difficulties, lack of expertise and resources to conduct this kind of recruitment of foreign workers (Platonova & Urso, 2012).

Papademetriou et al. (2008a) list various forms hybrid system can take:

- 1. Using both systems concurrently.
- 2. Awarding points for job offers in the points system or prioritising applicants with a pass mark based on a job offer.
- 3. Relying on temporary-to-permanent pathways by giving permanent residency based on employment track record.
- 4. Focusing on foreign students as a source.
- 5. Requiring both points test and employer selection to raise the quality of applicants.

The authors believe that the future of selective migration policies lies in hybrid systems and in the increased role of employer-led recruitment (i.e. flexibility). Meanwhile, they have two recommendations to improve hybrid systems:

- Create as adaptable and simple selection systems as possible. Complexity tends to channel resources towards immigration intermediaries and disadvantage small businesses and companies that do not hire foreign workers on a regular basis.
- Focus points systems more onto strategic growth areas. Many countries already award points
 to high-demand and future growth skills. Hybrid systems can be used to develop regional
 industry clusters (like Silicon Valley or Bangalore) that specialise in certain economic sectors.

BOX 1. ATTRACTING THE SUPER-SKILLED

The super-skilled are the small elite (e.g. persons with doctoral degrees, researchers, high-level engineers etc.) (OECD, 2009). The super-skilled are looking for opportunities to realise their potential, to learn and develop new expertise (Collett & Zuleeg, 2008). The presence of other talents in their own related fields supports that and therefore super-talents often concentrate to specific locations. Hence, various research parks and technology centres (e.g. Silicon Valley, Silicon Fens in Cambridgeshire, biotech cluster in Boston) are important to attract ambitious talents. Countries have recently introduced various incentives (Collett & Zuleeg, 2008):

- Less strict visa rules for migrants with a job offer above a certain minimum wage level,
- Less restrictive visa conditions for their family,
- Faster service in the visa application process,
- Talents with recognised accomplishments can apply as individuals (e.g. the US, the UK),
- Employers can use 'fast track' services if they pay a fee (this also serves as an indicator that the applicant is valued highly) (e.g. the US),
- Employer sponsored applications are moved up in visa process (e.g. Canada and Australia).

2.2.2. Identifying skill levels and needs

Since countries aim to distinguish between high- and low-skilled migrants, identifying skill levels and needs are at the centre of any selective migration system. Three most common ways of identifying skill level are (Chaloff & Lemaitre, 2009; EMN, 2013):

- Formal education
- Past or expected salary level
- Past or expected occupation

Identifying skills based on salary levels has become more popular over time since it is a cheap and efficient way for identifying knowledge workers – there is no need to validate previous qualifications and it provides an easy and transparent access for potential migrants.

Until recently, a labour market test was the main method to check for skill or worker shortages (Chaloff & Lemaitre, 2009). This approach has been criticised for slowing down the visa application process. Therefore, today various skill or shortage lists are becoming popular. France, Italy, Spain, and UK are among some countries which have recently introduced them (Chaloff & Lemaitre, 2009). In Europe the sectors occurring most often on these lists include for example ICT, health care, academia, art, engineering, financial services etc. (EMN, 2013). The main impact channel of these lists is exempting employers from labour market tests and reducing other visa restrictions. Although occupational shortage lists can speed up the process and reduce the alleged arbitrariness of labour market tests, it has its own weaknesses.

First, shortages can have many causes and there is no one simple reliable measure of the existence of skill shortage. One useful guide to identify the nature and severity of skill shortage is proposed in

Figure 3. The key differentiator of level is time required to fill vacancies for that skill.⁷ Out of four levels the first one is considered the most severe. However, even with this list in mind both approaches (i.e. shortage lists and labour market tests) have difficulty in distinguishing between temporary and structural needs.

FIGURE 3. CLASSIFICATION OF SKILL SHORTAGE LEVELS

•There are few people who have the essential technical skills who are Level 1 not already using them and there is a long training time to develop shortage the skills. •There are few people who have the essential technical skills who are Level 2 not already using them but there is a short training time to develop shortage the skills. •There are sufficient people who have the essential technical skills Skills who are not already using them but they are not willing to apply for mismatch the vacancies under current conditions. •There are sufficient people with the essential technical skills who are Quality gap not already using them and who are willing to apply for the vacancies but they lack some qualities that employers consider miportant.

Source: Richardson, 2007.

There are various approaches to establishing shortage lists (e.g. monitoring vacancies or occupational wage trends, surveys of employers, consultations with employers and/or unions etc.). Often, the lists have to be agreed with social partners to ensure consensus and differ at regional level (Chaloff & Lemaitre, 2009). Australia, New Zealand and the UK use independent bodies or ministry professionals to produce, review and update the lists of occupations that reflect the country's evolving economic needs (Papademetriou et al., 2008a).

TABLE 1. EXAMPLES OF SKILL AND OCCUPATION SHORTAGE LISTS

Country	List and establishing arrangements	Usage in migration processes
Canada	Provincial 'Occupations under pressure' list	Exempts employers from the labour market
		test
Finland Regional shortage list established annually		
	in consultations with social partners	
France Two lists based on vacancy data		1. High-skill occupations: establishes eligibility
		for third-country nationals

⁷ Another possible categorisation is: labour shortages (the lack of workers available or interested in accepting a job at the current conditions) and skill shortages (the lack of workers with the relevant skills) (Platonova & Urso, 2012). Labour shortage corresponds to the first two categories in Figure 3.

Country	List and establishing arrangements	Usage in migration processes	
		2. Longer list with some lower skill occupations: determines eligibility for citizens of new EU countries	
Germany	Allowed by law, but not used yet		
Ireland	Shortage list and ineligible occupation list	 Shortage list: simplified entry Ineligible occupation list: no entry 	
New Zealand	Immediate Skill Shortage List Long-Term Skill Shortage List	Determines migrants eligibility to certain visa categories	
Spain	Regional 'Catalogue of Hard-to-Fill Positions'		
United Kingdom	Migration Advisory Committee based on wages, vacancies and unemployment, recruitment and benefit changes, and the possibility to draw on resident workers through greater labour force participation or training initiatives	Exempts the employer from the Resident Labour Market test and if candidate has required English skills ensures approval of the employer request	
United States	Schedule A	Exempts from labour certification for permanent residence under employer-driven EB2 and EB3 visa programmes	

Source: Chaloff & Lemaitre, 2009; ; Immigration New Zealand, 2014.

The level of detail in shortage lists varies but the aim is to be sufficiently precise to cover the likely job descriptions and narrow enough to reflect professional certification systems (e.g. Spain, Canada, UK use 4-digit categories, France 5-digit, New Zealand and Australia 6-digit) (Chaloff & Lemaitre, 2009).

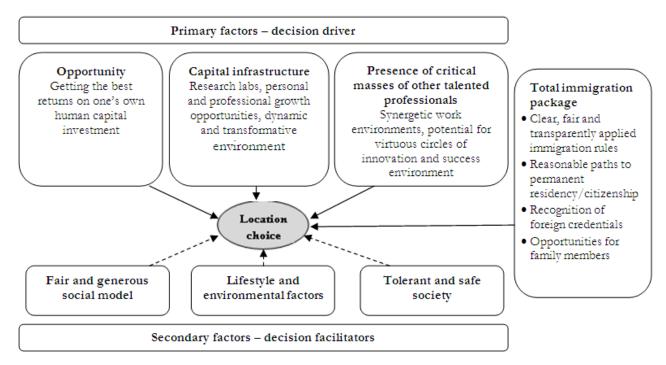
Second, there is a risk that these lists introduce new distortions (e.g. employers declare hiring for position on the list but agree other job tasks once the person has been hired) (Chaloff & Lemaitre, 2009). Another problem, encountered for example in Australia, can be that the country disproportionally attracts people with only a few professions and hence the overall migrant mix is not optimal. Therefore, some countries now have caps on skill or occupation categories (Doomernik et al., 2009). Although one goal of shortage lists is to speed up hiring foreign workers, in some cases it can be too slow because changing the lists takes time. For example, national evaluations in France and Finland have reached this conclusion (EMN, 2013). Therefore, some countries have opted for speeding up the labour market tests for temporary migration visas in parallel. The advantage of labour market tests is that they are always current and treat various occupations equally (Chaloff & Lemaitre, 2009).

2.2.3. Location decision of talents

Migration flows are driven by various factors that may be quite independent of migration policies (Cully, 2011). Often governments can influence these flows in the second selection stage after the initial migration decision has already been made by a person. Nevertheless, countries must keep both

push and pull factors in mind when designing talent policy. Given the wide range of factors, this policy touches multiple areas from education to economic development to social policy.⁸

FIGURE 4. FACTORS INFLUENCING THE DECISION-MAKING CALCULUS OF TALENTS ABOUT LOCATION CHOICE



Source: Adopted from Papademetriou et al., 2008a.

Many simultaneous factors affect migration decision and location choice. Some of them are objective, like salary, others subjective, like lifestyle, as human capital theory points out. According to Papademetriou et al. (2008b), prospective talents weigh the following factors in their location calculations:

- Primary factors decision drivers essential in the location calculations of most talents, they reinforce each other, overlap, reinforce a virtuous cycle. The primary motive is opportunity.
- II. **Secondary factors decision facilitators** influence decisions, but unlikely to determine the outcome. Effect varies by type of migrant and personal circumstances.
- III. **Total immigration package** the sum of all rules and conditions that plays a very important or determinative role in decision-making.

In the end, the location choice is firstly about the opportunities and secondly about the experience in living in the country. Besides these factors, there are a few issues that should be kept in mind when designing talent policy:

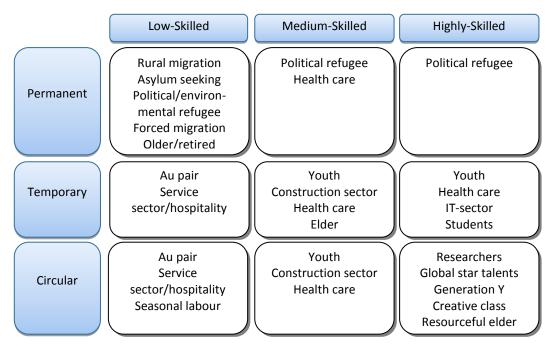
- a. Young people are more likely to move since benefits from migration are larger for the person (but also for the destination country).
- b. Transaction costs of changing a country increase with skill level (Hercog, 2008).

⁸ However, some authors believe there is one universal talent policy – internationalisation of higher education to attract students.

25

- Various types of migrants value different aspects (e.g. while younger migrants focus on a career opportunities, for women with children family and lifestyle factors become important) (Harvey, 2013).
- d. 'New economics of migration' theory postulates that migration is often a family choice and not an individual decision. This also means that besides maximising income, the goal is to minimise risks as well (Eurostat, 2000).

FIGURE 5. VARIOUS MIGRANT SEGMENTS



Source: Khallash, 2010.

Papademetriou et al. (2008b) recommend focusing on what immigration package will attract the kind of workers a country needs. This means policies needed to target specific segments of potential talents. Depending on the country's or region's talent needs the dimensions of these segments can include:

- profession (manager vs scientist);
- occupation (ICT vs health care);
- home country (rich vs poor, availability of talents with certain skills);
- expected duration of stay (permanent vs temporary);
- age (Millennial Generation, single vs persons with family).

The first step is usually looking at professions. Mahroum (1999) has proposed five different segments each requiring different measures (see Table 2). Students are here mainly seen as a potential source for other four categories. Khallash (2010) has proposed another way to segment potential migrants (see Figure 5) which emphasises the time dimension of migration. Although her classification is not complete and some choices can be questioned (e.g. why only political refugees are permanent high-skilled) it provides a good sense how to go about segmentation. In some cases, the regional dimension (i.e. the migrant's home country) is another important factor. For example, EU citizens from old Member States are more likely to consider lifestyle and cultural factors in their decisions to

migrate, while location choice of the citizens of new Member States depends more on economic considerations (European Commission, 2010). Another example is the efforts of Australia which had skill shortages in construction and engineering. They recognised the high value of British talent in these areas and targeted that talent source through expos, job fairs and recruitment events in London (Harvey & Groutsis, 2014). Recent experience of OECD countries has shown that the nationality of migrants indeed varies widely by visa type and occupation.

Yet another set of factors becomes important when the focus is on attracting national talents (returning expatriates). Overall, 'the battle' has now moved to the total immigration package. For example, using an efficient application procedure is likely to signal to prospective migrants the services and opportunities they are expected to get (Hercog, 2008).

TABLE 2. CLASSIFICATION OF TALENT SEGMENTS, FACTORS INFLUENCING THEIR DECISION AND SUITABLE POLICIES

Group	Type of push & pull factors	Type of policies
Managers & Executives	Benefits and remuneration	Business-oriented
Engineers & Technicians	Economic factors (supply and	Immigration legislation
	demand mechanisms)	Income tax
	The state of the national	
	economy	
Academics & Scientists	Bottom-up developments in	Inter-institutional and
	science	intergovernmental policies
	Nature & conditions of work	
	Institutional prestige	
Entrepreneurs	Governmental policies (visa,	Governmental and regional
	taxation, protection, etc.)	policies
	Financial facilities	Immigration legislation
	Bureaucratic efficiency	
Students	Recognition of a global workplace	Intergovernmental and inter-
	Accessibility problems at home	institutional policies
	Inter-cultural experience	Immigration legislation

Source: Mahroum, 1999.

Most countries started crafting their talent policies while having numerous restrictions in place (e.g. quotas on sectors, occupations or firms, short duration of work permits, labour market certification, minimum salaries, restrictions on changing employers, restrictions on employment of spouses, limits to extension of permits, obligation to return before change of status, language skills, etc.) (Kuptsch & Pang, 2006). To attract highly skilled people, the first response was to start removing some of these restrictions. The common measures are giving up labour market tests or certification and letting employers choose suitable workers or giving spouses an equal access to labour market (Kuptsch & Pang, 2006). Another approach has been accelerating visa application procedures to attract high-skilled people, often due to pressure from a small group of high stake companies, like in the Netherlands from high technology sector (Hercog, 2008).

However, none of these changes actually incentivised the high-skilled (e.g. no subsidies, no facilitation of qualification recognition, no special job listings abroad) (Chaloff & Lemaitre, 2009). Governments assumed that both companies and talents are willing to bear the costs of immigration. However, countries outside the 'high wage and English-speaking club' have to turn to active policy (Chaloff &

Lemaitre, 2009). And even that is no guarantee of success. For example, the Czech Republic's information campaign in some prospective recruitment countries failed to attract successful job seekers (Chaloff & Lemaitre, 2009).

Some countries have already turned to providing incentives (e.g. lower income taxes in France, Ireland, Luxembourg, Malta, Netherlands, Sweden, etc.) and becoming more active in marketing (Kuptsch & Pang, 2006; EMN, 2013). For example, in Canada Quebec offers five-year income tax holidays to attract foreign academics in health sciences to teach in their universities. Some Scandinavian countries with relatively high rates of income tax offer reduced income tax rates to foreign specialists (Kuptsch & Pang, 2006). More pessimistic voices see this as a part of the "race to the bottom" and emphasise that countries and companies should collaborate to develop more global talents to avoid global talent race becoming a zero sum game.

On the whole, countries are becoming more active on all three fronts of marketing:

- a. Passive marketing making general information available about the country/region and its talent environment to the public. The tools include information websites, advertising quality of life aspects.
- b. Active marketing taking steps to get into contact with potential global talent, to promote the country and to facilitate the arrival of global talent. This covers actions like sponsoring job fairs abroad (e.g. the UK and Australia), bilateral agreements with source countries, multilingual employment offer portals (e.g. Czech strategy), targeted campaigns, rules, etc. for specific groups (e.g. some countries tend to be sources of specific professions like India for IT, China for many science fields).
- c. *Branding* actions to establish and maintain a reputation as an attractive global talent destination (e.g. by providing assistance in administrative procedures both during and after entry) (Papademetriou et al., 2008b).

2.2.4. Attracting entrepreneurs

Foreign entrepreneurs are one of the most desirable categories of highly skilled, especially owners and managers of high-tech and high-growth start-ups. Canada and Australia introduced special admission programmes for foreign entrepreneurs and investors in the 1970s, followed by the US and New Zealand in the 1990s (OECD, 2011a). Some countries have more flexible rules on self-employment that allow immigrant entrepreneurs to apply for ordinary work visas (e.g. France, Germany, Italy, the Netherlands, Spain, Denmark, Sweden), but special entrepreneur/investor visas have become increasingly popular (Sumption, 2012). In recent years several countries (e.g. Australia, the UK and New Zealand) have introduced or renewed their visa programmes to make it easier and faster for entrepreneurs to qualify. The United States bill to establish a Startup Visa for entrepreneurs and start-ups has been introduced, but this has not found support in the legislature so far (Migreat, 2014).

Similarly to skilled professionals, the key questions here are: How to identify entrepreneurs and what admission rules/policies to use? The most common strategy that governments employ is to admit

.

⁹ A few countries (e.g. Austria, Italy, Switzerland and the US) set annual quotas for self-employment categories of admission. In the US, the cap is far higher than the actual number of applicants, while the Italian cap is oversubscribed (OECD, 2011).

¹⁰ Sumption (2012) provides a good overview of migration policies for entrepreneurs in various countries.

immigrants with potential and observe their success over time. Australia, New Zealand, UK, Ireland

and Singapore use variants of this approach "by offering temporary or 'conditional' visas that can be renewed or converted to permanent ones if immigrants demonstrate business success within a few years" (Sumption, 2012). The key differences among country are in how high is the bar for initial entry and for permanent residence, and how quickly immigrants must create a successful business. Entrepreneurship visas are for people actively managing the company and passive investors often have their own visa and permanent residence category. 12

Some countries are making even stronger efforts to attract talented entrepreneurs than designing special visa categories for

In Australian Business Innovation visa program applicants must pass a points test that rewards characteristics such as English language ability, business experience, experience in exportoriented or fast-growing businesses, and possession of registered patents or trademarks. Entrepreneurs who receive AUD \$1 million in venture capital will receive immediate permanent residence and need to provide no further evidence of business success (Sumption, 2012).

them. For example, in 2010 Chile launched its "Start-Up Chile" platform that is a pathfinder in people-led immigration/entrepreneurship model promoted by immigration expert Vivek Wadhwa (Dempsey, 2013). If your business proposal gets accepted by Corfo, Chilean investment agency, then you get \$40,000, one-year visa and support services ranging from office space to help in everyday matters like setting up a bank account. If the idea does not work the entrepreneur is free to move on without any liabilities. Although start-up support schemes with similar features are becoming more common in other countries, Chile's platform is more explicitly geared towards immigrants.

Step 1. Defining Potential: Initial Entry Criteria

The first entry criterion is usually an amount of start-up capital varying in range (e.g. New Zealand – none, Ireland – €75,000, Australia – A\$800,000 (\$787,000)) (Sumption, 2012). Some countries also scrutinise business proposals (e.g. New Zealand, the United Kingdom). However, since government officials are not trained for this task, they instead rely on professional business plans analysts (e.g. the existence of venture capital investment). The UK introduced an interview as a part of Entrepreneur Visa application process in 2013. It can lead to the rejection of the application if the business plan is

not deemed genuine, but does not contribute any points to pass the acceptance threshold. It is administered by civil servants and criticised for ambiguous legality (Migreat, 2014). There could also be restrictions about economic sectors (e.g. in Ireland only entrepreneurs in high-tech or high-growth sectors are eligible) (Sumption, 2012).

In New Zealand, applicants and admitted entrepreneurs must demonstrate that their business benefits the country economically. For example, through job creation, tax payments or exports (OECD, 2011a).

The criteria itself are only half of the story. For example, recent evaluation of the UK Entrepreneur Visa programme showed that even for applicants who would qualify by the criteria the application process is difficult to manage (Migreat, 2014). This has discouraged some applicants who have looked for other visa types and countries.

1

¹¹ Most countries offer temporary visas at first with the exception of Canada that offers immediate permanent residency.

¹² Countries with investor programmes include for example Australia, Canada, France, Greece, Korea, the UK and New Zealand. This usually requires a significant investment in the country (e.g. bonds or equity in local companies or national treasury bonds; property investments do not usually qualify). The amount of investment capital required ranges from €300,000 in Greece to €10 million in France (OECD, 2011).

Step 2. Defining Success: Criteria for Permanent Residence

If the immigrant creates a successful business, the initial visas can typically be renewed or converted to permanent residence after two to four years. The key criterion for success is job creation (e.g. 2–5 jobs for local residents, not including the entrepreneur's family members). Some countries also require applicants to raise additional investment or revenues. It also matters how fast entrepreneurs are required to achieve results. For example, Australia changed and Ireland abandoned the deadline rules, since these can discourage risk taking or adjusting business plans if that could jeopardise the visa status (OECD, 2011a; Migreat, 2014). Those who fail to meet the permanent residence criteria are required to leave the country or must qualify for another visa.

However, it is difficult for a newcomer without local knowledge, experience, networks, etc. to establish a successful business. Therefore, many future immigrant entrepreneurs enter by other routes. In other words, they choose their host country beforehand and therefore the nature of other visa routes is also very important for attracting potential entrepreneurs. Since they face greater barriers (e.g. access to capital) than native entrepreneurs, access to business support programmes plays essential role in successful migrant entrepreneurship. Furthermore, the success of foreign entrepreneurs can depend on the flexibility and attractiveness of other parts of visa system that influence hiring global talents (Tech City News, 2014).

2.2.5. International students

International students are an important channel for the arrival of high-skilled immigrants (Kahanec & Králiková, 2011). They are considered a particularly attractive talent source due to their higher integration potential: they are familiar with the culture and language, have easily recognised qualifications, perhaps even experience in the local labour market, etc. (Kahanec & Králiková, 2011; Hawthorne, 2008). Although, a recent study showed that sometimes the

governments are overly optimistic about these, e.g. the level of language skills and familiarity with the host country's culture (MPG, 2012). In OECD countries, on average 25% of foreign students change their status either to work or family reasons. In Australia, former students made up over half of skilled migrant applications in 2002 (Hawthorne, 2008). In Germany, the respective level was 30% in 2010 (OECD, 2013).

Moreover, students are a fast growing migrant source – the

UK advertises easy entry to the country more than France and Germany. It has amended visa regulations for students and introduced time targets for processing visa applications (e.g. straightforward student visa applications: 24 hours and non-straightforward ones: 10 working days (Kuptsch & Pang, 2006).

number of foreign students enrolled around the world increased by 77% between 2000 and 2009 (Kahanec & Králiková, 2011). However, these flows are concentrated to a handful of countries with the top five destinations (the US, the UK, Germany, France and Australia) attracting about half of all international students (Felbermayr & Reczkowski, 2012). At the same time, there are more and more students choosing emerging economies over traditional destinations (Migration..., 2012). For

example, the US lost 20% of its share of the world's international students between 1985 and 2009 (from 38% to 18%) (OECD, 2011a). The old South-to-North movement of students has been replaced

-

¹³ In case of Australia, New Zealand and the UK the majority of entrepreneur visa applicants enters through student or temporary visa paths (Migreat, 2014).

¹⁴ In addition, they are an attractive source of revenue (e.g. tuition) for the country (Papademetriou et al., 2008b).

by mobility in multiple directions (MPG, 2012). According to a UK study, there are now four major categories of education suppliers (Hawthorne, 2008):

- a. Major players the United States, the United Kingdom, and Australia
- b. Middle powers Germany and France
- c. Evolving destinations Japan, Canada, and New Zealand
- d. Emerging contenders China, Singapore, and Malaysia

A slightly different picture is painted by the share of international students of the student body. There

are five countries where this exceeds 10%: Australia (21.5%), the UK (15.3%), Austria (15.1%), Switzerland (14.9%) and New Zealand (14.6%) (OECD, 2011a). This is a good benchmark for national targets. For example, Ireland's aggressive policy stance does not aspire to raise the international student share in a cohort higher than 15–20% (Power et al., 2012).

Many countries have realised the great potential of foreign students as a source for high-skilled labour and put in place Germany has recognised that it is harder to attract high skilled professionals than to train them in Germany and has intensified its efforts since 2005 (Hawthorne, 2008). Students now benefit from a one-stop procedure: a possible work permit will be issued by the immigration board alongside the residence permit, provided the employment authorities have agreed to this (Kuptsch & Pang, 2006).

policies to attract and retain them. However, Hawthorne (2008) has warned that their numbers are not big enough to be a panacea for high-skilled migration. The success of these aspirations depends on careful selection at two critical junctures: first, selecting students by 'sponsoring' the educational institution at admission and secondly, when allowing to qualify for transition from a student visa to a work visa (Papademetriou & Sumption, 2011a). Some countries have made the entry of students easy, but staying afterwards difficult, while others have chosen the opposite path: starting studies is hard, but staying on easier (MPG, 2012).

Policy-makers must understand the push and pull factors behind students' educational choices. For example, Rosenzweig proposes that students often migrate not because they cannot acquire the same skills at home but because of low return to these skills at home (Rosenzweig, 2006). From pull factors, the

Japan is a rising front-runner in student mobility. The introduction of one year programs in English increased the number of US students between 1980 and 2000 from 1,000 to 40,000 (Kahanec & Králiková, 2011).

most important ones are university's reputation and recognition of the degree in the home country or international labour market (Kahanec & Králiková, 2011). In the longer run, other factors become important, like increasing the quality of education and research. This means increasing the quality level of faculty (e.g. enhancing the academic environment to attract good quality faculty, competitive salaries, research infrastructure, career prospects (de Wit, 2010 cited in Kahanec & Králiková, 2011). For example, cooperation among Irish universities under the Quality Mark programme aims to increase quality specifically for international students (Power et al., 2012).

The range of relevant policy measures is wide and their exact nature varies country by country. According to Hawthorne (2008), the most important ones are:

1. Facilitating student entry

Almost all OECD countries are introducing active measures to make it easier for international students to access higher education and reduce red tape (Hawthorne, 2008). In addition, many have set foreign student enrolment targets (Hawthorne, 2008). The measures include:

 Information platforms in the Internet – to make it easier to get information about study opportunities and requirements.

- Assistance in application for example establishing central application systems, using overseas organisations (e.g. British Council, embassies) (Kuptsch & Pang, 2006).
- Time targets for student visa application processing.

2. Language of instruction

An increase in the delivery of education in foreign languages (most importantly in English) is a trend across all the EU Member States (European Commission, 2013). In the past two decades, more countries have realised that students want tertiary education in English and now offer courses wholly in English. The Netherlands was the leader in this front – roughly 75% of international study programmes are taught entirely in English (European Commission, 2013). Today, Germany, Sweden, Denmark, Finland and even Japan are replicating this strategy (OECD, 2011a). Several EU Member States with only a few foreign language courses recognise their importance as a pull factor for attracting international students – it is a priority area of national strategies in Finland, Lithuania, Poland, Slovak Republic, Slovenia and Spain (European Commission, 2013).

3. Certainty of Access to Postgraduate Stay

In the past, the change from student to worker status has been difficult in European countries. Now many countries have modified visa conditions to allow a simpler and more certain Since 1998, foreign students holding a French IT degree can change their status from student to worker without labour market test. Since 2002, students "presenting a technological and commercial interest to French enterprises" have the same privilege (Kuptsch & Pang, 2006).

transition from student to worker status. At first, this policy was applied in certain fields only (e.g. science, engineering, business and health), but governments have expanded the number of eligible fields (Hawthorne, 2008). In addition, many governments facilitate the transition to extended stay through priority processing in uncapped migration categories (Kuptsch & Pang, 2006).

During this post-study period students are typically able to move between employers without having to apply for a new visa and their employers are exempt from labour market testing. In several countries, post-graduation visas now allow 3–6 month (or even longer) job search periods, so that students are not required to find work by the time they graduate or very quickly thereafter (Papademetriou & Sumption, 2011a).

Since 2007, new immigration rule changes gave near automatic entitlement to an 18 month visa valid for work experience or further training in Australia.

Stay rate (all status changes) % of former students among new labour migrants 45 40 35 30 25 20 15 10 GERMANY 2010 GERMANY 2008 Czech Republic United Kingdom New Zealand OECD average Netherlands

FIGURE 6. SHARE OF INTERNATIONAL STUDENTS WHO CHANGE STATUS AND REMAIN, AND SHARE OF NEW LABOUR MIGRATION COMING FROM THE STUDENT CHANNEL IN SELECTED OECD COUNTRIES, AROUND 2008

Source: OECD, 2011b (http://dx.doi.org/10.1787/eag-2011-en).

4. Cross-Subsidisation of Study

All European countries are increasingly acknowledging that foreign, like local, students might need to work to finance their studies. Therefore, increasing number of countries provides ways for or help international students to carry the financial burden of their studies (Kuptsch & Pang, 2006). The measures include:

- Waiving fees while many countries have introduced or increased fees for foreign students, others have waived them (Hawthorne, 2008).
- Scholarships Ireland, France, Germany, the UK and Sweden have all made more scholarships available as part of a promotion package to attract top students (Kuptsch & Pang, 2006).
- Working while studying virtually all OECD countries allow international students to work (typically 20 hours per week) while a number maintain near-zero tuition-fee policies (Hawthorne, 2008). The US provides graduate students with near-automatic access to subsidisation through research and teaching assistant positions. Other countries have introduced internship/apprenticeship programmes to facilitate the labour market entry and study financing (Kuptsch & Pang, 2006).
- Support to entrepreneurship efforts as governments are paying more attention to attracting entrepreneurs in general, many have introduced special programmes for students and graduates.

5. Global Promotion

Promotion is an important component of internationalisation strategies in most countries and aggressive marketing is becoming the norm. It is the universities' promotional efforts and success in attracting international students that to a large extent determine the quantity and quality of this

migrant channel (European Commission, 2013). The European Commission (2013) has even developed a 'Study in Europe Communication Tool-Kit' to support European universities in marketing themselves more effectively internationally. The efforts in this area include marketing a country's higher education and concrete institutions, transparent quality control and evaluation systems, information about recognition of the

Poland had low levels of international students for many years. In response, the country's 40 best universities organised a consortium, which launched an information campaign. This helped to increase the number of incoming students by 30% (Kahanec & Králiková, 2011).

diplomas they offer, and setting up national agencies to facilitate and coordinate these efforts (Kahanec & Králiková, 2011). Larger countries usually have special organisations active in international education exchange (e.g. German Academic Exchange Service DAAD). Examples of policy measures include:

- Marketing campaigns promoting destinations for education and science the UK started major campaigns in 1999, Germany and France in 2000 with the latter having the goal to double student visas (Kuptsch & Pang, 2006). As part of these campaigns, all three countries made additional scholarships available for foreign students.
- Export education fairs.
- Official informational websites for international students

 such as www.edufrance.fr/ for France, www.daad.de
 and www.study-in.de for Germany,
 www.studyinsweden.se for Sweden and
 www.educationuk.org for the UK (Kuptsch & Pang, 2006).

Mitacs Globalink brings top international undergraduate students to Canada for summer research internships which give them a unique glimpse into the research and innovation landscape at Canada's universities and the spectrum of graduate studies opportunities available (Mitacs, 2012).

- Visits and talks by diplomats and government officials.
- Promoting their educational institutions in targeted source regions (Hawthorne, 2008) some EU Member States use this strategy (e.g. Finland, France, Italy, Lithuania, Luxembourg, Netherlands, Poland, and Portugal). For example, France, Luxembourg, and the Netherlands focus on BRIC (Brazil, Russia, India, and China) countries, Portugal on Portuguese speaking nations (European Commission, 2013).

6. Tailoring the Migration Package to Attract and Retain International Students

In addition to the migration package components, the Migration Policy Institute has identified for high-skilled migrants in general, fast application processing, certainty of selection, access to permanent resident and citizenship status, and strong immediate as well as long-term employment outcomes as attracting students (Hawthorne, 2008). (See more under Student Retention).

Another trend worthwhile mentioning is the increasing international cooperation, distance learning and off-shoring efforts of universities. For example, in March 2008, 120,000

Recently New Zealand waived fees for students enrolled in PhD courses. This lead to rapid increase of international doctoral student flows.

international students were enrolled in Australian distance courses (in addition to the 370,000 studying in Australia itself) (Hawthorne, 2008). For many European governments, part of wider internationalisation efforts include the creation of international university networks (e.g. joint degrees, exchange programmes or cross-border campuses), often focusing on specific target country. For example, the UK has made substantial investments in off-shore education provision, with branch campuses, twinning programmes, and educational franchises (Knight, 2006).

2.2.6. Diaspora policies

The increasing demand for highly qualified labour and the intensified competition on talents has made countries seek talents worldwide. Part of this effort has been an attempt to reach out to the nation's own emigrated human capital. Several of the developing countries who have experienced large-scale brain drain in the past are trying to invent ways of reversing it to a brain gain so that the foreign living nationals could be utilised in the interest of the development of the home country. Similarly, developed countries are trying to reinvent ways of accumulating large shares of high quality human capital. Hence, the governments of both developing and developed countries have been trying to establish and set in place different kinds of diaspora strategies and engagement policies to facilitate the competitiveness of the country. Diaspora policies are defined by Gamlen as "state institutions and practices that apply to members of that state's society who reside outside its borders" (2008). These practices can include a very wide range of activities that can be economic, political or cultural by nature. The following will only focus on those types of policies that aim to facilitate the knowledge transfer of the highly qualified diaspora.

Policy interest in the diaspora has, as Ionescu (2006) refers, triggered various kinds of initiatives from collecting data to reach-out activities, dual citizenship promotion and image promotion of expatriates. Ionescu suggests that the multiplication of organised diaspora initiatives has been the result of the affirmation of the civil society as a major development player and the increase in grass-root

initiatives. In addition, the Internet and other telecommunication means have been instrumental in this expansion, while modern transport systems are facilitating mobility.

The development of diaspora strategies involves moving from informal networks and opportunistic links with expatriates to the institutionalisation of thorough government policies and programmes. The purpose of these programmes is to make connections with the diaspora more dense, multiple and systematised (Larner, 2007). Larner highlights that while in the

Advance Australia is a dynamic and diverse global community of Australian professionals overseas committed to advancing Australia and Australians. It provides valuable services for Australian state and federal governments, Australian universities and research institutes, and international and Australian corporate partners.

past the focus on diaspora policies was primarily on attracting highly skilled migrants back to the countries of origin, states now tend to approach this aim more broadly by encouraging diasporic imagination through multiple affiliations and associations. This means that the states are trying to utilise the potential of the diaspora in various ways which does not always include the physical relocation of foreign national talents. For that reason, the diaspora policies are increasingly referring to various forms of engagement including encouraging more extensive transnational networking and partnerships, temporary returns and circular migration.

However, before starting the development of particular strategies, it is important that diasporas are properly defined and that there is data available on the size and composition of the diaspora. As lonescu (2006) writes, unless there is reliable data and information, governments cannot engage diasporas in practical programmes for development. Ionescu identifies five main levels of useful data on diasporas:

 a) Individual data – involves information on citizenship and residence, demography, location, country of destination, gender, age, qualification, occupation, length of stay. One good example is for instance, the Database of Italians Abroad, where citizens staying abroad for more than 12 months register with consulates abroad and the information is transmitted to one single national database.

- b) Collective data this type of data includes statistics on a variety of associations, networks, community organisations, clubs and societies, including non-profit, religious, political, human rights, educational, professional and scientific. Collective data offer a good insight into the level of organisation of diasporas and their priorities for action. This information is most useful for identifying partners for collaboration among diasporas.
- c) **Transnational flows** these include remittances but also other types of transfers and transnational flows, e.g. on trade and foreign direct investments driven by diasporas.
- d) **Qualitative data** this include different data on their interests, attitudes, strategies, motivation, etc. This type of data needs to be collected mainly through surveys and interviews as the statistics usually do not reveal any information about these aspects.
- e) **Gender-differentiated data** gender-disaggregated data are important for better measuring and analysing the impact of migration on development, and designing policies that correspond to the expectations and needs of diasporas. Programmes aimed specifically at men and women in diasporas can therefore be designed to address the main areas of concern of men and women and support their engagement in job and enterprise creation, health and education provisions.

lonescu concedes that collecting data on diasporas is complicated and challenging and often a major barrier to data collection on diasporas is the reluctance of diaspora populations themselves to register with home country consulates, and to respond to surveys and governmental inquiries. Ionescu believes that by linking the procedure to register to services and the defence of migrant rights to the identification of diasporas, and ensuring improved participation of such communities in registration exercises, the availability and reliability of data on diasporas would also be greatly improved.

As Meyer et al. (1997) put it, there is no model for diaspora engagement. In addition, they emphasise that a population of expatriates does not automatically shape a diaspora. It needs to become one through community building, communication, shared goals and activities. Moreover, it does not require a political decision on the increasing role and inclusion of the diaspora; it is also a question of strategic management and technical instrumentation. The strategic planning and actual inclusion of the diaspora is often complicated by their heterogeneity. Starting from the identification problems, the diaspora members have very different qualifications; it is not simple to determine their possible contributions or actual availabilities.

lonescu draws attention to the issue that clarification of country development needs, gaps to be bridged and the potential diaspora contributions should precede the development of any specific policy. In addition, the diasporas' own development agenda and objectives should be made clear.

The UNDP (2007), reviewing the brain gain strategies of various countries, has outlined several common patterns in this area:

- reasonable levels of economic and political stability preceded successful brain gain strategies;
- earlier investments in quality education and its linkage with the labour market needs are often the case behind the success stories on brain gain;
- governments' recognition of and commitment to the role of diasporas in the national development processes;

- the creation of a conducive enabling environment and designing specific policy and financial incentive packages as part of the strategies;
- Expatriate Knowledge Networks share similar organisational and administrative structures website and databases of expertise;
- the knowledge networks have links with governmental structures and process.

FIGURE 7. DIASPORA INITIATIVES GEARED TOWARDS DEVELOPMENT

Business networks

•e.g linking entrepreneurs abroad and business opportunities in home country

Professional networks

•e.g wider cultural, economic or social networks or more specfic area focused networks (medical etc.)

Scientific networks

•often based on university networks

Skills capacity

•e.g platforms for organizing and supporting recruitment and career events, operating an employment database/search engine

Community initiatives

· e.g initiatives to support local development, microenterprise and local community projects

Co-development initiatives

•e.g involving expatriate communities and members of the host country to collaborate with expatriate communities abroad

Finances

•migrants can earmark a portion of the funds they send back home for a specific project

Source: Based on Ionescu 2006, a selection of examples by the authors.

Governments have also initiated several programmes to approach the diaspora and contribute to more intense inclusion and cooperation. Many governments have also set in place special institutional arrangements (special bodies) to maintain links with expatriate communities. Ionescu provides a few examples of these very diverse bodies: the Vice Secretary of State for Nationals Abroad in Brazil; the Council for Turkish Citizens Abroad; the State Agency for Bulgarians Abroad; the Directorate for Chilean Communities Abroad; the State Secretary for Romanians Abroad, etc.

GlobalScot – its objective is to provide advice, access and aspiration and build a network of 'high achievers' around the world who will help Scotland. It takes a sectoral approach to enlisting membership and seeks out members in areas where Scotland has particular strength. It researches members and invites them to join. Membership criteria are strict and access to the database is restricted. This is not a social membership but is all about using the global network to add value to Scottish businesses.

Various authors have addressed the factors that are conducive to diaspora contributions to the homeland. Esman (1986, cited in Brinkerhoff 2006) has pointed to three types of factors:

- a) <u>Diaspora's ability to mobilise</u> which functions through the sense of solidarity and community identity. If the diaspora interacts intensively, the more likely they are act collectively and participate in some type of activities.
- b) Opportunity structures/context refers to ways or avenues to act or contribute to homeland development. These could include: availability of economic opportunities; access to necessary infrastructures (political, technical, informational/communication); host country government proactive support of the diaspora through targeted service provision for integration and potential reliance on the diaspora for input and action in support of its foreign policy vis-à-vis the homeland; a home country government that is neutral or actively solicits diaspora participation and contributions, etc.
- c) Motivation to act the motivation for diasporas to mobilise, for whatever purpose, is likely to be for the expression of their identity, for maintaining or acquiring power or other resources, or both. The incentive of identity expression can be addressed through the formation of diaspora organisations, and it can be reinforced through activity on behalf of the homeland.

The incentives could be offering dual citizenship and voting rights, facilitation of free movement, right to buy land and property, portable and transferable social rights (pension, health benefits).

Ionescu (2006) stresses that symbolic inclusion through dialogue and communication needs to be backed up by real inclusion through rights and partnerships, while technical arrangements might not be sufficient to build trust and collaboration. In addition, it is important to acknowledge the diversity of the diaspora as it is not one homogenous entity but rather consisting of individual and subgroups with various goals and strategies. Therefore, lonescu emphasises that this diversity should be fully

Kea – New Zealand's global talent community connects talented New Zealanders around the world. Members are individually relationshipmanaged to identify opportunities for them to contribute to and influence New Zealand. Has more than 20 active groups, growing sector specific focus. Global and New Zealand-based summits and workshops are held quarterly to progress priority World Class New Zealand work streams and provide networking opportunities to members and supporters.

acknowledged by decision makers, who otherwise run the risk of estranging many individuals willing to contribute to the development of their homelands. Narrow and uniform diaspora approaches hazard facilitating only one type of diaspora contributions and failing to harness the full potential available in diasporas. Reviewing the experience of different diaspora programmes, Ionescu concedes that a commitment at a high institutional level is one of the keys to successful policy implementation. Programmes with significant leadership can achieve good results despite limited finances.

The UNDP (2007) has developed a checklist for action agenda regarding brain gain initiatives. It has been compiled based on the literature and country experiences reviewed to provide a starting point for countries aiming to design or revise their brain gain strategies. The UNDP recognises in their overview that there lacks comprehensive empirical evidence on return migration and the benefits from brain gain. However, the experiences of several countries do point to the huge potential of reversing the brain drain tendencies and the potential contribution to capacity development by utilisation of foreign living nationals. Ionescu (2006) similarly to UNDP has also provided policy recommendation on developing effective diaspora policies – the report outlines a detailed policy roadmap to guide policy-makers in their policy development. According to Ionescu, the starting point should be the definition and identification of diasporas. This should be followed up by the identification of key development priorities and concrete projects to build a common agenda with diasporas. The next step should be the identification of partners among diasporas (and recognising their agenda) and how they could be of value to the development agenda of the country. It is

recommended to adopt a sector-based approach in outlining the needs and skills of diasporas and then providing sector-specific approaches. The measures targeting diaspora contributions should take into account proper provision of incentives to motivate them to participate and contribute. The major obstacles such as structural, macro and microeconomic settings, cultural, social (education, health and housing) and political contexts that might hinder participation and contribution have to be analysed carefully. After the analysis of all relevant aspects, the most appropriate policy tools should be chosen and implemented. Policy implementation should be coupled with appropriate resources, government commitment, knowledge sharing and proper evaluation. Since diaspora policies are a horizontal policy field, attention should be paid to policy coherence across different areas of policymaking.

FIGURE 8. CHECKLIST FOR ACTION AGENDA: BRAIN GAIN INITIATIVE

Engage partners and build consensus

- Identify existing formal or informal Diaspora networks/association (Hometown Associations, knowledge networks, etc.)
- Gauge the relative concentration of specialization, interest, type of diaspora (e.g., IT specialists of Indian & Chinese origin in US)
- Explore existing outreach mechanisms (e.g., the relationship between the Diaspora associations and the diplomatic mission in the host countries)
- Involve academia, think tanks, other members of the knowledge industry

Assess capacity assets and needs

- Understand the structure, skill compositions and linkage with home country institutions (both state & non-state)
- Assess the existing/planned cooperation frameworks, incentive structures and Information sharing mechanisms

Define capacity development strategies

 Define necessary responses in relevant policy areas e.g. quality education and linkage with labour market, R&D, salary structure and incentive mechanisms, immigration and duty/tax related policies and regulations

Implement strategies

- ensure appropriate legal and institutional arrangements in place to facilitate 'Brain Gain'
- define the composition and mandate of coordinating bodies and other implementing bodies
- work programme and budget for implementation body defined and approved
- support the establishment of advisory team/committee to oversee 'Brain Gain' programmes

Monitor and evaluate strategies

- establish national monitoring mechanism to review 'Brain Gain' initiatives
- conduct regular monitoring and reporting activities
- ensure 'Brain Gain' initiative results fed into appropriate national bodies

Source: UNDP 2007.

Ireland carried out a review of other countries' diaspora policies and its main lessons in order to be more informed in its own diaspora policy revision. The report by Aikins, Sands and White (2009), outlined several important key lessons that need to be kept in mind when implementing diaspora policies in any country:

- 1. Diaspora initiatives are easy to start but it is difficult to maintain momentum unless concrete results materialise.
- 2. There tends to be no shortage of interest and conferences on diaspora issues, but without specific 'takeaways' or 'projects' the initial enthusiasm dissipates and runs out of steam.
- 3. Countries wrongly assume that their diaspora is a fairly homogenous and tightly knit group. In fact the network tends to be diffuse and diverse, with a range of economic, social, and ethnic characteristics. Group characteristics become further differentiated through individual experiences. Such variety requires tailored strategies.
- 4. Quality is more important than quantity. Many diaspora initiatives have failed because they did not identify the highly motivated individuals who were willing to stick with the initiatives for a long time, battling against the odds and lending creditability to it.
- 5. The exceptional people required to make diaspora strategies work tend to be busy, impatient and project-driven. They need goals with measurable outputs. They are happy to make the commitment in terms of time and money but do not want to do it alone.
- 6. Return of migrant policies have largely failed. Governments therefore have begun to explore new policy measures that encourage expatriates to participate in their countries of origin without requiring them to return home. These measures have included active mobilisation of expatriates through initiatives such as: investment conferences; industry and sector-specific web links; the creation of expert databases; direct appeals by national leaders; short-term visits by academics, mentors and industry specialists; and the explicit targeting of financial, philanthropic, market and technical expertise.
- 7. Many existing diaspora organisations were set up to look after local interests in the host countries and are not in a position to significantly influence development in the home country although they often feel they ought to have a role. This can lead to disappointment if they are not involved.
- 8. The key to successful websites is 'eyeballs'. 'Build it and they will come' does not apply people have to have good reason to make repeat visits to a site.
- 9. Monitoring change is important but difficult.
- 10. There is a tendency and understandable desire to announce initiatives in this area with great fanfare without waiting to see if they are successful.
- 11. Observations would suggest that the government is best served in the role of a facilitator, rather than implementer. As countries around the world attempt to develop vibrant links with their respective diasporas, governments have a key role to play in the early stages of development but the lessons from other successful strategies emphasises the importance of dynamic individuals and organisations at home and abroad.

2.3. Talent retention policies

Though some talents are only looking for temporary migration, most are looking for longer term or permanent location change. Therefore, retention policies are an integral part of talent attraction. Some Middle Eastern countries had or have preference to "attract and replace", but this puts many migrants in a disadvantaged position concerning their social rights (Harvey, 2014). Harvey (2014) points out that in the long run, as talent war intensifies, migrants will prefer locations that enable them to integrate better if all other things are equal. Therefore, "attract and retain" approach has become more widespread. Furthermore, retaining and attracting talent will increasingly be mutually reinforcing: if a country cannot attract it, it will not be able to retain its own domestic talent too (Morehouse & Busse, 2013).

Most foreign workers who will eventually seek permanent residence enter the host country on a temporary visa (Papademetriou & Sumption, 2011a). This is even true for countries where permanent residence is available as an initial route of entry because temporary visas can often be obtained faster and can have lower eligibility criteria. For example, 'two-step migration' became the norm in New Zealand by 2005 with 88% of skilled migrants first entering the country as students or temporary workers (Hawthorne, 2008). This makes temporary-to-permanent pathways an important tool for both attracting and retaining talent.

However, there are some talent segments that look for cyclical or temporary migration and should not be target of retention measures (e.g. workers in construction sector, most researchers). In general, talents are attracted to certain location by opportunities but in talent retention secondary factors, e.g. living conditions, start to play a larger role and so do family considerations (Harvey, 2013). To increase retention, governments have focused on selecting migrants based on adaptability potential and provide integration support to enable them take advantage of the opportunities, overcome hardships and become full members of society.

2.3.1. Temporary-to-Permanent Visa Pathways

A simple, clear, and transparently applied process of transition to permanent status is a strong asset in attracting and retaining skilled workers (Papademetriou et al., 2008b). Temporary visa¹⁵ holders represent a rich pool from which to choose permanent immigrants, since workers on temporary visas are afforded the time and opportunity to build up language skills, valuable host country work experience, and local contacts within the country, and demonstrate the commitment to play by the rules (Papademetriou & Sumption, 2011a). Australia has been a leader in developing such temporary-to-permanent pathways, as have New Zealand, Sweden, the UK and, increasingly, Canada. The US made a crucial innovation in this regard in 1990 with the creation of the H-1B visa for foreign professionals (Papademetriou & Sumption, 2011a).

One should differentiate two categories here: workers and students. The experience of Canada, Australia and the US shows that the highly skilled often initially migrate as students rather than workers (Doomernik et al., 2009). Therefore, study-migration pathways will remain highly attractive for potential migrants.

-

¹⁵ Three main visa types are: temporary, provisional and permanent residence.

Offering up-front permanent residence is most common in traditional immigrant-settlement countries such as Australia and Canada. However, they have greatly expanded temporary-to-permanent pathways. The US also admits relatively small numbers of newly arriving employment-based immigrants on permanent visas but the vast majority of workers enter on a temporary visa first (Papademetriou & Sumption, 2011a).

The 'provisional status' visas that combine relative certainty with flexibility are increasingly common and expected to become the dominant work visa model (Papademetriou et al., 2008b). It will be the minimum condition for attracting highly skilled people. However, it can be expected that other countries besides traditional immigrant countries offering initial permanent resident visas will offer this route more often for the most sought-after immigrants (Papademetriou et al., 2008b). ¹⁶

2.3.2. Retaining international students

Many countries have taken a "train and retain" approach towards international students (MPG, 2012). These efforts are aimed at fulfilling the needs of the local labour market. However, there are other countries that are focusing on attracting international students mainly for revenue reasons (e.g. Singapore's vision of becoming a Global Schoolhouse) (Ng, 2013). When analysing the practices of other countries policy-makers should distinguish for which goal the measures are targeted.

A recent survey of international students in five EU countries showed that the students who intended to stay after graduation were younger, often had worked during their studies and were less likely to have children (MPG, 2012). Furthermore, students in science and technology-related fields were more likely to plan staying than those studying social sciences, art or humanities. In line with what we know about the Millennial Generation, only 10% plan to stay more than 5 years. The main reason for staying

Access to postgraduate stay is strong with an approval rate of 99% for former international students, unless they fail health or character checks. Australian citizenship is available within four years and the students can count study periods to qualify. Six-month and 18-month employment outcomes are strong (Cully, 2011).

after studies is the career – to gain a few years of international work experience.

One key element in retaining students is the study-migration pathways that remain an attractive instrument for many OECD governments who compete to attract and keep the best students (Hawthorne, 2008). A study by the Migration Policy Group (2012) lists six types of policy measures the EU Member States and other countries have implemented in the recent past to promote the retention of international students:

- post-study 'job-search' schemes allowing students to stay in the country after graduation to seek a job,
- the general streamlining of procedures for obtaining student visas and highly skilled work permits,

There are also internationalisation efforts for the purpose of providing a top quality higher education through diverse student body etc.

42

¹⁶ On the other hand, recently several countries (e.g. the Czech Republic, Japan and Spain) have introduced measures to encourage unemployed migrants to return home by offering a grant. However, experience shows that these schemes have a limited impact (http://www.oecd.org/general/keepdoorsopentomigrantworkerstomeetlong-termlabourneedssaysoecd.htm).

- taking into account the study years when assessing eligibility for acquiring citizenship/longterm resident status,
- the easing of work restrictions during the study and post-study periods,
- introducing new visa categories specifically designed to retain international students,
- providing privileges for graduates when accessing certain visa schemes (e.g. lower minimum income requirements, waiving labour market tests).

Another element is the growing emphasis on the integration of foreign students. For example, countries have taken special steps to retain students by (European Commission, 2013):

- establishing study programmes advantageous to the national economy (e.g. English language degree programmes based on labour market needs, like nursing in Finland and fields of study considered strategic to the national economy in Poland);
- 2. establishing work training programmes that provide opportunities to international students (Finland);
- 3. introducing mentoring programmes that provide third-country nationals a mentor within the business community (e.g. the 'Mentoring for Migrants' programme in Austria which aims at facilitating the efforts of migrants to find employment);
- 4. providing career services tailored to international students by universities (e.g. the Netherlands).

Compared to the traditional immigration countries, the retention polices of EU Member States have so far put more emphasis on promoting the initial entry of international graduates into the labour market and not necessarily their permanent settlement (MPG, 2012). However, the recent introduction of the Blue Card may make the longer term settlement of former international students easier (MPG, 2012).

However, retention efforts carry some risks too. For example, in the UK and Australia a lot of international students attended less selective colleges or even 'diploma mills' that served as a gateway to employment (Papademetriou & Sumption, 2011a). Then again, the statistical evidence about the misuse of the student route to immigration to the EU is very limited – while the majority of Member States reported some incidences of abuse, it was considered a big problem in only three Member States (EMN, 2012). The review of skilled migration outcomes in Australia revealed the following risks (Cully, 2011):

- academic admission and progress standards suffered as a result of an institutional conflict of interest (i.e. relaxing the admission standards to maximise tuition revenue versus raising the standards to ensure high quality student body);
- post-arrival English skills did not improve as expected;
- rapidly emerging private training organisation providers, particularly in vocational education, lacked adequate surveillance or quality control;
- many international students were at serious risk of academic segregation due to a high level of cultural and linguistic enclosure.

Based on these results, the government introduced major policy changes to reduce the capacity of international students qualified in low calibre trade sector courses to participate in skilled migration and re-introduced English testing.

2.3.3. Integration policy

Integration policy has a vital role in talent retention. The approach, pioneered by Denmark and the Netherlands during the 1990s, which requires immigrants to pass an exam to prove they have integrated, has gained popularity in a growing number of EU Member States (Doomernik et al., 2009). To facilitate integration language skills are often tested before giving a visa (Papademetriou et al., 2008b). For new immigrants Austria, Germany, the Netherlands, Norway and many other countries require and provide hundreds of hours of language instruction (Papademetriou & Sumption, 2011a). Canada and many European countries have mentorship, career development, and workforce-training programmes with the goal to address immigrants' specific needs (Papademetriou & Sumption, 2011a).

Overall, OECD countries can be divided into two groups based on their recent steps in integration policy (OECD, 2013). First, there are countries with longstanding immigration presence, with integration policies cutting across most economic and social life (e.g. Australia, Canada and Germany). Second, many countries with smaller migrant population have taken first steps in introducing a unified integration policy (e.g. Czech Republic, Mexico and Russia). Furthermore, the recent financial crisis has pushed countries in two opposite directions: some have continued to invest heavily in integration (e.g. Nordic countries, Germany, Australia), others have cut back considerably (e.g. Greece, Spain and Portugal) (OECD, 2013).

Some of the integration strategies put emphasis on reducing potential social conflict. However, more importantly, these policies should also be targeted to maximising the potential of foreign workers and emphasise skills recognition, training, education, language learning, etc. (Knight, 2006).

Integration measures potentially cover a broad and diverse range of policy fields ranging from family reunion to labour market mobility to political participation. In OECD countries the general trend has been towards paying more attention to labour market in integration efforts (OECD, 2013). Here, one major issue that countries face in attracting, selecting and retaining skilled migrants is the assessment of foreign qualifications (OECD, 2013). For example, in Europe the skill recognition is a major problem given that the over-qualification rate for non-EU immigrants is more than twice the rate for nationals (46% versus 19%) (EWSI, 2013). ¹⁸

In Madrid, the Association for the Integration of Immigrant Professionals (INPROIN) works with immigrants who have qualifications from third countries and tries to make the recognition process as smooth as possible. Their activities range from information workshops on the degree validation process for migration officials to personal interviews with migrants to advise on diploma validation, labour market situation etc. to telephone help line (EWSI, 2013).

Here, countries are taking steps to overcome the problems. Steps include, for example, establishing one-stop-shops (Portugal), launching information sites (Austria and Germany), taking steps to counter the horizontal and vertical fragmentation of system of institutions in charge of validating qualifications and competencies (Austria), including establishing new special bodies (Sweden), etc.

¹⁸ There are, of course, other reasons too like employers' opinions of migrant workers, lack of information about job opportunities, etc.

(EWSI, 2013; OECD, 2013). However, in many countries there is still room to improve these services (Sumption, 2013).

Four EU Member States (Finland, France, Netherlands and Portugal) also have a highly developed validation system for non-formal and informal learning. The EU has urged its Member States to establish national systems for the validation of non-formal and informal learning by 2015 (EWSI, 2013).

2.4. Conclusion

The global talent war will become more intense over the next decades with more countries entering the talent attraction game and more talents 'turning' global. Countries will have to rethink and redesign their talent policies. The hardest battle will be for the best and the brightest.

Though the talent attraction game started with the removal of some restrictions on migration, the frontrunner countries have now turned to proper attraction measures and provide incentives for global talents. Governments have realised that today the talents have the upper hand in location choice. At present, the battle is about the total immigration package (or value) that a country can offer to the talent and its family. To win this battle, these policy measures have to be clearly targeted to specific talent pool segments (e.g. scientists, IT experts, youth, etc.). Highly attractive potential talents like super-skilled, entrepreneurs and students usually get special treatment. In fact, for many countries the internationalisation of higher education forms a large part of talent policy.

In general, demand-driven and employer-led systems have become more prevalent but governments still regulate talent flows to protect the jobs of native workers. This shift away from supply-driven models reflects the difficulties (and costs) in capturing and assessing the skills employers are looking for by formal qualifications. Secondly, it has arisen as a response to 'just-in-time' hiring practices and fast changing needs of companies. In the future, the dominant models will most likely be hybrid systems mixing the demand and supply-based approaches with many governments taking a more strategic look at talent policy. One of the key elements of this is the temporary-to-permanent residency pathway through the so-called provisional visas.

Governments also put higher emphasis on talent retention. There are two main strands of measures. First, offering students the so-called two-stage migration opportunities. Second, selecting migrants for adaptability and providing integration support so that migrants can take advantage of opportunities, overcome problems and become part of the society.

With the war for talents intensifying, governments are more and more starting to look for ways of attracting their own foreign living talents back to the homeland or utilising their knowledge in the interests of the home country. These diaspora policies do not necessarily include straight relocation promotion but entail a strategic approach to diaspora inclusion and cooperation that benefits the development of the country. Successful diaspora policies tend to adopt a sector-based approach in outlining the needs and skills of diaspora and then providing sector-specific approaches. The measures targeting diaspora contributions should take into account proper provision of incentives to motivate them to participate and contribute.

Talent policies are in constant change and there is a lot of experimentation. The basic principles of success for government are: being in constant discussions with business community about their needs, knowing the nature of global activities of the companies and understanding the key decision drivers of potential talents. Regardless of the type of talent admission system a country chooses,

governments face the challenge of creating clear, predictable and well-enforced rules that employers can understand and observe.

3. The context of talent policy in Estonia

This chapter takes a look at how Estonia compares to the other Baltic Sea countries in terms of relevant talent policy and related indicators. The following will cover indicators from the overall living environment to demographics, migration, labour needs and working abroad. Data from different international and local databases are used to illustrate the issues.

3.1. Estonia in the BSR context

In view of the recently published OECD Better Life Index, which compares the well-being across countries based on 11 topics, Estonia scores high in education and in environment but also comparatively well in safety and work-life balance (see Figure 9). Similarly to Poland and in contrast to other BSR countries, Estonia lags behind in income, overall life satisfaction and health aspects. While the education indicator is significantly more positive for Estonia compared to Poland, it falls behind in civic engagement, being more similar to Germany in this aspect.

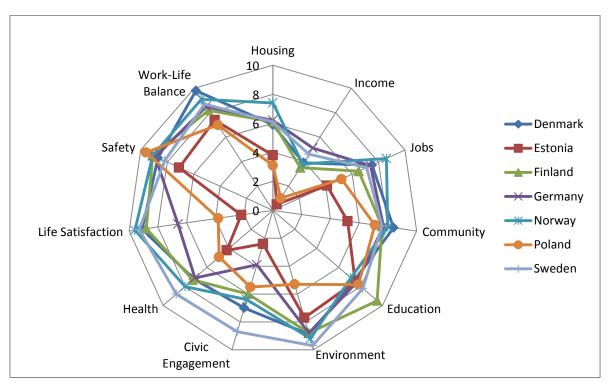


FIGURE 9. OECD BETTER LIFE INDEX (SCALE: 0 – LOWEST INDEX SCORE, 10 – HIGHEST)

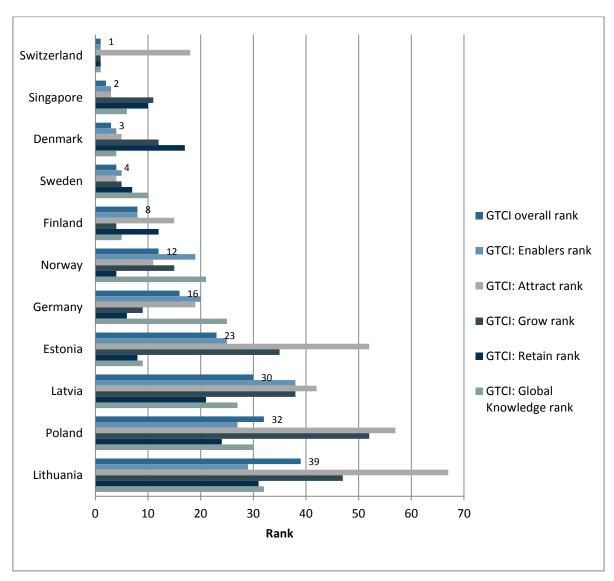
Source: OECD, http://www.oecdbetterlifeindex.org/.

Overall, it can be seen that the BSR countries other than Estonia and Poland tend to rank very high on the OECD Better Life Index scoreboard. Germany stands out with its average life satisfaction and comparatively lower civic engagement while leading the income section. While the Nordic countries and Poland score rather low in the overall OECD scale (mostly due to the high income level of the leading US), their scores are substantially higher than those of Estonia and Poland. Consequently, it can be seen how the Baltic Sea Region is made up of two contrasting regions — on the one hand the Nordic countries and Germany providing world-class living conditions both in terms of objective criteria (jobs, education, safety, health, environment) as well as subjective criteria (Germany to a

lesser extent); on the other being Poland and Estonia (and mostly likely other Baltic countries) with their low income and life satisfaction scores, outlining a situation where the comparatively well-developed education, safety and work-life balance systems are not enough to provide positive life environments.

Recently, INSEAD has compiled a Global Talent Competitiveness Index (2013) to assess comprehensively what countries do to produce and acquire talents (different inputs) and the kind of skills that are available to them (different outputs). As expected, the more affluent Nordic countries rank higher in the index compared to the Central and Eastern European countries (see Figure 10). The top ranking countries — Denmark and Sweden — are great at providing a very facilitative and supportive environment (regulatory, market, business) for talents; additionally, they are rather good at attracting and increasing highly qualified labour.

FIGURE 10. BSR COUNTRIES' RANKINGS IN THE GLOBAL TALENT COMPETITIVENESS INDEX 2013 (OUT OF 103 COUNTRIES)



Source: INSEAD 2013.

Estonia ranks 23rd overall in the country list. The overall context (enablers) is rated high (rank 25), except the country's labour market flexibility. The assessment give to the talent attraction is rated low (rank 52), the country has especially low scores in FDI inflow, qualified labour inflow, tolerance of minorities and immigrants. At the same time, the local talent growth aspect is rated comparatively high (rank 35), although the scores are low in international student inflow and university rankings. The local talent retention context is rated very high (rank 8), while the labour and vocational skill are evaluated to be comparatively high (rank 24). The global knowledge, i.e. the outcome of talent policies, was rated again very high (rank 9) for Estonia as the country has a highly educated and qualified labour force, significant innovation output and new product entrepreneurial activity. Therefore, as can be seen, Estonia needs to work most on aspects of talent attraction which in the closeness of the successful Nordic countries is all the more difficult and challenging as these countries tend to top the OECD Better Life Index rankings.

3.2. Demographic changes

During the last decade, Estonia has witnessed rather dramatic demographic changes. In addition to the overall decline in the population, the more severe changes have been occurring in different age groups. As a result of declining birth rates the share of younger generations has been decreasing and older age groups are gaining significance, creating increasing demographic labour market pressure on the labour market. At the beginning of the 2000s the share of young people entering the labour market in the next ten years was greater than the share of aged populations leaving the labour market (demographic labour pressure index, see Figure 11), although it has demonstrated negative tendencies ever since. By 2013, the index had dropped to 0.76 – meaning that for every thousand labour market leavers there is only 760 new replacements available – creating financial pressure on the state social security and tax system. Since the share of older age groups is still on the rise and the share of retirees is expected to increase further from the current 20% to above 30%, the burdens on the social security system become increasingly more severe, threatening the sustainability of the system (Aaviksoo et al., 2011).

1 600 000 1,40 1 400 000 Total population 1,20 number (including pressure index migration) 1 200 000 1,00 Population aged **Total** population 1 000 000 5-14 0,80 800 000 0,60 Population aged 600 000 55-64 0,40 400 000 Demographic 0,20 200 000 labour pressure index 0 0,00 2005 2006 2008 2009 2007

FIGURE 11. POPULATION AND DEMOGRAPHIC LABOUR PRESSURE INDEX, 2000–2013

Source: Statistics Estonia.

Increasingly, declining populations is not a cross-cutting problem in the Baltic Sea Region. Comparing the data for 2001 and 2012 (see Figure 12), it is apparent that the demographic decline is worsening in the Baltic countries (especially Latvia) while the Nordic countries (especially Norway) are witnessing significant growths. The crude rate of population change (depicted in Figure 12) is the ratio of the population change during the year to the average population in that year expressed per 1,000 inhabitants. It can be seen that in 2012 the population in Norway increased almost the same magnitude as it fell in Latvia: the former gained 13 new inhabitants per 1,000 inhabitants while the latter lost 12. Interestingly, Poland has not experienced almost any changes in the last decade.



FIGURE 12. CRUDE RATE OF POPULATION CHANGE PER 1,000 INHABITANTS, 2001 AND 2012

Source: Eurostat.

As Figure 13 depicts, the population changes are partly explained by the natural population changes. In the Baltics, the number of deaths has been increasingly greater than that of live births, while in contrast are the Nordic countries. The Nordic countries have been successful in maintaining and increasing population size due to the fact that births have outnumbered deaths. The contribution and role of migration in population changes is discussed later.

Latvia Lithuania -2,3 Germany -1,1 Estonia 2012 Poland Denmark **2001 Finland** Sweden -0,3 3,6 Norway 2,8 -8 -6 -4 -2 0 2 4 6

FIGURE 13. NATURAL POPULATION CHANGE (LIVE BIRTH MINUS DEATHS) PER 1,000 INHABITANTS, 2001 AND 2012

Source: Eurostat.

While the Baltic Sea countries differ greatly in terms of changes in population size, population aging is a common problem in all of the countries. Figure 14 compares the Baltic Sea countries in terms of oldage dependency ratios, referring to the projected number of persons aged 65 and over expressed as a percentage of the projected number of persons aged between 15 and 64 (active labour force). As the Eurostat data reflect, the countries' dependency on old aged people is expected to double in the next 50 years. While currently the share of people above 65 is 20–30%, it will reach 50–70% in some countries. The countries most threatened by old-age dependency are the Baltics, Poland and Germany. The least affected countries are Norway and Denmark where the comparative share of younger populations create less pressure on the labour market and the state systems.

Poland 64,59 Norway 42,97 Lithuania Denmark 43,52 **2010** Estonia **2020** Latvia **2060** 67,99 36,18 **Finland** Sweden Germany 59,89 0 10 20 30 40 50 80 60 70

FIGURE 14. PROJECTED OLD-AGE DEPENDENCY RATIO, 2010-2060 (%)

Source: Eurostat.

3.3. Increasing demand for highly qualified labour

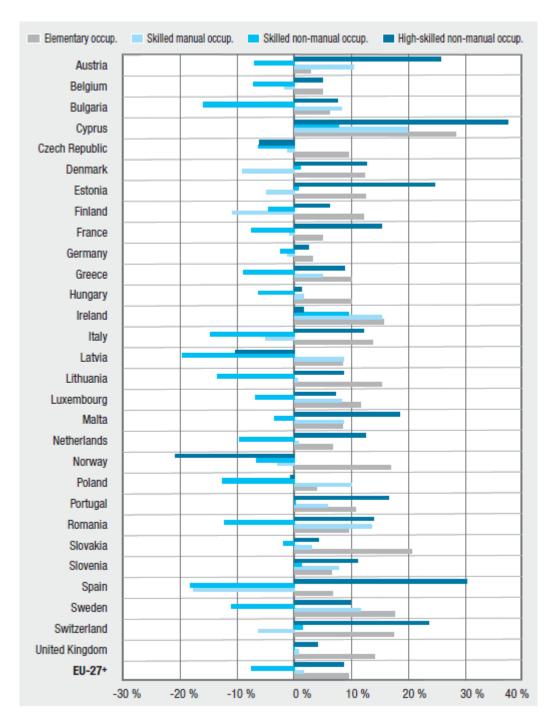
In the context of demographic decline and population aging that bring along serious labour force replacement demands, the overall demand is shifting from low-skilled to high-skilled labour - a trend evident across Europe. CEDEFOP (2010) has projected that the demand for highly qualified people will rise by almost 16 million in Europe while the demand for people with medium-level qualifications will increase by more than 3.5 million. However, the demand for low-skilled workers is expected to decrease by around 12 million. Between 2010 and 2020 the share of highly qualified jobs is expected to increase by 6 percentage points overall (from 29% to 35%) (CEDEFOP, 2010). The most recent labour force forecast by the Estonian Ministry of Economic Affairs and Communication (2012) has projected that by 2019 compared to 2009-2011 the largest increase in labour demand will appear among the professionals (increase by 14,000 employees) and skilled workers (increase by 13,300 employees). The highest demand is concentrated in the manufacturing, wholesale and retail trade sectors. However, the forecast has also identified two other important groups of sectors where significant future needs are emphasised. Labour demand is expected to grow at above average rate in the sectors that provide high added value (ICT, manufacturing of machinery and electronics, scientific and technical activities) and are in increasing demand due to population aging (health and social work activities) (Estonian Ministry of Economic Affairs and Communication, 2012).

Meriküll and Eamets (2009), analysing the labour force needs in the context of attaining the objectives of a knowledge-based society (as outlined in the Estonian R&D strategy for that time), highlight that there is a significant demand for increased number of highly skilled (tertiary education) labour. The authors stress the importance of accelerating the provision of labour in the fields critical to the advancement of the high technology sector especially by increasing the number of higher education graduates in the fields of exact sciences and engineering (Meriküll & Eamets, 2009).

Labour shortages are also directly felt by small and medium-sized enterprises (SMEs) in Estonia, as a recent study reflects. According to the representatives of SMEs, only 8% agreed that finding an employee for an executive position is easy (vs 27% in 2005). Furthermore, it has become increasingly difficult to fill positions of mid-level specialists and technicians (Kaarna et al., 2012). According to PricewaterhouseCoopers CEO survey (2013), 76% of Estonian CEOs disagree that the government has been effective in helping create a skilled workforce and 85% are concerned about the availability of key skills.

As mentioned earlier, the shortage of highly qualified labour is a large-scale problem across the globe, including Europe. Similarly, this tendency is apparent in the BSR where most of the countries are in greater need for highly skilled labour. Figure 15 below compares the EU countries in terms of the projected changes in the occupational structure. With the exception of Norway, Latvia and Poland where CEDEFOP forecasts decreases in the need for highly skilled labour, all other countries are facing labour shortages in highly qualified employee sectors and would need significant additions to their current manpower pool to meet the needs of the economy. Estonia, with its 25% projected increase in high-skilled occupations, stands out among the BSR countries. Denmark reflects the second highest projected change with a 12% increase.

FIGURE 15. PROJECTED CHANGE IN OCCUPATIONAL STRUCTURE BY COUNTRY, 2010-20 (%)



NB: Changes in employment (NA-based estimates). Source: Cedefop (IER estimates based on E3ME and EDMOD).

3.4. Migration patterns

Emigration

According to Statistics Estonia, emigration has been on the rise since 2010 (see Figure 16 below). Before 2010 emigration remained below 5,000 per year, although it rose rather significantly in 2010 and even more so in the following years. The largest contributors to the change have been people with Estonian citizenship, for other groups the changes have been less evident. In 2007, 3,940 individuals with an Estonian passport emigrated to other countries. This figure increased by 50% by 2012. When reviewing official migration data, it needs to be kept in mind that this could be underestimating the actual migration flows (e.g. Krusell, 2013). The fact that there are no official borders between the EU countries complicates the monitoring of actual mobility and hence it is believed that there are more people changing residence than those officially claiming to do so.

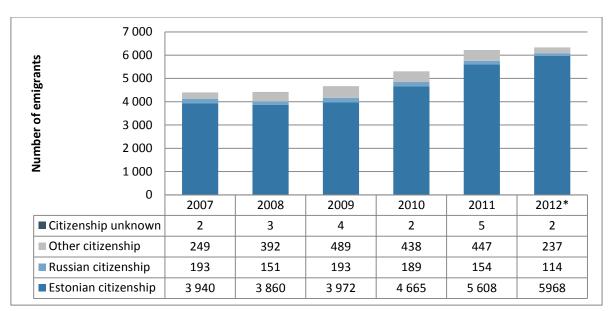


FIGURE 16. EMIGRATION 2007-2012

Source: Statistics Estonia.

Until 2011, the increases in emigration have been taking place in all age groups, i.e. the migration has not been brought about by remarkable increases in certain specific age groups. Figure 17 reveals how the proportions of age groups have remained rather stable across the years with the exception of 2012 when there appears to be some more dynamics. In 2012, the share of the youngest age group increased while the other younger age group revealed somewhat lower migration patterns. Since in 2014 Statistics Estonia changed its data collection and calculation methods for 2012 and onwards, the changes might be to some extent attributed to different data collection methods. Otherwise, the data suggests that younger age groups have been emigrating with children more than before. There have not been any major differences between males and females either; both of these groups have revealed rather similar migration patterns.

^{* 2012} emigration data was corrected in 2014 as a result of the Population Census and change in data collection methods (moving from events-based calculation to individual-based calculation).

Table 3 provides an overview of emigration destination countries for 2007–2012. Taking into account the geographical location, sociocultural similarity and the differences in the level of economic welfare, it is not surprising that Finland is by far the most popular destination for Estonian residents. In 2012, the number of people migrating to Finland increased by a third. However, the significance of the United Kingdom as a destination country has also remarkably grown since 2007, peaking in 2011. However, data for 2012 reveals a decline. All countries except Finland demonstrate a decline for 2012. As mentioned earlier, this could be partly related to change in data collection but is also affected by other factors (e.g. increasing attraction of Finland or family emigration).

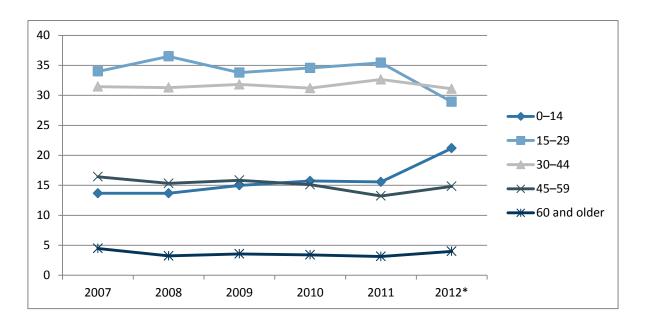


FIGURE 17. EMIGRATION 2007–2012, SHARE OF MIGRANTS BY AGE GROUPS, %

Source: Statistics Estonia.

TABLE 3. EMIGRATION 2007–2012 BY DESTINATION

	Sweden	Germany	Finland	UK	Ukraine	Russia	Countries outside EU
2007	108	206	3,163	164	32	221	95
2008	152	203	2,743	409	29	211	141
2009	139	214	2,733	409	32	270	178
2010	105	231	3,475	260	73	246	282
2011	167	282	3,597	779	55	245	284
2012	110	185	4,883	365	33	167	105

^{* 2012} emigration data was corrected in 2014 as a result of the Population Census and change in data collection methods (moving from events-based calculation to individual-based calculation).

Source: Statistics Estonia.

^{* 2012} emigration data was corrected in 2014 as a result of the Population Census and change in data collection methods (moving from events-based calculation to individual-based calculation).

Figure 18 below illustrates the contrasting emigration situation in the Baltic countries versus the other BSR countries. In Lithuania and Latvia in particular, the emigration of people has skyrocketed in the last few years, while in other countries the emigration has rather decreased (Norway, Germany, Denmark), stayed the same (Finland) or increased at a more moderate rate (Sweden).

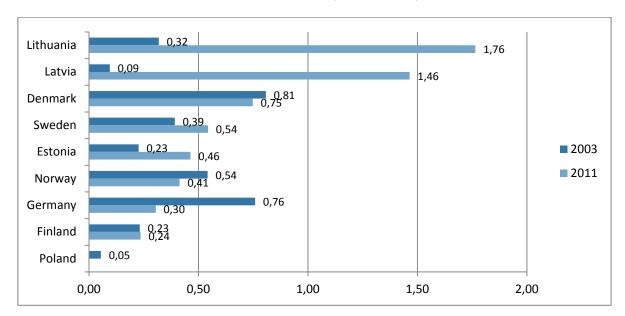


FIGURE 18. EMIGRATION AS A SHARE OF COUNTRY POPULATION, 2003 AND 2011, %

Source: Eurostat; authors' calculations.

Immigration

In Estonia, immigration was rather stable during 2007–2009 (see Table 4). In 2010, immigration dropped rather significantly below three thousand. After rising back to the 2007–2009 level in 2011, it again demonstrated a significant fall in 2012. The largest share of immigrants originate from Finland and Russia, while other countries are represented to a lesser extent.

TABLE 4. IMMIGRATION 2007–2012 TOTAL AND BY COUNTRY OF ORIGIN

	Total	Sweden	Germany	Finland	UK	Ukraine	Russia	Countries outside EU
2007	3,741	99	179	1,468	12	7 184	651	277
2008	3,671	112	184	1,151	12	8 192	798	370
2009	3,884	114	161	1,214	13	3 237	757	420
2010	2,810	74	70	1,020	10	8 112	622	240
2011	3,709	55	58	1,149	11	8 272	1,200	428
2012	2,639	54	49	509	16	5 206	852	385

^{* 2012} immigration data was corrected in 2014 as a result of the Population Census and change in data collection methods (moving from events-based calculation to individual-based calculation).

Source: Statistics Estonia.

The immigration overview changes when the new residents are viewed in terms of their country of birth (see Table 5). A large share of immigrants have Estonian origin (they were born in Estonia) and this number has grown during the last few years. A decline was revealed in 2012 but since then data collection methods by Statistics Estonia also changed, so there are also data comparison issues. In 2011 immigrants born in Estonia comprised 41% of all immigrants for that year. This shows that a large share of people coming to Estonia are actually not newcomers but rather returners. According to Statistics Estonia (Tammur & Meres, 2013), the returnees are mostly younger people. The majority are in their twenties and thirties. The age distribution of new immigrants is more balanced with the majority still being in the 24–40 age group. However, the share of under one-year-old children is much higher among the new immigrants. The returnees arrive mainly from Finland, the United Kingdom and USA, 70% of all returning migrants are from EU countries (Tammur & Meres, 2013). The new immigrants mostly originate from Russia (one-third), followed by Finland and Ukraine. Interestingly, the data shows that Russia stands out as a country of new immigrant origin for people in their seventies. Tammur and Meres attribute this to the reunification of families.

The overview of the socio-economic background of the returnees (Tammur & Meres, 2013) reflects that people migrating back to Estonia are more often than average highly educated and their command of foreign languages is better. This reflects that the returnees are contributing to the national talent pool. Under 40-year-old people are more often than average also single.

TABLE 5. IMMIGRATION 2007-2012 BY COUNTRY OF BIRTH

	Estonia	Russia	Finland	Other country	Country unknown
2007	1,296	273	820	948	404
2008	1,184	675	316	1,416	80
2009	1,250	672	317	1,595	50
2010	1,188	534	167	881	40
2011	1,539	1,085	56	991	38
2012*	890	758	47	788	156

^{* 2012} immigration data was corrected in 2014 as a result of the Population Census and change in data collection methods (moving from events-based calculation to individual-based calculation).

Source: Statistics Estonia.

Figure 19 below depicts the dynamics in valid temporary residence permits in Estonia during the last six years. Overall, the number of valid permits has been slightly declining – in 2007, there were twenty-six thousand valid permits while in 2013 this had dropped to twenty-three thousand. The largest share of all valid temporary permits is made up by permits provided under a foreign contract. This figure has dropped from almost 80% to below 60% but still this type of residence permit composes the largest share of foreigners in Estonia. However, it is important to note that this large group of people cannot be deemed 'proper' foreigners as this type of permit has been mostly provided to the so-called stateless citizen in Estonia (no citizens of any country; former residents of the USSR) who are permanently living in Estonia. The second largest share of temporary permits is made up of permits provided for family reasons (increasing from below 20% to almost 30%). The third most popular type of permits has been those for work purposes (around 10%). The significance of educational, entrepreneurship and legal income permits has been very marginal.

90 80 70 60 Family 50 -Work 40 Entrepreneurship 30 Education 20 Legal income 10 Foreign contract 0

FIGURE 19. SHARE OF ALL VALID TEMPORARY PERMITS BY REASON 2007-2013, %

Source: Police and Border Guard Board.

Table 6 addresses more specifically the issue of immigration of a highly skilled labour force into Estonia, providing an overview of the provision of temporary first permits for specific target groups in 2007–2012. It can be seen that the immigration of highly skilled people has been gradually on the rise and the overall number of this type of immigrants has increased by 50% since 2007. The largest contributors to this rise have been students and other people immigrating for education purposes (from 286 in 2007 to 516 in 2012) as well as various experts and consultants (from 29 in 2007 to 104 in 2012). However, there is also a negative trend among those migrating for entrepreneurship reasons – while the number of this type of permits had increased to almost 800 by 2011 there has been a severe decline since then. This has been mostly as a result of imposing restrictions on entrepreneurship permits due to a national scandal of possible misuse of this type of permits. Although the extent of the misuse was not widely proven the scandal led to the tightening of the rules and hence affected the business-related migration flows considerably. The number of permits for creative work, research and teaching has remained unchanged.

TABLE 6. TEMPORARY FIRST PERMITS FOR HIGHLY SKILLED LABOUR IN ESTONIA 2007–2012

	2007	2008	2009	2010	2011	2012
Educational and study reasons (students, interns,	286	353	392	459	464	516
trainees, volunteers)						
EU Blue card					1	16
Entrepreneurship and work as an executive in a	149	276	408	680	779	97
company						
Creative work, research and teaching	71	57	60	51	72	79
Experts, advisers and consultants	29	33	26	27	62	104
Total	535	719	886	1,217	1,378	812
% of all temporary first permits	13%	19%	24%	34%	32%	25%

Source: Police and Border Guard Board.

According to the latest data, Norway and Sweden are the most popular migration destinations in the BSR (see Figure 20). As the OECD Better Life Index ranks Sweden and Norway as the best living environments in the world (combined index score), it is not surprising that these countries have become more and more attractive to people residing in regions with less welfare and lower quality of life. While Norway and Sweden attract the greatest number of immigrants the number of incoming people (as a share of population) has been on the rise in almost all BSR countries (except Germany). Even the Baltic countries that have stood out with their significant emigration patterns have become more attractive for residents of other countries. However, as the Estonian case exemplifies, this immigration can at least partly be explained by the returning expatriates. To some extent, the data is also affected by the shrinking population size in the Baltics. As the data from Figure 21 highlights, the Baltics are not receiving immigrants in the form of new citizens in contrast to Norway, for instance, where the number of acquisition of citizenship has greatly increased lately.

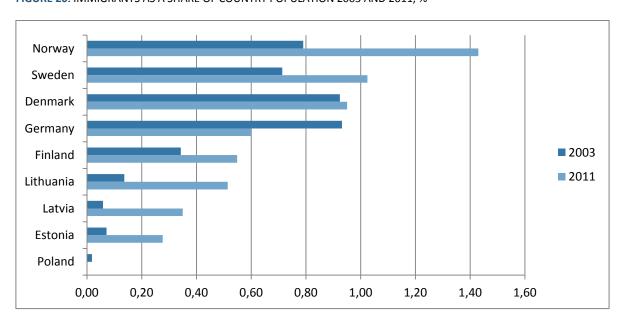


FIGURE 20. IMMIGRANTS AS A SHARE OF COUNTRY POPULATION 2003 AND 2011, %

Source: Eurostat; authors' calculations.

Sweden Norway Germany Latvia 2003 Estonia **2011** Finland Denmark Poland Lithuania 0,00 0,05 0,10 0,15 0,20 0,25 0,30 0,35 0,40 0,45

FIGURE 21. ACQUISITION OF CITIZENSHIP AS A SHARE OF COUNTRY POPULATION 2003 AND 2011, %

Source: Eurostat; authors' calculations.

When comparing the data in granting first residence permits (see Figure 22), Poland stands out as the most active provider of new residence permits. Compared to 2008, the number of new permits has increased almost sevenfold while in most countries there has been a decline in this indicator. According to Eurostat data, this has been the result of an increase in the number of granted residence permits for remunerated activities (increasing eight times compared to 2008) and other reasons (increasing 16 times compared to 2008). In Norway, there has also been a small increase in new permits made available mostly due to an increase in permits for educational reasons.

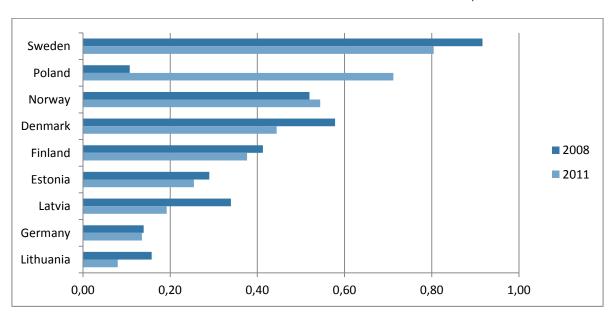


FIGURE 22. FIRST RESIDENCE PERMITS AS A SHARE OF COUNTRY POPULATION 2008 AND 2011, %

Source: Eurostat; authors' calculations.

The data on the provision of first residence permits for education purposes are very mixed. It seems that most BSR countries seem to have become attractive for shorter-term education mobility as the share of long-term education permits has become rather marginal in most countries. Finland is an exception here, as it has been able to attract slightly more long-term students than there are short-term mobilities. It is also interesting to note that Denmark, Germany and Poland stand out with their significantly reduced granting of long-term education permits.

TABLE 7. FIRST RESIDENCE PERMITS FOR EDUCATION REASONS AS A SHARE OF ALL FIRST PERMITS 2008–2011, %

		Short	-term		Long-te	erm (12 r	nonths o	r over)
	2008	2009	2010	2011	2008	2009	2010	2011
Denmark				18	61	24	21	6
Germany	4	20	19	19	22	6	7	6
Estonia	4	5	9	5	5	5	6	6
Latvia	4	8	12	10	0	1	1	2
Lithuania	8	15	22	12	0	1	0	0
Poland			7	3	15	21	2	0
Finland	10	12	10	11	11	10	13	16
Sweden	7	7	7	6	7	9	10	3
Norway	6	6	6	6	6	5	6	8

Source: Eurostat; authors' calculations.

In view of the first permits provided for remunerated activities, the data also reveals very diverse patterns among BSR countries. For short-term permits, Poland is the most attractive of all the countries, having been granting by far the largest share of permits. In 2011, more than half of all first permits were for short-term remunerated activities in Poland while for other countries this figure ranged between 1% and 17%. Estonia, Lithuania and Denmark are, however, the leading providers of long-term permits for remunerated activities, granting approximately one-third of all first permits to those intending to work in these countries. Interestingly, in Germany and Poland the significance of long-term permits for remunerated activities has decreased greatly during the last years.

TABLE 8. FIRST RESIDENCE PERMITS FOR REMUNERATED ACTIVITIES REASONS AS A SHARE OF ALL FIRST PERMITS, %

	Short	-term		Long-te	erm (12 r	nonths o	r over)	
	2008	2009	2010	2011	2008	2009	2010	2011
Denmark				12	23	42	43	30
Germany	2	10	10	12	16	3	4	5
Estonia	1	1	1	1	23	29	28	36
Latvia	21	13	9	7	3	7	8	6
Lithuania	35	18	8	17	43	33	24	32
Poland			85	54	46	33	0	1
Finland	9	7	7	11	17	9	8	14
Sweden	12	13	11	9	5	8	9	13
Norway	11	11	11	14	17	15	13	14

Source: Eurostat; authors' calculations.

The data on all valid residence permits shows that the share of people with foreign background has slightly increased in most countries. Estonia and Latvia have the greatest share of inhabitants with a residence permit. However, it has to be taken into account that there is a great share of so-called non-citizens or citizens with an unidentified citizenship in Estonia and Latvia (no citizens of any country; former residents of the USSR) who form the majority of residence permit holders and therefore cannot be deemed 'real' immigrants.

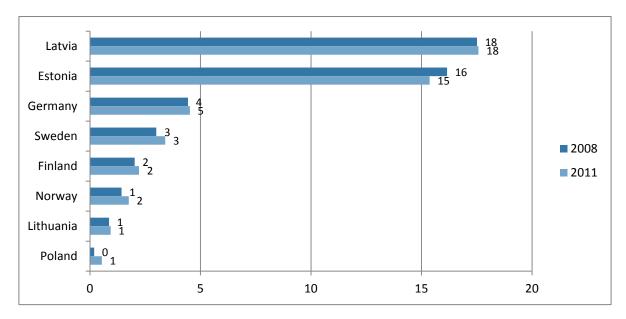


FIGURE 23. ALL VALID RESIDENCE PERMITS AS A SHARE OF COUNTRY POPULATION 2008 AND 2011, %

 $Source: Eurostat; \ authors'\ calculations.$

3.5. Working abroad

There were almost twenty-five thousand residents of Estonia (4.4%) working abroad in 2011 according to the census data. This number has increased almost tenfold compared to a decade ago (see Table 9) when only a couple of thousand people living Estonia stated their place of employment to be a foreign country. The predominant destination country is Finland with more than 15 thousand employees, followed by Norway (below two thousand) and Sweden (1,500). This significant increase can be attributed to a combination of factors of which becoming an EU member state, opening of the labour markets of foreign countries, the level of income in neighbouring countries, good transportation connections and linguistic-cultural similarities with Finland tend to be the most influential ones. (Krusell, 2013)

TABLE 9. RESIDENTS OF ESTONIA WORKING ABROAD BY SEX, AGE AND MOTHER TONGUE, 2000 AND 2011

	2000		2011	
	Number	%	Number	%
Employees working abroad	2,646	0.6	24,907	4.4
Sex				
Male	1,728	65	20,727	83
Female	918	35	4,180	17
Age				
15–29	1,095	41	6,862	28
30–49	1,291	49	13,943	56
50+	258	10	4,102	16
Mother tongue				
Estonian	1,852	70	18,724	75
other	794	30	6,181	25

Source: Krusell 2013.

As the census data outlines, the majority of foreign employed people are male (the share of females has halved compared to 2000). People between the ages 30–49 (56%) are most likely to be working outside Estonia, whereas those older than 50 are least likely to be employed by a non-Estonian employer. Foreign employment is mostly sought by residents whose mother tongue is Estonian – 75% of residents working outside Estonian have stated this to be their first language. Open borders and foreign labour market conditions have attracted mostly people with upper secondary vocational education to migrate for work. While this education group composed 27% of all foreign employed people in 2000, it had risen to 36% in 2011. The share of people with lower secondary education or less has also doubled in 11 years while the share of those with higher education has halved.

Employment in foreign countries is first and foremost taken up by residents working in crafts and the related trades. They composed almost half (47%) of all the foreign residing employees in 2011. This is especially significant in the context of their overall share in the Estonian labour market: people working in crafts form only 13% of all employees in Estonia, however their share in foreign employed is almost fourfold larger. The second largest group of occupations represented abroad are plant and machine operators (17%) whose share has also double compared to 11 years ago. The data demonstrate that foreign employment is most easily available in blue collar jobs while white collar jobs are rather marginally represented among foreign working employees. This tendency is likely caused by two types of factors: a) people with higher education tend to seek foreign employment less frequently; b) jobs available in foreign countries tend to require lower qualification than that obtained by employees. As the census data suggest, only 22% of highly educated people were employed as professionals in foreign jobs while 20% were employed in crafts. Out of all the foreign employed residents of Estonia, 43% work in construction which explains well the predominance of males in job migrants. The other sectors that are popular are wholesale and retail trade, hotels and restaurants, transport, storage and communication (24%) and public administration and defence, education, health and social work (17%).

TABLE 10. WORKING ABROAD BY OCCUPATION, 2000 AND 2011, %

		2000		2011
	Estonia	Foreign country	Estonia	Foreign country
Managers	13	11	11	5
Professionals	14	12	19	6
Technicians and associate	14	12	16	9
professionals				
Clerks	6	2	6	2
Service workers and shop	13	15	14	5
and market sales workers				
Skilled agricultural,	3	4	2	2
forestry, hunting and				
fishery workers				
Craft and related trades	15	16	13	47
workers				
Plant and machine	12	9	11	17
operators and assemblers				
Elementary occupations	11	7	8	8

Source: Krusell 2013.

Finland dominates the patterns of foreign employment and hence could provide a somewhat skewed picture of the rather diverse group of people working abroad. Leaving aside Finland as a destination country, the picture of foreign working residents changes rather dramatically. For instance, the share of highly educated people increases to 35% (vs 14% including Finland) and the share of people with Estonian as a mother tongue decreases to 57% (vs 75% including Finland).

As Krusell (2013) points out, there are both advantages and disadvantages to foreign employment. On the one hand, the opportunity to find work outside the home country helps to avoid possible unemployment at home and contributes to family welfare as well as new competencies. On the other hand, having to work far away from home could weaken family ties and in the worst case scenario lead to break-up of families; additionally, work abroad increases the likelihood of emigration. In the longer run, the increasing number of young emigrants could have a negative effect on the demographics as well.

3.6. International Students

Recruiting foreign students has been a central part of Estonia's strategy for internationalisation of higher education and looking at the statistics it has been quite successful so far. The number of international students in formal education in Estonian higher education institutions (Figure 24) has more than doubled over the past five years – in 2009/10 there were 1,072 international students, rising to 2,230 in 2013/14. This increase in student numbers has been the biggest in doctoral studies, where it has grown more than three times – from only 66 doctoral students in 2006/07 to 241 students in 2013/14. In bachelor's studies the number of students has grown about 264% during the past five study years.

2 500 ■ Doctoral study 2 000 ■ Master's Study 1 500 240 ■ Integrated study programmes of 233 Bachelor's and Master's study 1 000 232 Bachelor's study 500 919 650 482 479 432 487 Professional higher education study 06/07 07/08 08/09 09/10 10/11 11/12 12/13 13/14

FIGURE 24. NUMBER OF INTERNATIONAL STUDENTS IN ESTONIA BY LEVEL OF STUDIES, 2006/07-2013/14

Source: EHIS.

Looking at the incoming international students by their field of studies (Figure 25), the vast majority still comes to Estonia for social sciences, business and law – in 2013/14 the share was around 57% of all international students and it has remained basically the same since 2006/07 although the number of these students has more than doubled (from 520 in 2006/07 to 1,263 in 2013/14). The growth in numbers has been the biggest in the field of technology, production and building as there were only 4 international students in 2006/07 but 149 students in 2013/14. Similarly, the number of international students studying mathematics and natural sciences has also been growing fast – from only 34 students in 2006/07 to 200 students in 2013/14. The number of international students has remained the lowest in the fields of education as well as services.

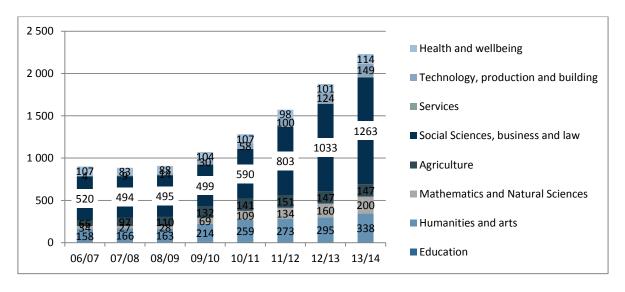


FIGURE 25. NUMBER OF INTERNATIONAL STUDENS IN ESTONIA BY FIELD OF STUDY, 2006/07-2013/14

Source: EHIS

The top sending country (Figure 26) has always been Finland, in 2013/14 about 49% of all the international students in Estonia came from there. Other top sending countries have been Russia and Latvia, in recent years there has also been a bigger increase in the number of students coming from Turkey, Georgia, Ukraine and India. One of the main reasons behind this is the fact that most of these countries have been chosen as targets for student attraction by Study in Estonia marketing strategy (more on this in Chapter 4.3).

1103 **Finland** Russia Latvia Turkey **2013/14** Georgia **2011/12** 2009/10 China 2007/08 Ukraine India **USA** Germany 0 200 400 600 800 1 000 1 200

FIGURE 26. TOP SENDING COUNTRIES OF INTERNATIONAL STUDENTS IN ESTONIA, 2007/08-2013/14

Source: EHIS

3.7. Conclusion

The statistical overview provided here suggests that Estonia, similarly to other BSR countries, is severely threatened by labour shortages in the coming decades. In fact, the problem of finding qualified workforce has already become a reality for a rather significant number of companies, especially in some knowledge-intensive sectors (e.g. ICT). The patterns of emigration and foreign employment have recently become increasingly worrying as the number of people moving to other countries has significantly increased. Although the foreign employed group of Estonian residents is dominated by lower qualified people, the share of highly educated people should not be underestimated. Besides, threatening the potential of economic growth, the 'brain drain' of highly educated people refers to 'brain waste' as educated people migrate in order to earn easy money by

taking simple jobs (Mølster, 2007). This is an important concern, as studies (e.g. Anniste, 2011) suggest that people with higher education backgrounds are more likely to accept employment below their qualification level.

The overview of immigration data suggests, however, that the immigration policy in Estonia has not been driven by the need to overcome labour shortages and provide the necessary workforce for obtaining the goals of the knowledge society. The data on valid residence permits does not reflect the necessity to prioritise the influx of highly qualified labour (especially that of education and entrepreneurship purposes). However, the data on temporary first permits suggests that there have been some positive developments lately, as the share of first study-related and expert permits have increased considerably. Still, the absolute numbers remain very low and the number of first permits for entrepreneurship and research/teaching purposes has been especially moderate recently. At the same time, the number of incoming international students has been growing steadily revealing an encouraging doubling in numbers.

This data illustrates well the non-reconcilable goals of various policy fields in Estonia. On the one hand, the state needs to stand for the constitutional aim of protecting the continuity of the nation, the national language and culture. Therefore, and also for historical and national security reasons, Estonia has opted for a conservative migration policy that is reflected in the selective immigration policy. As the main principles of population policy state, Estonia applies a selective migration policy based on the qualification of people; Estonia is first of all open to highly qualified specialists and skilled employees (Vabariigi Valitsus, 2009). The strategy on the population policy additionally states that Estonia is not expected to need more employees in the near future than its own labour market can provide. However, it also concedes that Estonia would benefit from immigrants with very specific competencies who could create new employment opportunities on the labour market. Still, this is a great challenge for Estonia because these types of people are needed all over the EU countries, the document adds.

4. Talent policy in practice in Estonia

This chapter will proceed with the specific analysis of the Estonian talent policy issues. The objective here is, firstly, to address the overall national strategic approach to talent policy management. This will provide a description of various policy elements in the area, review the relevant stakeholders and their roles in the policy management and implementation and evaluate the effectiveness of the policy. The analysis will also identify current weaknesses and challenges in the policy and point to issues for improvement.

The section on talent policy management will be followed by the analysis of talent policy sub-fields, i.e. policies and their implementation regarding qualified foreign labour, international students and researchers and the diaspora. Each of these subsections will review the current situation and achievements in the field, pointing to relevant challenges and issues.

4.1. Talent policy management in Estonia

Current talent policy management setting

This section will provide an overview of how talent policy as a policy area has been managed in Estonia.

During the last decade the different economic sectors in Estonia have undergone rapid change. New (types of) industries and therefore employers enter the economy and new (types of) professionals and therefore new employees are in demand. In particular, the need for highly qualified workers and specialists has increased due to increasing (global) competition. Therefore, the qualified labour has become a key factor in determining the success of economies (enterprises) both in national and global markets. At the same time, the shortage of qualified labour is an increasing problem all over the world, inhibiting raising enterprises competitiveness and innovation activities. More frequently the problem of qualified labour shortage at national level is revealed through hiring and attracting the labour force from abroad. In this case, the countries' migration policy is concentrated on stimulating the immigration of highly qualified labour. Moreover, the general trend in the search for talents around the world shows the movement from restricted to targeted migration policy with more emphasis on attracting the (local) talents who have left the country to return.

The problem of qualified labour shortage is also acute in Estonia where local labour market is unable to meet the need for qualified labour due to the population shrinkage and aging. According to the Estonian Labour Force Demand Forecast 2019, 20 every fifth employee in Estonia will leave the labour market by 2019. Hence, the labour force demand is mostly affected by the need for substituting today's employees. Estonia needs an extra 140 thousand people in the labour market by 2019. This clearly highlights the need for immigrants to supplement the workforce. However, the Global Migration Barometer 11 indicates that although Estonia is ahead of many other East European

69

¹⁹ See, for example, Mürk, I. Talent policy is a key question in economic development. Estonian Development Fund, 2011. http://www.arengufond.ee/upload/Editor/English/imre-myrk-towards-talent-policy.pdf

²⁰ Labour Force Demand Forecast 2019 [Tööjõuvajaduse prognoos aastani 2019]. Ministry of Economic Affairs and Communications. https://www.mkm.ee/sites/default/files/toojouvajaduse prognoos aastani 2019 luhikirjeldus.pdf

²¹ Global Migration Barometer. Economist Intelligent Unit, August 2008. http://www.un.org/esa/population/meetings/seventhcoord2008/GMB_ExecSumEIU.pdf

countries in terms of its attractiveness to migrants (e.g. Latvia, the Czech Republic, Lithuania, Hungary, Poland, etc.) ranking at 24th place, in terms of the accessibility of migrants it remains far behind all the East European and Nordic countries, ranking at 59th place at the end of the list.²²

The 'Estonia 2020'²³ (E2020) competitiveness strategy is Estonia's strategy for achieving the 'Europe 2020' objectives. Its main objectives are centred on increasing the productivity of the companies and employment of the labour force in Estonia. The strategy outlines that the economic development of Estonia is seriously challenged by long-term and structural unemployment as well as low productivity which in turn is related to the low share of higher value added products and services both in the entire economic structure as well as among export articles. There are three primary groups of factors that affect GDP growth: 1) demographic factors, 2) the extent to which the workforce is utilised in the economy and 3) hourly productivity. Recognising the negative demographic trends, the strategy highlights the importance of increasing the employment rate in Estonia and especially the productivity of enterprises in terms of value added to increase competitiveness. However, the authors of the strategy also concede that the relatively high share of non-citizens²⁴ sets clear limits on Estonia's possibilities to import labour, suggesting that the main focus of Estonian employment policies should be facilitating the skills development of local employees together with the overall increase in labour force.

Even though the overall approach of the E2020 suggests that Estonia's primary focus in increasing the supply of labour should lie on maximising the use of local labour force, the activities proposed in the strategy allow concluding that the supply of labour is intended to be increased partly with the help of foreign labour force. The fact that the strategy is careful in clearly stating the goal of increasing the supply of foreign labour is likely to do with the conservative immigration policy of Estonia (selective immigration limitation²⁵), which recognises the importance of balancing national interests, internal security and economic needs. However, the E2020 suggests that the supply of highly qualified labour is to be increased through several measures. These are: increasing the availability of an international general education; increasing the number of higher education students in key areas of study; increasing the number of foreign faculty members together with better opportunities for doing research; improving conditions for employment for higher education students after graduation; improving migration regulation with the objective of making it easier for potential top-level specialists and highly qualified employees to enter the Estonian labour market; improving the attractiveness of Estonia as a place to live; removing other hindrances in hiring foreign researchers and faculty staff, e.g. rules restricting the circle of applicants; creation of English language information materials for promoting the hiring of the workforce and simplifying the use of www.eesti.ee as a single contact;

²² The 61 countries have been ranked according to the scores they receive.

http://valitsus.ee/UserFiles/valitsus/en/government-office/growth-and-jobs/Estonia%202020%20in%202013/ENG%20national%20reform%20programme%20Estonia%202020.pdf.

²⁴ The non-citizens or citizens with undefined citizenship are persons who have lost their citizenship due to the non-existence of their state of citizenship (e.g. former Soviet Union or Yugoslavia) and who have not applied for the citizenship of the successor state (http://www.meis.ee/randealased-moisted). The relevance of this group of people to labour migration lies in the issue that it is in the national interest of Estonia to maintain the majority of Estonian citizens in the country. Allowing greater labour migration threatens to imbalance the national and citizenship composition in the country.

²⁵ The Basic Principles of Population Policy [Rahvastikupoliitika alused 2009–2013]. http://valitsus.ee/UserFiles/valitsus/et/valitsus/arengukavad/sotsiaalministeerium/Rahvastikupoliitika alused muude tud.pdf

development of a comprehensive talent programme. In the end, it can be concluded from the competitiveness strategy that Estonia's highly qualified labour supply also needs to be supported with foreign employees even though this is not strategically set as a clear objective.

The Estonian Entrepreneurship Growth Strategy 2014-2020²⁶ recognises the imminence of the lack of highly qualified labour and the importance of increasing the supply of labour with the help of foreign employees very clearly and foresees several measures in this aspect. The strategy claims that an effective talent policy will be developed which includes measures such as simplifying processes or procedures of finding, hiring and employing talents; also increasing the attractiveness of Estonia as a place of residence and employment for talents; improving support services for adjustment; development of talent networks, etc. The implementation plan for the strategy is being developed and will reveal which specific activities are planned to facilitate the development of the policy field.

Overall, even though the talent policy now seems to fall into the policy area of the Ministry of Economic Affairs and Communications (with the adoption of a new strategy), there has not been a single responsible minister, high official or public sector organisation clearly responsible for the horizontal policy area of talent policy until now. Therefore, the policy area has not been systematically analysed and managed. Several sub-areas of the policy have been under the management of different ministries and therefore there has been a lack of strategic leadership (see also next sub-section on the roles of ministries). Talent policy as such has not also been documented in a policy document or strategy.

The interviews with the policy-makers and experts conducted as part of the case study suggest that the stakeholders are aware of the problem of lack of qualified labour in Estonia and recognise the critical importance of this issue for Estonia's future development. The policy-makers are aware of the demographic trends and the migration context of Estonia, i.e. increasing pressure of population aging, low birth rates and high emigration in recent years. Since the lack of qualified (as well as low qualified in several sectors) labour has been loudly voiced by employers and organisations for some time now (especially in sectors like ICT and engineering), the message has been heard by the policy-makers. According to the policy-makers, the main approach to the issue has been the following: all the relevant ministries have been making efforts to remove various barriers in their policy area to facilitate more easy or simple employment of foreign talents. This usually means regulation or service provision improvement.

However, the interviews with policy-makers and experts also highlighted that even though the problem of qualified labour seems to be widely recognised, the problem is not always specific enough to act upon. Firstly, the interviewees highlighted that it is not always clear enough what kind of employees (with what kind of skills and competencies) are actually needed in the labour market and in which sectors is the need the most critical? The signals from the employers have sometimes been too vague or ambiguous. Secondly, it came up at the interviews that Estonian employers are rather reluctant to hire non-Estonian speaking employees – this might be just caused by convenience (it is uncomfortable to start managing a business in English), lack of information, lack of English language skills of employers, etc.

Talent policy management roles and responsibilities at state level

²⁶ http://kasvustrateegia.mkm.ee/index_eng.htm

The previous section provided an overview of the status of talent policy management in Estonia. It was demonstrated that even though the lack of qualified labour seems to be widely recognised as a policy problem and the competitiveness strategy points to several issues that need to be addressed in Estonia to facilitate a greater supply of talent in the country, there seems to be a lack of clear strategic vision and approach to the issue. At the same time, different ministries have been dealing with talent policy issues in their policy field, i.e. they have been focusing on issues that they could improve to remove barriers to talent attraction, retention and management.

The following will now look more closely at the mosaic of different efforts undertaken by various ministries and other organisations to facilitate the increase in the supply of highly qualified labour in Estonia. Table 11 below summarises the different policy areas and the relevant talent policy initiatives in the last few years.

TABLE 11. TALENT POLICY EFFORTS BY MINISTRIES AND OTHER ORGANISATIONS IN ESTONIA

Ministry/	Main policy area	Main talent policy efforts	Unresolved issues? Further
Organisation			action needed?
Ministry of Economic Affairs and Communications	Economic policy Innovation policy Entrepreneurship policy Foreign investments and Export policy	 ✓ Labour needs forecasts ✓ Changing focus from supporting large (financial) investors to knowledge-based investments (strategic investors) ✓ NEW starting coordination of talent policies 	✓ Division of labour between Ministry of Economic Affairs and Communications and Ministry of Social Affairs — to what extent is the Ministry of Economic Affairs and Communications dealing with employment information dissemination? ✓ Labour forecasts not specific enough ✓ Taking the lead in managing/developing a comprehensive talent policy
Ministry of Education and Research	Education policy Research policy Language policy	✓ Support for establishment of the European School in Estonia ✓ Support for implementing IB curricula in Estonian general education schools ✓ Diaspora programme	✓ Diaspora programme has no relevant connection to talent policy (how relates to supporting the provision of highly qualified labour?)
Ministry of Internal Affairs Ministry of Foreign Affairs	Migration policy Internal security policy Foreign policy International relations	 ✓ Revision of Aliens Act ✓ Implementing Diaspora programme ✓ NEW (under construction): adaptation programme to newly immigrated people ✓ Providing support to other ministries through embassies and consulates ✓ Implementing Diaspora 	 ✓ Improvements needed in information provision to new immigrants ✓ Too many expectations and lack of priorities

Ministry/ Organisation	Main policy area	Main talent policy efforts	Unresolved issues? Further action needed?
		programme	
Ministry of Social Affairs	Social policy Labour market policy	✓ EURES ✓ Labour market services provision	✓ Until now, EURES has been focusing on facilitating foreign employment of Estonians ✓ Role of EURES in facilitating the supply of foreign employees unclear; also unclear what their role in facilitating the employment of foreign living Estonians is ✓ EURES services are not really used by companies
Ministry of Culture	Culture policy Integration policy	✓ Integration programme✓ Implementing Diaspora programme	
Government office	Coordination of government policy and horizontal policy issues	 ✓ Qualitative labour forecasts development (in process) ✓ Improving overall labour needs forecasting system 	✓ Talent policy not coordinated as a horizontal policy
Archimedes Foundation		✓ Support for internationalisation of higher education (studyinestonia.ee, HE branding, development of international curricula, grants to foreign students, researchers and teaching staff, mobility grants) (by Archimedes Foundation)	✓ Internationalisation of education not supported by economic and (sometimes) foreign policy
Enterprise Estonia	Support system for entrepreneurship, providing financial assistance, counselling, cooperation opportunities and training for entrepreneurs, research institutions, the public and non-profit sectors	 ✓ Investment promotion (by Enterprise Estonia) ✓ Development employee grant for companies (by Enterprise Estonia) ✓ NEW Pilot project for attracting highly qualified ICT professionals in Finland ✓ NEW (under construction): workinestonia.com (by Enterprise Estonia) 	 ✓ Not very successful in disseminating information about the development employee grant ✓ Need for proactive activities for attracting strategic investors
The Integration and Migration Foundation Our People (MISA)	Promoting and coordinating integration and migration processes	✓ Providing information and adaptation services for migrants and returnees	 ✓ Partly project-based activities ✓ Sometimes role conflicts with Ministry of Internal Affairs (e.g. both involved in provision of adaptation support)?
Estonian Chamber of Commerce and Industry	Business interests representation	✓ 'Talents Come Home' project	 Not very successful in terms of returning talents; economic recession

Ministry/ Organisation	Main policy area	Main talent policy efforts	Unresolved issues? Further action needed?
			affected number of vacancies available; term 'talent' created polemic ✓ No connection to the diaspora programme
Estonian Development Fund	Providing investment support to the development of the Estonian economy	✓ Talent Forum initiative	✓ initiative was stopped with a change in leadership and strategy

As the table reflects, there have been a number of various activities carried out under different ministries. The number of direct attraction activities has been limited. The main activities in this area have been the Study in Estonia and the related branding activities that have been supporting the universities in their efforts to attract more foreign students to study in Estonia. Enterprise Estonia has carried out investment promotion for Estonia but this has not been focused on attracting employment to Estonia directly. Rather, is generally the case that foreign investments tend to bring along skilled specialists to set up and run the companies. However, the concept of marketing Estonia as an employment destination is now in the process of development. Another more active type of attraction activity was a project done by the Estonian Chamber of Commerce and Industry which reached out to the Estonian diaspora to invite them to return home to work at companies in need of international knowledge and know-how ('Talents Come Home'). This project gained a lot of public attention but was not very successful in actual talent re-attraction because the project started during the economic recession when the number of vacancies in companies was dramatically reduced.

All other talent policy initiatives have been addressing the lack or ineffectiveness of some type of service provision, regulatory aspects or support to organisations employing or using talents. In that respect, these activities have mostly been reactive by nature and dealing with issues that facilitate talent attraction and retention but do not directly target the increase in overall talent supply. All of these activities have been important and critical in the overall talent attraction management approach. These have been vital steps in moving forward in creating a supporting environment for foreign talents. One of the most important recent changes has been the revision of the Aliens Act, which considerably relieved the restrictions on employing highly qualified labour without labour market tests and also provided an opportunity for foreign higher education graduates to seek employment in Estonia within 6 month after graduation. However, since the legal change was only just implemented, it is too early to evaluate its effectiveness.

Viewing the Estonian talent policy efforts in a strategic perspective, it can be noticed that the different activities implemented and about to be implemented do not form a completely coherent approach since there is no strategic approach to talent policy in the country. There is no agreed strategy and the activities are not coordinated at state level from one single responsible person or organisation. From the interviews, it is known that the officials of the ministries are coordinating various activities but there is no coordination and oversight at strategic level. This is problematic in many ways. Firstly, the lack of strategic management and coordination might lead to duplication or inefficiency since without coordination there is no assurance that all the implemented activities form a specific piece in a comprehensive approach where different activities complement each other accordingly. Even more so, a lack of strategic approach makes question whether all the activities carried out are the right ones. Based on the data collected in the study, it can be said that there are

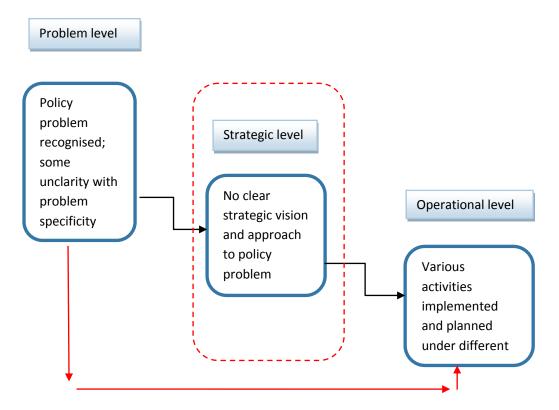
no significant problems with the current approach as the ministry officials have been able to coordinate activities rather well. However, the activities seem to be characterised by fragmentation and occasional duplication or inefficiency. For instance, several organisations have been providing information services to foreigners in Estonia but there are still remarkable problems with information availability according to foreigners themselves. EURES should be helping in increasing the supply of foreign employees but they lack both information and guidance to carry out this task. At the same time, Enterprise Estonia has also initiated activities to reach out to certain potential employees abroad suggesting that the activities of various state organisations have not been coordinated as they should be. Equally, the diaspora programme claims to focus on attracting Estonians back to the country but misses the links with the talent policy goals (e.g. reaching out to potential highly qualified employees living abroad and searching for opportunities to return). As can be seen, the lack of coordination could lead to fragmented policy in which different parts of activities do not lead to strategic and hence effective policy. Taking into account the scarcity of resources of a small country, it is even more critical to focus on strategic and thorough policy planning so that maximum efficiency and effectiveness can be achieved.

The second problem with the lack of strategic management relates to sustainability. If the overall policy approach has not been agreed and fixed in a document, there is no certainty that the goals or views of different ministries do not change over time. Alternatively, if the people at the ministries change, there is no change in the approach chosen. For instance, if new public servants come to office there is no formal point of reference for their work unless this is fixed in a strategy or guidance document. Therefore, the lack of strategic approach can easily threaten the sustainability of the policy and in the end its effectiveness and efficiency as well.

The third problem with the current policy management setting is that in a situation where no high official or organisation is formally responsible for the strategic management and coordination of the policy, there is no accountability either. In the case of the policy failure, there is no one person taking responsibility for the consequences. The ministry officials responsible for their specific activities could be only made accountable for their particular measures but not for the overall policy failure. The disambiguation of accountability does, in turn, threaten policy effectiveness and efficiency.

To conclude, it appears that Estonia has, in general, recognised the talent policy problem and is already taking important steps to address the problem. However, instead of defining the problem in more detail and agreeing on the overall strategic approach, the attention has been switched to immediate operational level, i.e. ministries and their agencies started implementing activities (see Figure 27 to illustrate the situation). There is some coordination at civil servant level but no strategic policy coordination and oversight at higher level. Even though the ministry officials see the need for strategic planning, they are not in a position to negotiate and agree strategic priorities. This needs to be done at higher policy-maker levels, which has been missing thus far. Therefore, it is now vital to take a step back, agree on the strategic approach (e.g. how to approach the question of lack of highly qualified foreign labour supply, which employees we want to attract and from where? which target groups should be prioritised? what value packages we could offer, etc.?) and envision it in a document so that everyone dealing with the policy is up to date and aware of the policy approach. This would decrease current fragmentation and potential inefficiencies, as well as contribute to greater effectiveness and sustainability.

FIGURE 27. TALENT POLICY MANAGEMENT IN ESTONIA



4.2. Highly qualified foreign labour

This chapter addresses the topic of highly qualified foreign labour and the related policies in Estonia. In the following subsections, an overview of the activities in attracting, developing and retaining the highly qualified foreign labour in Estonia will be given. In the current study highly qualified foreign labour does not refer only to foreign labour, but also to foreign investors and entrepreneurs. The situation overview will be supplemented by qualitative assessments based on different experts' opinions (representatives of different ministries, universities, foundations, research institutes and businesses) and bearing in mind the problems raised in the chapter above.

4.2.1. Regulative framework

In comparison with other EU Member States, Estonia belongs to the group of countries which has not developed separate policies targeted at highly qualified migrants, but has included provisions targeting highly qualified foreign (mainly third-country) nationals in wider migration policies.²⁷ Estonia has placed a specific focus on attracting foreign students, researchers and scientists as well as highly qualified executive staff and managerial employees, investors and entrepreneurs. Estonian migration policy is not focused on specific occupations, although the Estonian Labour Force Demand Forecast 2019²⁸ specifies rapid growth sectors where the labour force demand is larger in the nearest future: information and communication, machinery industry, electronics industry, science and engineering activities. In Estonia, the number of third-country nationals entering the country is limited by immigration quotas. EU Blue Card applicants are subject to the general immigration quota. However, as of September 2013, researchers and international students who finish their studies in Estonia wishing to remain for work, and their family members, will be exempt from such quota.²⁹

The approach to immigration of highly qualified workers in Estonia is employer-led. In the case of third-country nationals this means that employers are expected to 'preselect' foreign national they wish to hire and prove that they could not find any national to fill the position. A third-country national has to have a residence permit for employment, which is issued by the Citizenship and Migration Bureau of the Police and Border Guard Board. Before the residence permit for employment is issued the employer must apply for the permission of the Estonian Unemployment Insurance Fund for employing an alien. At the request of an employer the Estonian Unemployment Insurance Fund may grant the employer permission to fill the position by employing an alien if the employer has failed to find a suitable candidate within three weeks. In addition to the application form, the employer has to submit certified copies of the documents providing evidence of the education, professional

77

²⁷ See European Commission and Eva-Maria Asari. European Migration Network Focussed Study 2013: Attracting Highly Qualified and Qualified Third-Country Nationals in the European Union and Estonia. Estonian Academy of Security Sciences Centre for Migration Studies, pp. 24–46.

²⁸ Labour Force Demand Forecast 2019 [Tööjõuvajaduse prognoos aastani 2019]. Ministry of Economic Affairs and Communications. https://www.mkm.ee/sites/default/files/toojouvajaduse prognoos aastani 2019 luhikirjeldus.pdf

²⁹ See Aliens Act §115, RT 2010, 3, 4. [entered into force 01.10.2010] http://www.legaltext.ee/et/andmebaas/tekst.asp?loc=text&dok=XXXXXX14K5&keel=en&pg=1&ptyyp=RT&tyyp=X&query=v%E4lismaalaste

qualification and work experience of alien as well as a copy of the ID or EU Blue Card. The Estonian Unemployment Insurance Fund authorises or refuses to grant the permission within seven days.³⁰

Estonia has not applied specific measures for highly qualified migrants, but with the new amendments to the Aliens Act since September 2013, the registration of employment procedure for third-country nationals has simplified. 31 According to the amendments, there will be a fast-tracking procedure regarding temporary employment and a simplified procedure for encouraging investments and supporting start-ups. Regarding the temporary employment procedures, the main beneficiaries of amendments are educational and research institutions and companies looking to hire foreign students. For example, when the employer wants to promote the alien employee and offer an opportunity to start working in a different position, there is no longer a need to apply for a new residence permit for work purposes.

Moreover, Estonia has set requirements for self-employed third-country nationals and entrepreneurs to provide proof of secured funding from 16,000 to 65,000 euros. 32 For investors from third countries, the main admission criterion in Estonia relates to the sum to be invested - 65,000 euros. However, the amendments to the Aliens Act since September 2013 did not bring significant changes regarding residence permits for entrepreneurship purposes. Furthermore, since 1 September 2013 the minimum requirement does not apply if the business association has been registered in Estonia for less than 12 months and starts its activities with support from the state or a private investment, where that investment or loan is received from the state or from a private management company with an activity license granted by the Financial Supervision Authority or where that support has been granted by some state support measure.

In addition, it is important to mention that Estonia has developed measures to influence positively the immigration decision of third-country nationals by offering family members of highly qualified workers the right to directly accompany them to the Member States, rather than within six-month period of application as provides EU Blue Card Directive (Article 15(4)).³³

As of today, in 2014, it is not obligatory for migrants to take part in adaptation courses or introduction activities. In 2009, Integration and Migration Foundation Our People (MISA) initiated voluntary programmes and courses.34 However, with the amendments to the Aliens Act since September 2013, a new article has been added which allows the Police and Border Guard Board to allocate thirdcountry nationals to introduction programmes.³⁵

Regarding the attractiveness of the working environment there are no taxes incentives in Estonia for highly qualified national workers, but social security and other welfare benefits are the same for all

[http://www.legaltext.ee/et/andmebaas/tekst.asp?loc=text&dok=XXXXXX14K5&keel=en&pg=1&ptyyp=RT&tyyp=X&qu <u>ery=v%E4lismaalaste</u>]
³² Ibid.

 $^{\rm 33}$ See Council Directive 2009/50/EC, 25 May 2009.

[http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0050&from=EN]

http://www.legaltext.ee/et/andmebaas/tekst.asp?loc=text&dok=XXXXXX14K5&keel=en&pg=1&ptyyp=RT&tyyp=X&qu ery=v%E4lismaalaste

³⁰ See more information at Estonian Unemployment Insurance Fund website: https://www.tootukassa.ee/eng/content/employers/permission-fill-position-employing-alien

³¹ See Aliens Act RT 2010, 3, 4

See http://www.meis.ee/kohanemisprogramm

³⁵ See Aliens Act RT 2010, 3, 4, §121.

residents. Estonia has not entered any cross-country agreements which focus specifically on attracting highly qualified nationals to the country.

As it is seen from above, there is no policy for attracting highly qualified foreign labour to Estonia. Estonia has adopted several provision, which have been targeted to qualified foreign (mainly third-country) nationals in the frame of wider migration policies. Thus, the government's main effort has been in creating and improving the regulative environment.

4.2.2. Measures for planning highly qualified foreign labour

This subsection provides a more detailed overview about the current measures for planning foreign labour to Estonia. One of the preconditions for successful talent policy implementation is an adequate overview of missing and required labour shortages in the labour market. Therefore, talent planning and deployment is a key to successful talent strategies and activities. In Estonia, the situation for labour needs forecasting has been under discussion for a long period of time. The Estonian Ministry of Economic Affairs and Communications does prepare annual labour forecasts ³⁶ but these are argued to be too general to prove useful for labour supply planning. These forecasts focus on occupational groups and areas of the economy, but do not contain information on job family level³⁷. In some sectors, there have been sectoral labour force surveys to forecast labour needs more specifically.³⁸ However, there is no comprehensive overview of the competencies which are most required or detailed labour shortage lists.

For this very reason the Government formed the Labour Market Changes and Peoples' Skills Alignment Task Force (hereafter referred to as Task Force) in June 2012. The aim of the interministerial Task Force was to develop concrete proposals and measures which would contribute to better alignment between labour market needs and availability of labour force. In June 2014 the Task Force released its first results, which concerned the creation of labour market monitoring and forecasting and peoples' skills development coordination system (hereafter referred as coordination system). This coordination system creates a regular coordination platform for employers and educational institutions for planning the structure, volume and content of educational services. In addition, the coordination system enables information on labour market and economic developments and labour force demand forecasts to be gathered and analysed. At the same time, the Task Force published its first book Eesti Tööturg: täna ja homme (in English 'Estonian Labour Market: Today and Tomorrow'), which provides an overview on Estonian labour market trends, labour force and skills needs in the nearest future and labour market future trends in the world. 39 The book gathers the information from the Estonian labour survey, census of population, Estonian Labour Force Demand Forecast, and interviews with different field experts. It is the first time when the Government in analysing the labour market trends has used combined methods – quantitative labour market analysis

_

³⁶ See Labour Force Demand Forecast 2019 [Tööjõuvajaduse prognoos aastani 2019]. Ministry of Economic Affairs and Communications. https://www.mkm.ee/sites/default/files/toojouvajaduse prognoos aastani 2019 luhikirjeldus.pdf

³⁷ A job family is defined as a series of progressively higher, related jobs distinguished by levels of knowledge, skills, and abilities (competencies) and other factors, which promotional opportunities to employees. See https://www.slcc.edu/hr/docs/Job_Families.pdf

³⁸ See for example the wood cluster sector (Eamets, R., Meriküll, J., Ukrainski, K. Eesti puidusektori tööjõuvajaduse prognoos aastateks 2005–2015, Tartu Ülikool 2005), energy sector (Energeetika tööjõu uuring. Tartu Ülikool RAKE, Poliitikauuringute Keskus Praxis, October 2011) or the ICT sector (Eesti IKT kompetentsidega tööjõu hetkeseisu ja vajaduse kaardistamine. Poliitikauuringute Keskus Praxis, 2013).

³⁹ See *Eesti tööturg: täna ja homme. Riigikantselei, 2014.* [Estonian Labour Market: Today and Tomorrow].

and qualitative research. This makes it possible to identify what type of workers are needed in specific fields, whether the labour supply meets the demand and what are the skills required at the workplace. Although the coordination system is still under development, it will help in the nearest future to plan also foreign labour force needs and need for foreign talents as the coordination system provides a regular overview of competences required in the labour market and labour shortages in concrete fields and occupations.

At the request of the Estonian Unemployment Insurance Fund, every three years the survey *Välistööjõu vajaduse uuring: 2011* (in English 'Foreign Labour Force Demand Survey')⁴⁰ has been conducted. The results of the last survey showed that only 6% of enterprises have hired foreign labour and 4% are planning to do so. Moreover, 12% of enterprises were interested in hiring foreign labour in the future (in comparison, in 2008, 24% of enterprises were interested in hiring foreign labour). Therefore, the interest in hiring foreign labour has lessened within the last years. Entrepreneurs mostly need specialists with specific skills and qualified workers. The reasons why they need to hire foreign labour are the labour shortage in the specific area and low level of employees' qualification in a specific job or service.

In this study, interviewees also stated that the biggest constraint in foreign talent planning has been the absence of systematic labour market monitoring in terms of the shortage of occupations and skills. While the understanding about what type of foreigners Estonia needs is rather similar between different stakeholders, the opinions about where Estonia ought to attract those people differ. In general, the stakeholders consider it essential to attract people with an academic background such as international students, lecturers, scientists, but also highly qualified workers and R&D workers, who could contribute to the increase of private sector R&D activities. However, the opinions in terms of target countries from where to attract the highly qualified workers are different. The state has not considered it important to determine specific target countries for attracting highly qualified foreign labour, as for the state the main question relies on how to get the talents to Estonia. Similarly, the entrepreneurs consider the employees' skills and knowledge more important than where the person is from. Academics have a slightly different view on these issues, stressing that in the conditions of increasing qualified labour shortage the state should intervene more forcefully for attracting highly qualified foreign labour through applying a targeted migration policy. It is important to bear in mind that if Estonia wants changes then we should be more active in forcing these changes to happen.

4.2.3. Measures for attracting highly qualified foreign labour

As pointed out in the subsection describing the national policy context, Estonia has elaborated several measures for creating the regulative environment which will help an alien to start working in Estonia. Due to the increasing shortage of qualified labour worldwide the creation of a favourable environment through regulative measures is not sufficient, and it is also important to use active measures such as marketing and branding of the home country as well as proactive measures to attract and recruit the foreign talents. As also mentioned earlier, the general trend among many countries is to move from restrictive to targeted migration policy, especially in terms of attracting highly qualified foreign labour. Several countries are applying active marketing and recruitment measures through selling their country in specific target countries as a good studying, living and/or employment destination.

_

⁴⁰ See *Välistööjõu vajaduse uuring: 2011*. Turu-uuringute AS, mai 2011. [Foreign Labour Force Demand Survey: 2011] https://www.tootukassa.ee/sites/tootukassa.ee/files/Valistoojou%20vajaduse%20uuring%202011.pdf

While the universities have agreed on the higher education marketing strategy regarding potential target countries and cooperation activities, there is a less clear vision in other areas regarding foreign talent attraction. Estonia has not yet developed a national marketing or branding strategy for attracting highly qualified foreign workers. In 2001, Estonia established an Estonian marketing concept used in the international introduction of Estonia, where Estonia is promoted as a place of tourism, good place for business (investments, exports) and studying/working/living. The main aim of the marketing concept was to increase the number of tourists, involvement of foreign investments and creation of a favourable basis for the Estonian export products. One part of the marketing concept was elaboration of the sign "Welcome to Estonia!" Still, since 2008, this marketing concept has not been re-developed. Currently, the main introductory gate for Estonia is the web-portal Visitestonia.com, which promotes Estonia mainly as a tourist destination.

Largely, the information about the living and working in Estonia is shared through different webportals, i.e. through passive marketing tools. It is worth mentioning three web-portals, that to a greater or lesser amount promote living and working in Estonia. First, Estonia is a member of the EURES (European Employment Services)⁴² network which enables to share information on Estonian vacancies across Europe, but this is not focused specifically on talent attraction activities. EURES provides general information about Estonia and labour market issues such as how to apply for a job, registration and residence permits, employment contracts, etc. Second, there is a portal for disseminating research job opportunities in Estonia (as part of the European portal) called EURAXESS.⁴³ The portal provides practical advice and reliable information about Estonia, but its aim is not to promote Estonia as a good living or working destination. Third, the StudyinEstonia.ee portal introduces different study opportunities in Estonia and promotes Estonia in general as a safe and stable environment with the availability of free Internet access and its populations' good English language skills. In addition, it provides information that is absent in the other two web-portals, although it should be stressed that it is only targeted at students, not the whole labour force. (See more on StudyinEstonia.ee in chapter 4.4).

The responsibility for attracting foreign investors to Estonia rests with Enterprise Estonia (EAS)⁴⁴, whose main virtual marketing hub is the Estonian Investment Agency web-portal investinestonia.com. The portal promotes Estonia as a good investment place and gives an overview of business opportunities across different sectors. It also provides an investment guide for investors, with useful hints about the regulative environment for doing business and establishing a company in Estonia, as well as information on premises and infrastructure and labour market issues. In addition to web-based marketing, EAS offers free of charge investment consultancy services for potential and existing investors. These activities are supported by their 10 branch offices located abroad. Still, some of the interviewees of the current study stated that it is not clear what exactly EAS is doing in terms of attracting foreign investors. Currently, offered activities are considered too passive, which cannot ensure the inflow of knowledge-based investors or entrepreneurs who would bring along a highly qualified labour force or create the job places for them. In the opinion of the interviewees, Estonia is missing a top-level speaker, either high-level official or the member of government whose

⁴¹ See Enterprise Estonia http://www.eas.ee/en/introduction-of-estonia/estonian-marketing-concept

⁴² See http://www.eures.ee/

⁴³ See http://euraxess.ee/

⁴⁴ www.eas.ee

⁴⁵ London, Hamburg, Stockholm, Oslo, Helsinki, Silicon Valley, Shanghai, Tokyo, Moscow and Saint Petersburg.

responsibility would be to attract foreign investors or entrepreneurs through actively and systematically introducing the Estonian business environment, conducting meetings and negotiating on a daily basis with foreign investors to persuade them to come to Estonia.

A recent study by Männik and Pärna (2013) among foreign investors indicated that Estonia as a brand is practically non-existent outside Europe. ⁴⁶ In the opinion of foreign investors, Estonia has not been very active in marketing its potential in foreign markets and among potential investors. Though Estonian climate conditions might not be suitable for everybody, Estonia possesses several strengths and good characteristics which might be of interest to foreigners. It is important to find a way to sell these strengths skilfully and to the right target group. As the study by Männik and Pärna (2013) pointed out, in the eyes of many foreign investors Estonia is still seen as an attractive work environment from the aspects of its openness, lack of bureaucracy and hierarchy, simple taxation, economic and political stability, and good IT and language skills. ⁴⁷ These statements were confirmed by the opinions of the interviewees of the current study who also pointed out the good and secure living environment, beautiful nature, start-up culture as well as young state and opportunities to make a good career in Estonia. However, the answers of some interviewees left the impression that Estonians themselves (especially policy-makers) underestimate these strengths.

While in the past Estonian foreign investment policy was not targeted at specific sectors or markets, the new foreign investment and export plan, launched in May 2014 'Made in Estonia 3.0'48, sets up concrete activities involved in foreign investments on target markets and sectors. According to the plan, in attracting foreign investments, 75% of total investments are preferred from Estonia's largest foreign investment and export partners (Sweden, Finland, Netherlands, Norway, Russia, etc.), and 25% is the focus from Japan, USA, Brazil and China. The main activities for achieving these goals involve business delegations' visits to and from the target markets, developing the network of contacts, responding to investment inquiries and counselling of investment projects. Therefore, there are no major changes compared to earlier actions taken. In the opinion of the experts interviewed in the current study, Estonia faces two large problems in attracting foreign investors. First, Estonia misses incentive systems, which would make Estonia attractive for knowledge-based investors. The attractiveness of the country without any particular incentive (e.g. treating everybody equally) decreases the greater the development of the country is. Second, Estonia has lost its competitiveness in terms of cheap labour, which was one of the main reasons for foreign investors investing in Estonia in the past. As of today, the main question for foreign investors is the qualified labour, which is able create higher value added.

Above all, there is a national support measure for recruitment and employment of highly qualified workers with international (professional) experience – the Development Employment Grant Scheme provided by Enterprise Estonia. ⁴⁹ Under this scheme enterprises can recruit and employ highly qualified workers such as researchers, engineers, designers, marketing managers, CEOs, etc. Enterprises can apply for partial compensation of the recruitment costs and the salary of the

82

⁴⁶ See Männik, K. and Pärna, O. Estonia - the Business Paradise, 2013. [http://www.technopolis-group.com/wp-content/uploads/2014/04/KMW1789FDI- Summary Eng 250613.pdf]

The Estonian foreign investments and export action plan for the years 2014–2017 for increasing the export capacity of Estonian companies and involving foreign investors [https://www.mkm.ee/sites/default/files/mie_3.0_english_version.pdf]

⁴⁹ See Enterprise Estonia http://www.eas.ee/et/ettevotjale/ettevotte-arendamine/arendustoeoetaja-kaasamise-toetus

employee depending on the profile of the employee (from 50%–70% of the salary of the employee) for up to 36 months. However, the usage of the grant scheme has been lower than expected and it has not become very popular among entrepreneurs. According to the interviewees, the main reason has been the low awareness of it. Thus, assuming that the problem is not related to the overall low preparedness in hiring this type of employees, information gaps should be comparatively easy to overcome. Still, as the results of the survey 'Foreign Labour Force Demand Survey' indicated the interest in hiring foreign labour has lessened within the last years, with reference to overall low preparedness of private enterprises in hiring the highly qualified foreign labour.

The interviewees of the current study agreed that enterprises are not showing a very high interest in hiring the foreign labour. In their opinion it might be related to comfort, lack of knowledge, uncertainty as well as psychological barriers. It requires skills to manage an international team and communicating in a foreign language. In addition, the working environment must become bilingual. Often companies do not want to do this (especially companies with domestic capital), because it requires too much effort, and it is easier to deal with their own people (local citizens). Equally important is also the level of wages in Estonia, which are often not competitive enough for attracting foreign labour. This all makes the attraction of highly qualified foreign labour more difficult from the government side as there is a need to boost the demand among private sector actors.

Apparently, the attraction of highly qualified labour involves several important aspects (see also Figure 4). First, for attracting the highly qualified foreign labour the presence of opportunities, strong capital infrastructure and critical masses of other talented professionals are needed. This is very much connected to the general economic development and business environment. Second, for attracting the highly qualified foreign labour the creation of a favourable regulative environment is needed, which facilitates the process of entry as well as living and working in the country. Third, the image of a strong state is necessary that people would want to come to Estonia. The creation of all of these aspects should go hand in hand with the aim of introducing Estonia as a good place to live, to work, to study, to invest, to export from, etc. In the opinion of the interviewees of the current study, the creation of a complete image of the state is one of the most important aspects of attracting highly qualified foreign workers that the state should systematically address. The following step forward is to figure out what type of workers are needed and how do we reach them.

4.2.4. Measures for developing and retaining highly qualified foreign labour

In the area of talent development, Estonia has been utilising European Structural Fund money to build the capabilities of human resources mainly in the R&D area. The programmes have been focused on increasing the knowledge and skills of current and future researchers, teaching staff and support staff. The types of activities have included, among other things, support for greater international mobility and networking, training and support for commencing higher education studies. Still, a specific programme⁵¹ has also been established with the support of the European Social Fund targeting the increase in competitiveness through raising the level of skills and knowledge of enterprises'

⁵¹ See *Teadmiste ja oskuste arendamise toetamise meede* (Knowledge and skills development support measure) http://www.eas.ee/et/ettevotjale/ettevotte-arendamine/teadmiste-a-oskuste-arendamise-toetamine/ueldjutt

_

⁵⁰ See *Välistööjõu vajaduse uuring: 2011*. Turu-uuringute AS, mai 2011. [Foreign Labour Force Demand Survey: 2011] https://www.tootukassa.ee/sites/tootukassa.ee/files/Valistoojou%20vajaduse%20uuring%202011.pdf

employees and managers in such areas as management, implementation of quality management systems, development of ICT systems, technology counselling, etc.

The national recognition of talents takes place in some sectors or areas in Estonia, but is addressed to all talents not only foreign talents. Every year, EAS carries out the entrepreneurship competition Ajujaht,⁵² which is oriented to young people, employees who want to start their own business and everybody who would like to test their innovative business plans. In addition, each year EAS organises the Entrepreneurship Award⁵³ competition, which recognises enterprises in five areas: Regional Company of the Year, Foreign Investor of the Year, Innovator of the Year, Design implementer of the Year and Exporter of the Year.

When discussing factors of retention relating to foreigners in Estonia, there has been an important change recently. As already mentioned in subsection 4.2.1, the Aliens Act was modified so that in the case of promotion of the alien employee or offering the new opportunity in a different position, there is no need to apply for a new residence permit for work purposes. In addition, foreign students are allowed to extend their residence permit so that they can stay in Estonia until six months after the graduation to look for employment. The regulation was changed recently and the future will show if this policy change can bring along any significant changes in international talent retention. Another important change in the regulation has been the introduction of the condition that the labour market test is not required for employing foreigners when he/she has graduated from an Estonian higher education institution. Still, it is important to state that the recent study by the Institute of Baltic Studies (2014)⁵⁴ about the newcomers' adaptation in Estonia indicated that the information on residence permit procedures is badly structured and too complicated, and there are often problems with officers' communication and language skills.

While the migration regulation has become more flexible for international researchers and students allowing them to find employment here, the regulation on provision of permanent residency has stayed the same requiring applicants to pass the language test at B1 level. Taking into account the complexity of the national language it is fair to say that this requirement remains unattainable for most foreigners in Estonia.

A large role in facilitating the retention (and attraction) of foreign labour is also played by the support services offered for adaptation and integration to society at the national level. A study by the Institute of Baltic Studies (2014)⁵⁵ indicated that the lack of system of services supporting the adaptation, including adaptation programmes and absence of acting support networks, is one of the main obstacles in the recruitment of foreign talents in Estonia. Estonia offers free Estonian language and adaptation courses for third-country nationals living in Estonia for less than three years. The courses are taught by Immisoft Ltd Research and Education Centre for New Immigrants in Estonia⁵⁶ and financed by the Ministry of Culture. There are also language courses for EU citizens, but not free of charge. In addition, it is possible to study Estonian through online English-based or Russian-based

53 See http://www.eas.ee/et/eas/ettevotluse-auhind/auhind-2014

⁵² See Ajujaht http://www.ajujaht.ee/

Kristina Kallas *et al. Uussisserändajate kohanemine Eestis: valikud ja poliitikaettepanekud tervikliku ja jätkusuutliku süsteemi kujundamiseks* (Newly-arrived immigrants in Estonia: Policy Options and Recommendations for a Comprehensive and Sustainable Support System). Balti Uuringute Instituut, 2014. https://www.siseministeerium.ee/public/TOF - uussisserandajad - lopuaruanne.pdf

⁵⁵ Ibid.

⁵⁶ See http://www.integrationresearch.net/free-estonian-courses.html

language e-courses, which are financed by the European Social Fund and the Estonian Ministry of Education and Research.⁵⁷ There are a couple of project-based initiatives offering counselling (including e-counselling) and mentorship services for newcomers,⁵⁸ but apart from that, the support for adaptation of foreigners has been left largely to the employers and universities. Moreover, in the opinion of the interviewees of the current study the provision of support services is greatly splintered between different organisations and the project-based approach does not justify itself as it is not sustainable.

Usually, companies who hire highly qualified foreign workers have their own division or employee who is dealing with them. Similarly, in the universities, the foreign students and researchers are supported by international students' offices or human resources divisions. Moreover, during recent years several private companies have started to offer counselling and support services for newcomers. The interviewees of the current study stated that there is actually a large difference between the employers and universities problems in terms of providing adaptation services for foreigners as the language and cultural courses are all in place at the university, but employers have to organise so-called 'adaptation package' on its own merits. Employers often use specific companies or law firms for helping them to recruit and deal with the adaptation of foreigners. As a result, the cost of recruiting the foreign labour becomes very high and companies do not take up this possibility. This might be another explanation for the low readiness and interest of entrepreneurs in hiring foreign labour. Hence, support from the state is clearly needed more by the employers than the universities. The interviewees of the current study suggest that everything concerning the adaptation should be more strongly supported by the state.

According to the study by the Institute of Baltic Studies (2014),⁶⁰ employers and universities are in general satisfied that large amount of support services are offered by them. Still, they would like the state and local governments to provide more support in improving the availability of (English language) health care, education and kindergarten places as well as creating the possibilities for language and culture studies. In Estonia, there are three international general education schools that provide instructions in English: two of them offer education from kindergarten to basic school level (Tallinn European School⁶¹ and Tartu International School⁶²) and one from kindergarten to secondary school level (International School of Estonia⁶³). In addition, there is the possibility for Finns to study at the Tallinn Finnish School ⁶⁴ and pre-school children can go to International Kindergarten. ⁶⁵ Additionally, two schools – Tallinn English College and Miina Härma Gymnasium in Tartu are offering International Baccalaureate Diploma Programme for international students. However, the results of

⁵⁷ See <u>https://www.keeleklikk.ee/en/welcome</u>

⁵⁸ See http://www.jmk.ee/integratsioon/mentorship-service-for-the-integration-of-new-immigrants-third-country-nationals-in-estonia/; http://www.meis.ee/news?news_id=806

⁵⁹ See for example Expat Relocation http://www.expatestonia.ee/

⁶⁰ Kristina Kallas et al. Uussisserändajate kohanemine Eestis: valikud ja poliitikaettepanekud tervikliku ja jätkusuutliku süsteemi kujundamiseks (Newly-arrived immigrants in Estonia: Policy Options and Recommendations for a Comprehensive and Sustainable Support System). Balti Uuringute Instituut, 2014. https://www.siseministeerium.ee/public/TOF - uussisserandajad - lopuaruanne.pdf

⁶¹ See http://www.est.edu.ee/

⁶² See http://istartu.ee/

⁶³ See http://www.ise.edu.ee/

⁶⁴ See http://www.soomekool.fi/

⁶⁵ See http://www.kindergarten.ee/pages/practical-information.php

the study by the Institute of Baltic Studies (2014)⁶⁶ indicated that the foreigners are not totally satisfied that there are not enough places for kindergarten and school children and tuition fees for the services are very high. They also pointed out that the quality of language courses is variable, the course times are inflexible and it is difficult to find information about the courses. In addition, it is a challenge for families to find a job for their spouses due to low language skills, missing information about labour market possibilities and absence of social network. Equally important are also statements that Estonian employers' interest in hiring foreign workers or students is small and there is still rather high intolerance towards foreigners in the society. According to one interviewee of the current study the integration of foreigners to Estonian society is one of the biggest challenges in the nearest future.

Accordingly, the new integration plan 'The Strategy of Integration and Social Cohesion in Estonia 2020'67 involves sub-goals and activities for developing an adaptation programme which includes adaptation training and development of support services for newcomers. According to the amendments of the Aliens Act, 68 the Police and Border Guard Board has a right to send an alien who has been granted a residence permit or whose residence permit has been extended to participate in the adaptation programme. Currently, the adaptation programme is in the development phase, but the general idea is to develop different modules addressing a variety of topics, for example, information about the state, what is e-road, Estonian cultural differences and etc. In addition, the modules will have subtopics like family, work, entrepreneurship, study, science, etc. The adaptation programme will also involve Estonian language courses. After completing the adaptation programme, the alien has a possibility to register for integration training. In the opinion of the interviewees of the current study the Ministry of Foreign Affairs with Estonian embassies and representatives around the world should also be included in the development and implementation of adaptation programme as they could play a large role in helping to attract and recruit the highly qualified foreign labour.

4.2.5. Conclusions

This chapter described the main measures and issues to attract highly qualified foreign labour to Estonia. First, an overview of the regulative and legal framework for attracting the highly qualified foreign labour was given. Then, a discussion about the national measures for attracting the foreign labour was provided. This was followed by an overview on highly qualified foreign labour development and retention issues.

Estonia has not developed separate policies for attracting the highly qualified foreign labour. However, recently the Estonian government has put a lot of effort in creating and improving the regulative environment for aliens to come Estonia. This has simplified registration of employment procedures and especially academic research and international students' possibilities to remain for

⁶⁶ Kristina Kallas et al. Uussisserändajate kohanemine Eestis: valikud ja poliitikaettepanekud tervikliku ja jätkusuutliku süsteemi kujundamiseks (Newly-arrived immigrants in Estonia: Policy Options and Recommendations for a Comprehensive Sustainable Instituut, 2014. and Support System). Uuringute https://www.siseministeerium.ee/public/TOF - uussisserandajad - lopuaruanne.pdf

⁶⁷ See The Strategy of Integration and Social Cohesion in Estonia 2020 https://www.osale.ee/konsultatsioonid/files/consult/259 140428 Loimuv%20Eesti%202020%20arengukava%20tekst. <u>pdf</u> ⁶⁸ See Aliens Act §121 RT RT I 2010, 3, 4.

http://www.legaltext.ee/et/andmebaas/tekst.asp?loc=text&dok=XXXXXX14K5&keel=en&pg=1&ptyyp=RT&tyyp=X&qu ery=v%E4lismaalaste

working in Estonia. In addition, Estonia has developed a national support measure for the recruitment and employment of highly qualified workers with international (professional) experience (Development Employment Grant Scheme). However, it has not become as popular as was expected. Still, it must be admitted that the attraction of highly qualified foreign labour to Estonia has not been among the priorities of Estonian government.

The government has been of position that simplifying and improving the regulative environment will bring along an increase in the supply of foreign labour. There is lack of knowledge in terms of shortage of occupations and skills, because of the absence of systematic labour market monitoring. Moreover, the information about the working and investments possibilities in Estonia is shared through different web-portals, i.e. through passive marketing tools and the share of active measures is rather small. One important problem is that entrepreneurs' readiness and interest in hiring foreign labour is low. On the one hand it is caused by their comfort, lack of knowledge, uncertainty and psychological barriers. On the other hand, the cost of recruiting the foreign labour becomes very high, as employers often use specific companies or law firms for helping them to recruit and deal with the adaptation of foreigners. The lack of system of services supporting the adaptation, including adaptation programmes and absence of acting support networks, is considered to be one of the main obstacles in the recruitment of highly qualified foreign labour in Estonia. However, the government has started to develop an adaptation programme which includes adaptation training and development of support services for newcomers.

The study reveals that the government should intervene more forcefully for attracting highly qualified foreign labour through applying a targeted policy, either in terms of occupations and countries or both. It would be important to figure out what type of workers is needed and how to attract them. Due to the increasing shortage of qualified labour the creation of a favourable environment through regulative measures is not sufficient, and it is also important to use active measures such as marketing and branding of the home country to attract the foreign talents. In raising the attractiveness of the country as a working and investment location, Estonia should appoint a top-level speaker, either a high-level official or the member of government whose responsibility would be to attract foreign investors or entrepreneurs through actively and systematically introducing the Estonian business environment, conducting meetings and negotiating on a daily basis with foreign investors to persuade them to come to Estonia. In addition, Estonia should develop a solid incentive system, which would make Estonia attractive for knowledge-based investors. The attractiveness of the country without any particular incentive (e.g. treating everybody equally) decreases the greater the development of the country is. The interviewees of the current study suggested that everything concerning the adaptation should be more strongly supported by the state.

Overall, Estonia needs an active attraction campaign with developed value packages and targeted markets. The potential target countries for attracting highly qualified foreign labour could be neighbouring countries with which Estonia shares a similar cultural heritage (e.g. Russia, Ukraine, Moldova, Belarus, etc.). While developing thorough and targeted activities aimed at the attraction of highly qualified foreign labour to Estonia is a long-term and resource-intensive process, in the short-term a more rapid way of attracting highly qualified foreign labour could be achieved through the management of incoming talented international students to the Estonian labour market. Previously the legislation did not allow international students to stay in the country and look for a job after her/his studies; however, these obstacles have now been removed. The simplest action that Estonia could do is to choose its international students very carefully, not to invite them from everywhere. This could be done through conducting the preliminary studies in the targeted markets from where the talents are wanted to be attracted. Moreover, if necessary, then on-site campaigns should be

carried out in the targeted market with the aim to attract students to come and study in Estonia. While international students have started their studies in Estonia, efforts should be made to integrate them into the Estonian life and economy already during their studies. In the long run, it is important to develop target markets programmes in collaboration with enterprises, taking into account the trends and the needs of the labour market.

4.3. **International students**

This chapter looks at Estonian policies and measures to attract international students to take full degree programmes69 in Estonian higher education institutions (HEIs). It gives an overview of the current policy context followed by discussions on some of the main issues to be tackled to facilitate better student attraction and retention in relation to the need for more highly skilled labour force in Estonia. The chapter is based on desk research and interviews carried out with experts from different sectors and organisations – representatives of different ministries universities, foundations, research institutes and businesses.

4.3.1. Policy context

All the main developments and activities in Estonian higher education system so far have been based on Estonian higher education strategy for the years 2006–2015⁷⁰, which has set (among others) the strategic objective to satisfy the needs of Estonian society for a highly qualified workforce. Although it does not directly set attracting international students as a way to satisfy this need, it has set the internationalisation of higher education as one of the key measures to link higher education with research and development activity and the innovation system. In order to support internationalisation, the strategy mentions the following activities among others: developing a state programme with instruments to bring highly qualified specialists to Estonia and to substantially increase the number of foreign students (especially doctoral students) in Estonian HEIs.

Activities to attract international students to Estonia are based on the strategy for the internationalisation of higher education for years 2006–2015⁷¹ which is a sub-document of the higher education strategy. According to the strategy, the objective of the internationalisation of higher education is to improve the competitiveness of Estonian higher education in the region, make the HEIs more visible and create a legal and institutional environment that supports internationalisation in all of its aspects. The strategy stipulates that among others, it is based on a principle that the measure of a knowledge-based society is the existence of highly qualified workers. Three courses of action that have been described in the strategy are: the creation of a supportive legal environment; the internationalisation of teaching and the development of a support system for internationalisation. All these actions involve steps for attracting international students to Estonia for example, the simplification of recognition of (foreign) qualifications and degrees, development of joint curricula of universities in different countries, providing special conditions for international students and researchers in the immigration policy, creation of a favourable study environment and internationalisation of study programmes. The strategy specifies that gifted and motivated

⁶⁹ Attracting foreign students for short-term mobility (e.g. Erasmus programme and other credit mobility options) is not the focus of this chapter.

⁷⁰ Available at: <u>www.hm.ee/index.php?popup=download&id=7653</u>

⁷¹ Available at: http://www.studyinestonia.ee/images/tekstid/esthestrategy.doc

international students should be attracted and that special attention should be paid to the involvement of international students in doctoral, master's and applied higher education studies in internationally competitive specialities that are important to Estonia. As the strategy is planned to end in 2015, it is not clear yet if a new strategy for internationalisation of higher education in Estonia will be developed. According to the Ministry of Education and Research, the new Lifelong Learning Strategy 2014–2020 will replace all current different relevant strategies and internationalisation of education will be a horizontal topic that should be kept in mind throughout all activities, but it has not been set as a clear specific goal in the document itself.

The 'Study in Estonia' platform and marketing strategy has been developed based on the strategy for the internalisation of higher education in order to attract foreign students to study programmes in English. Study in Estonia is a cooperation platform of HEIs in Estonia to create the visibility of Estonia as an attractive study destination and promote the possibilities for studying for international students. The activities are coordinated by the Archimedes Foundation under the programme DoRa (Developing Doctoral Studies and Internationalisation) and co-financed by the European Social Fund. When the Study in Estonia activities were initiated they first set out to get universities to cooperate, to find out the reputation and image of Estonia through analysis and comparisons to other countries and then to explain in Estonia to other stakeholders why attracting foreign students is an important issue for Estonia. The main activities now include representing Estonia and Estonian universities in international student recruitment and networking fairs, participating in international student surveys, organising events and seminars for spreading information, publishing printouts about study opportunities in different languages, being active on social media, cooperating with different partners and stakeholders (embassies and other representations, Enterprise Estonia, student organisations, etc.), organising academic workshops and open lectures in the universities of target countries (Georgia, Finland, China and Turkey), also organising trips and meetings abroad for the representatives of Estonian universities. The Study in Estonia website coordinates and gathers all information in English and has links to other sites for more information.

Study in Estonia promotes Estonia in general as a safe and stable environment with the availability of free Internet access and good English language skills of the general population. The strategy defines two levels of arguments for branding Estonian education and attracting foreign students: first, it emphasises that Estonia is worth discovering and Estonia is comfortable and safe, and second it points out that it is practical (helpful) to study in Estonia and in Estonian universities. Looking at the website and different materials it can be said that both the society as well as education is being used to attract students.

Although all universities have their own internationalisation strategies and activities for attracting international students, they have seen the Study in Estonia initiative as very necessary, as universities alone would not have had enough resources for marketing and branding activities. Study in Estonia offers them opportunities and it is up to universities themselves how actively they participate in or use these opportunities. So far some universities have been more active than others.

There are **no specific target groups** set in Estonia for attracting foreign students. According to the strategy for internationalisation of higher education, gifted and motivated international students should be attracted and special attention will be paid to the involvement of international students in doctoral, master's and applied higher education studies in internationally competitive specialities that are important to Estonia (mainly the ICT sector, science, technology and engineering, health technologies). According to the strategy of Study in Estonia there are two main target groups: exchange students and degree students but also academic staff and administrative staff as indirect

target groups. The Study in Estonia strategy describes targeted students as young, active, fun-seeking, adventurous, open-minded, not that familiar with responsibility for their future, willing to pay a higher price (money or time) to get what feels right. It also emphasises that the aim is to attract those foreign students that have not yet decided where to study.

At the same time, some more specific target countries have been chosen by the Study in Estonia strategy for student attraction activities, by focusing mainly on four countries: Finland, Russia, China and Turkey, also more recently Ukraine and India. These countries were chosen based on where it would be the easiest to attract students from, mainly considering the following criteria: countries where Estonia has embassies or consulates, where Estonian students are already studying, where Estonia has already some international cooperation and from where international students have already come to Estonia for studies.

English-based degree programmes and shorter courses are offered to international students by universities that have agreed on common high academic standards and support services by signing the Agreement on Good Practice in the Internationalisation of Estonia's Higher Education Institutions.⁷² In 2013/14, there were **128 international degree programmes offered** in Estonia that were fully taught in English – in 7 universities (6 public and 1 private) and 2 professional HEIs.⁷³

Admissions to the study programmes are administrated by the HEIs and candidates apply directly to the institution of their choice, with international students usually being treated on the same terms as Estonian students. The general requirement – qualification giving access to university studies in the student's home country – is binding in all HEIs. Other enrolment requirements are institution specific and can include minimum scores of state/final examinations passed in upper secondary school (international results are converted to the Estonian national system) and entrance exams (tests, interviews, written essay, portfolio, etc.). Applicants also need to show proof of proficiency in English when applying for English study programmes (the common requirement is an official result of TOEFL, IELTS or some other internationally accepted English proficiency tests). There are no enrolment requirements for exchange students besides an agreement between partner universities.

In 2013/14, Estonia abolished **tuition fees for degree programmes** taught in Estonian for new students studying full-time, but universities have the right to charge tuition fees for study programmes in English (or any other language). Some HEIs differentiate tuition fees for students from the European Union and from outside the European Union. Most universities in Estonia offer **scholarships for international degree programmes** and it is possible to use other international scholarships (for example, Compatriots' scholarships, Erasmus, Erasmus Mundus, foreign government scholarships, funds, grants, companies, etc.). The internationalisation programme 'DoRa' offers support for master's students, doctoral students and members of teaching staff who are already working or studying at Estonian HEIs, or are planning to do so.

All students who are not Estonian citizens need a temporary residence permit to study in Estonia. EU citizens (including EEA countries and Switzerland) need to register their place of residence with the local government authority of the place of residence within three months from the day of entry to Estonia. The temporary right of residence is granted for a period of five years. In addition, they have

.

⁷² Available at: http://www.studyinestonia.ee/images/tekstid/headetavadelepe.pdf

⁷³ In total there were 26 HEIs in Estonia in 2013/14: 6 universities under public law, 1 private university, 17 professional higher education institutions (9 public and 8 private) and 2 public vocational education institutions.

to apply for Estonian ID-card within one month from obtaining the temporary right of residence. Non-EU students have to apply for a temporary residence permit at the Estonian embassy or consulate in their home country.

As to the **postgraduate stay options**, the revised Aliens Act allows extending the residence permit for studies up to six months after graduation for finding employment. Foreigners who have graduated from an Estonian HEI with a bachelor's, master's or doctoral degree are not required to pass labour market tests for obtaining a work permit and starting from 1 September 2013 can apply for a temporary residence permit for work under special requirements. This means that their employers do not have to apply the payment/fee requirement (applied to other international temporary residence for work applicants) and are not obliged to have the permission of the Estonian Unemployment Insurance Fund for hiring an Estonian graduate.

Based on different international student surveys, foreign students have been **highly satisfied with their stay in Estonia** – according to the International Student Barometer in 2011, 90% of international students in Estonia said that Estonia was a good country to study in. According to the Erasmus Student Network Survey in 2010, Estonia had the highest satisfaction rate among foreign students who had studied in Estonia for at least six months (followed by Portugal, Austria and Sweden).

4.3.2. Current talent attraction and retention issues

➤ Who is attracted to study in Estonia?

So far the emphasis has been on attracting students to come and study in Estonia – mainly by assuring that Estonia has good quality international study programmes and academic staff as well as branding Estonia as a lovely place to study and live in. Many of the interviewed experts expressed their opinion, that attracting international students has been relatively successful so far because the benchmark set by the internationalisation strategy – to have 2,000 foreign students studying full-time in Estonia by 2015 – was already reached few years earlier. According to many opinions from the interviews with different experts, one of the reasons behind this has been the creation and existence of the internationalisation strategy itself, as most of the activities to attract foreign students to Estonia started from there and it has given involved stakeholders and actors a common ground to rely on. On the other hand, some of the experts are not that happy with the current outcomes – although the numbers of international students have been increasing in recent years, many doubt the qualitative aspect of the issue – who is attracted and why?

As was described in the policy context overview, the internationalisation strategy sets out to attract gifted and motivated students but it is not clear if this has been the reality. Universities must treat foreign students the same as Estonian students in the admission process which means that only the best students should be admitted regardless of their nationality. At the same time, some interviewed experts expressed their concerns that it is becoming more complicated for universities to be able to assess the potential of foreign students as more of them are coming now from distant countries compared to neighbouring countries that Estonian university representatives have more knowledge about. Another issue is the conflict between internationalisation strategy and Study in Estonia activities – the former sets out to target gifted and motivated students, while the latter is focused more on young, active, fun-seeking, adventurous, open-minded, etc. students and nothing is actually said about motivation or talent. In this sense, it is not clear who has been actually targeted so far in Estonia's student attraction activities and why these two strategies have not been coordinated better,

as both are instruments of the Ministry of Education and Research and one strategy should be supporting the other, not undermining it.

Some of the interviewed experts believe that Estonia actually does not have the privilege to choose which students and from which countries it wants to attract - therefore, Estonia should be able to attract whoever possible. Some say Estonia should target Asian and African countries as the most prospective ones, others believe that Estonia should target countries that are culturally more similar to Estonia so it would be easier for international students to adapt and stay to work here. On the other hand, due to the free movement of people in the European Union they are also again less likely to stay in Estonia after graduation. Some experts pointed out that Estonia has a bigger probability to attract students from those countries that Estonia has something better and more attractive to offer. None of the interviewed experts actually doubted in the choices of target countries by Study in Estonia, as the number of students coming from those countries has been constantly increasing which means there is some interest there to study in Estonia. On the other hand, there is no information on how many foreign students and from which countries actually stay (or would like to stay) in Estonia for work after graduation. Currently, a new strategy for marketing is in development by Enterprise Estonia to examine the target countries more broadly: does Estonia have any countries from where the foreign workers are wanted and needed? Experts also pointed out that it is important that when the target countries are chosen all different stakeholders and sectors (businesses, tourism as well as other national policies) actively work to attract students/workers from these countries, not only the representatives of the Ministry of Education and Research. This has not been the case so far in Estonia.

The strategy for internationalisation of higher education also pointed out that Estonia should attract motivated students in internationally competitive specialities that are important to Estonia. According to the new smart specialisation initiative ⁷⁴, those are related to ICT, health technologies and services and effective use of resources. Matching education with the needs of the labour market is currently one of the main challenges ahead of Estonia and with the recent reforms in higher education the state funding for developing new (international) study programmes is becoming more and more narrowly focused on smart specialisation fields. Consequently, this constrains universities in some ways to offer international study programmes also in those fields. At the same time, universities have the autonomy to open international study programmes in whatever field they prefer and attract students to those accordingly. Many of the programmes do not fall into the smart specialisation fields. Looking at the statistics (see section 2.6), social sciences, business and law has been the most popular study field among international students in Estonia over time. At the same time, the growth in numbers has been the biggest in the field of technology, production and building as well as in mathematics and natural sciences, which shows that there has been some success in attracting foreign students to specialities important to Estonia.

From attraction to retention?

Most of the interviewed experts believe that international students are crucial for the Estonian economy: as many young Estonians go to work or study abroad and many of them do not plan to

http://www.arengufond.ee/wp-content/uploads/2013/04/Estonia Smart Specialisation Qualitative Analysis.pdf

⁷⁴ Available at:

return, attracting international students to Estonia and ensuring that some of these highly qualified talents also stay and work in Estonia after their studies is one of the only ways to survive the otherwise difficult economic situation. Many interviewees said that one of the most effective ways to attract highly qualified people to work in Estonia is to first train them in Estonian universities as well.

As most of the activities so far have been related to attracting foreign students, Estonia has naturally started to arrive at the next logical phase from attraction to retention of international students. Based on the interviews carried out with different stakeholders, the discussion and focus has recently started to shift towards questions about what happens to international students in Estonia after they graduate. Does Estonia need and want foreign highly skilled labour? Does Estonia's foreign policy and immigration policy actually support them to work in Estonia? Who are the interested employers? Does Estonia have international schools and child care? Is it possible for international graduates to bring their families to Estonia?

Although a shift can be seen in the way of thinking about international students – from attraction to development and retention - there are many obstacles in reality which need to be overcome in order to go from ideas to actions. So far, most of the student attraction activities can be mainly seen as something universities do in order to make their institution and education they offer more international, as well as something the Ministry of Education and Research needs in order to increase the quality and competitiveness of Estonian higher education as a whole. However, it can hardly be seen as part of a bigger talent policy in Estonia that addresses the demands for more highly qualified labour, as student attraction has so far been only in the interest of the education sector and not been based on the needs of the labour market. Student attraction activities in target countries have been rarely strategically coordinated with or supported by other Estonian stakeholders or activities abroad (business sector as well as other national branding and marketing activities). As the activities in Estonia should move from attraction of international students to study in Estonia towards attracting them to work in Estonia, many interviewed experts emphasised the need for a common strategy or agreement between different stakeholders - at least between different ministries - to set out new and common goals to be achieved (in this sense it cannot be only a task for the Ministry of Education and Research - in order for it to be successful ministries for internal, foreign, economic as well as cultural affairs also play a vital role and have to contribute to make the system work better). As most of the student attraction activities so far have been initiated by certain active people, a common written strategy or plan would also serve as a guarantee for sustainable activities if those people leave the related organisations.

One of the main questions currently is — who is responsible for international students in Estonia after they graduate and want to find a job there? While they are still students, universities are in a sense responsible for them and provide services and support needed for studies. However, according to the interviewed experts, universities in Estonia have not yet considered much what happens to international students after they graduate — how do they get employed? Universities understand the need for highly qualified workers in Estonia but they cannot make it their goal to assure that international students stay in Estonia after graduating their studies. The purpose of universities is to provide high quality education and they look at international students rather from their own perspective — are they attractive and competitive enough to attract international students to study there? Besides helping the universities to become more international, foreign students can be also seen as a source of income for HEIs. Therefore, universities cannot be blamed for not taking responsibility for international students being employed in Estonia after graduation, as nobody has tasked them to do so. Universities offer career services to all of their students — local and foreign — and this should be sufficient enough. Interviewed representatives of the universities also believed

that there is not much they can do to help their graduates be employed afterwards as they do not have any contact with students after they leave the university. Although most of the universities try to keep in contact with their graduates, international students are somehow left out of this. As long as Estonia does not have a common national strategy or idea why and what kind of international students/highly qualified labour is needed, it is difficult for universities to start thinking about attracting international students as attracting talents to Estonia's economy in a broader sense.

Although most of the interviewed experts emphasised that it would be important for Estonia to be able attract international students to work there after graduation, they also pointed out that the opportunities for foreign students to find jobs are poor and the Estonian labour market is not yet ready for international workers. It is not clear what kind of people and how many are actually needed in Estonia as the labour market forecasts have been insufficient so far. The Estonian public sector is mostly not able to hire foreigners at all due to Estonian language requirements (and citizenship requirements for people from outside the EU). Only some larger and international (or more internationally oriented) companies seem to be ready for foreign workers, but these opportunities are rather limited. Additionally, the interest of the business sector seems to be rather paradoxical – they emphasise the need for smart and good international workers and find it even better, when these workers have a higher education degree from Estonia, but in reality they do not seem to be able to hire foreigners. The reasons behind it are believed to be mainly language issues (for example to have all the important documents in other languages and to have other workers able to communicate in foreign languages), as well as lack of awareness (for example about laws and legislation about hiring foreigners) and open-mindedness (some might be less willing to work with foreigners then others) of the employers. As many work positions require using Estonian language, it would be important to teach international students Estonian already during their studies in order for them to be able to enter the labour market in Estonia after graduation. Although students in HEIs have already been provided with free language courses, it has so far been voluntary and not many of the students have used this opportunity.

Interviewed experts pointed out that there has not been much strategic cooperation to support Estonian employers in hiring highly qualified foreign workers. At the same time, some stakeholders are hoping that the private sector would first need to discover the benefits of hiring international students/workers. For this they believe that among other things more information and support should be given to the employers to increase their readiness to employ foreigners. The Ministry of Economic Affairs and Communication has an important role here as it has better information about which companies have more experience in hiring foreign labour and which businesses based on foreign capital might be interested in foreign employees. Currently, different ministries are already having consultations and discussions about how to get employers involved more in talent attraction. Offering internships to international students is one good way to get them already in contact with Estonian employers. The Ministry of Education and Research has currently planned some measures for the EU new structural funds period to offer internship opportunities to foreign students as well. However, for this strong cooperation is also needed between universities and the business sector for the latter to be interested in offering internships to international students, not to mention finding actual working places for graduates.

Another question surely is if international students actually would want to stay in Estonia after graduation and if Estonia can offer them competitive salaries. Some experts have pointed out that Estonia does not necessarily need to have all or most of the international students working in Estonia after their graduation, because even the time they spend in Estonia while studying can be seen as

beneficial to Estonia (as they live there, spend their money there, are educated there and maybe later spread information about Estonia back home).

4.3.3. Conclusions

This chapter described main policies, measures and issues to attract international students to take full degree programmes in Estonian HEIs. It first gave an overview of the current policy context and then discussed some of the main issues to be tackled to facilitate better student attraction and retention in relation to the need for a more highly skilled labour force in Estonia.

As internationalisation of higher education is one of the main principles and goals in Estonian higher education policies, attracting foreign students to study in Estonia has been strategically planned for some time now. Based on the strategy for the internationalisation of higher education, a marketing strategy called "Study in Estonia" has been developed in order to attract foreign students to study programmes in English language. It is a cooperation platform for HEIs to promote Estonia as an attractive study destination and the possibilities for studying, it has created a brand for Estonia as well as defined target students and countries. It focuses on young, active, fun-seeking, adventurous students as the main target group to be attracted to Estonia. On the other hand, the internationalisation strategy states gifted and motivated foreign students are desirable. This inconsistency between these two strategies makes it really difficult to evaluate the effectiveness of student attraction as it is not actually clear, who is targeted. As none of the strategies have been actually connected to the labour market needs or other national policies in Estonia, it is not clear whether Estonia is trying to attract students whom Estonia's society and economy actually needs? On the other hand, many experts believe that Estonia actually does not have the privilege to choose which students and from which countries we want to attract - so in this sense Estonia should be able to attract whoever possible.

As most of the activities so far have been about attracting foreign students, Estonia has naturally started to arrive to the next logical phase from attraction to retention of international students and the discussions have recently started to shift more towards questions about what happens to international students in Estonia after they graduate. Does Estonia need and want them as highly skilled foreign labour? Although Estonia does have a coordinated national strategy for student attraction, it has been lacking one of the crucial aspects to be truly successful - this international education policy is barely integrated with other national policies and although universities and the Ministry of Education and Research (and the Archimedes Foundation) may work hard to promote Estonia as an attractive study destination, it is not supported by the promotion of Estonia as an attractive work destination by other stakeholders. Furthermore, although employers publicly emphasise the need for highly qualified international workers in Estonia, in reality the opportunities for foreign students to find jobs are poor and the Estonian labour market does not seem to be ready for international workers (mainly because of language issues as well as lack of awareness). It is not clear what kind of people and how many are actually needed in Estonia, as the labour market forecasts have been insufficient so far and student attraction strategies have not been related to these at all. As many of the interviewed experts pointed out — Estonia needs a common idea or strategy behind attracting international students to work in Estonia after their studies. It is important to find out what kind of highly qualified labour is needed in Estonia and then attract foreign students there accordingly. For this common strategy to be truly successful it cannot be only a task for the Ministry of Education and Research – all other ministries and stakeholders play a vital role and have to contribute to make the system work better.

4.4. Diaspora policies

This chapter will provide an overview of the national diaspora policy, its main activities and address the question of how does the diaspora policy support or contribute to finding solutions to the lack of highly qualified labour in the country. To what extent is the diaspora related to the talent policy and how much does the diaspora policy touch on actual labour market and economic aspects of the issue? Since Estonia does have a diaspora programme, an overview of the programme is provided followed by an analysis of both its attraction and to some (very limited) extent its retention issues, from the perspective of talent policy. Besides the diaspora programme, another initiative reaching out to foreign residing Estonians is being discussed (Talents Come Home) since that project had a more narrow labour market and attraction focus. The chapter concludes by outlining the potential areas of improvement and recommendations in view of the current policy situation and talent policy goals in mind.

4.4.1. Estonian diaspora programme

The Estonian diaspora programme (also translated as Compatriots' Programme) is a programme run by the Estonian Ministry of Education and Research (falling under the domain of the Language Policy Department) in cooperation with the Ministry of Cultural Affairs, Ministry of Foreign Affairs, Ministry of Interior, State Archives, and the Estonian World Council. The programme was first introduced in 2004 to provide support for the Eastern diaspora for learning Estonian and activities of cultural organisations. The next programme, introduced in 2009, intended to provide balanced support to both the Eastern and Westerns diasporas and extended the programme activities to providing support to diaspora cultural heritage preservation, facilitating the return migration of foreign living Estonians. Systematic support for Estonian schools abroad was set up and e-learning support was initiated. As the diaspora and its composition have been evolving over time, the programme has adapted its activities according to the needs and nature of the foreign living Estonians (in the framework of the budgetary constraints).

The second diaspora programme ran from 2009–2013. The diaspora (*rahvuskaaslased* in Estonian), i.e. the target group of the programme was defined through the term 'foreign residing Estonians' (*väliseestlased*) signifying Estonians living permanently abroad. As the programme states, the term does not include any value judgements regarding the diaspora but has been adopted for practical reasons as the best of all possible alternatives. The overall number of the diaspora is estimated to be 150,000–200,000.

The 2009 programme set 10 strategic objectives for 2013. The following Table 12 illustrates the nature of the completed programme. As can be seen, the focus of the programme has mostly been on language and cultural activities complemented by more general information sharing and relocation support services. The annual budget of the programme has varied, during the last few years it has been around EUR 700,000. In 2013, the budget was extended to EUR 724,480, out of which education and cultural heritage support took up 58% and 26% respectively, leaving the rest to other types of activities. Since the programme falls under the domain of the Ministry of Education and Research and more specifically to the Language Policy Department, it is only natural that the language policy activities are being prioritised. However, the language policy measures can be facilitative to other more wide activities such as return (e.g. to the Estonian labour market, education system) or participation in Estonian language based social and cultural activities. Supporting the diaspora in learning Estonian has also historically been the main driver of the programme. According to the

authors of the programme, the two diaspora programmes have been important in terms of extending the opportunities for learning Estonian abroad, supporting cultural activities of Estonian organisations as well as different events and publications, collection and preservation of cultural heritage, activities of Estonian churches and providing support and training to returning Estonians.⁷⁵

TABLE 12. THE OBJECTIVES OF THE 2009–2013 DIASPORA PROGRAMME

No. Activity Indicator Baseline Target Outcome 1 Providing information on organisations of Estonians abroad Availability of contact information information of information of communities, associations, etc. No contact information of 585 organisations in organisations in organisations in made available on the diaspora programme website organisations in associations, etc. 2 State provided website to disseminate information between Estonia and foreign residing Estonians Availability and regular updating of website No website Active and reliable website Website is available and is being used 3 Providing support to teaching and learning of Estonian language and culture outside Estonia Number of places providing study opportunities 35 55 58 4 Providing TV and radio broadcasts on the diaspora, making them accessible to the diaspora accessible to the diaspora Duration and frequency of shows once a week and TV shows once per month No regular shows once per month Two regular shows once accessible over the web 5 Extending the scholarship Number of 33 scholarships 50 scholarships 38 scholarships, as
disseminate information between Estonia and foreign residing Estonians 3 Providing support to teaching and learning of Estonian language and culture outside Estonia 4 Providing TV and radio broadcasts on the diaspora, making them accessible to the diaspora Two regular updating of website of we
teaching and learning of Estonian language and opportunities 4 Providing TV and radio Duration and No regular shows Broadcasts on the frequency of diaspora, making them accessible to the diaspora shows and TV shows once per month radio, live broadcasting is accessible over the web
broadcasts on the frequency of once a week on TV, additionally diaspora, making them shows and TV shows some irregular accessible to the diaspora once per month radio, live broadcasting is accessible over the web
5 Extending the scholarship Number of 33 scholarships 50 scholarships 38 scholarships, as
programme scholarships for the number of foreign living applications has Estonians remained low and studying in the quality of Estonian higher applicants has not and vocational met the expected education standards; the institutions programme has been extended to applicants wishing to study Estonian language.
6 Providing counselling to Number of 80 100 390 returning Estonians individuals
counselled

⁷⁵ Diaspora programme 2014–2020 [Rahvuskaaslaste programm 2014–2020]. Background and development principles of the programme. http://www.hm.ee/sites/default/files/rahvuskaaslaste programm 2014 2020.pdf.

97

No.	Activity	Indicator	Baseline	Target	Outcome
	support to returning Estonians	returning individuals receiving a relocation grant			2011: 66 2012: 91 2013: 96
8	Providing relocation training to returning Estonians	Number receiving training	0	15	0, funds were not available to provide training
9	Providing support to church services	Number of supported church communities	9	12	13
10	Preserving Estonian national cultural heritage	Publicly accessible, mapped and organised archives	Preliminary information available	Systematic information collection, collection management and public access	NGO BaltHerNet includes 48 official members and 350 partners; www.balther.net available; 141 archive projects supported

Source: The final report of the 2009–2013 diaspora programme.

The third diaspora programme for 2014–2020 was adopted at the end of 2013.⁷⁶ The programme sets the following objectives: keeping the diaspora in contact with Estonia and its culture; easy repatriation; increasing the opportunities for disseminating objective information about Estonia abroad; facilitating opportunities for preserving Estonian cultural heritage abroad. The annual budget of the programme is 753,000 euros, out of which 80% are intended for the Ministry of Education and Research activities. The programme has four main groups of activities:

- supporting learning Estonian and learning in Estonian abroad; supporting studies of members of the diaspora in Estonia (annual budget 457,173 euros);
- supporting the preservation of Estonian culture abroad and the development of common sense of belonging of Estonians (annual budget 35,500 euros);
- supporting the collection and preservation of Estonian cultural heritage abroad as well as access to this cultural heritage (annual budget 163,331 euros);
- facilitating the repatriation of the diaspora (annual budget 97,000 euros).

Although the main framework and approach of the programme has remained largely the same, the 2014 programme has introduced several important changes and new activities like providing adaptation support for retuning Estonians, cultural event are being more widely used for promoting Estonia, development of e-learning materials for learning Estonian, providing in-service training to Estonian language teachers abroad, providing a scholarship for Estonian language studies at Estonian higher education institutions, extending the number of participants in Estonian cultural camps in

-

⁷⁶ https://valitsus.ee/UserFiles/valitsus/et/valitsus/arengukavad/haridus-ja-teadusministeerium/Rahvuskaaslaste%20programm%202014-2020.pdf.

Estonia and extending the target group (up to 26-year-old youth); sending Estonian interns to Estonian schools abroad.

Talent attraction under the diaspora programme

In the context of the diaspora programme, it is relevant to turn to the issue of interrelationship between the diaspora programme and the talent policy, namely to what extent does the diaspora programme help to address the issue of the shortage of qualified labour. In addition to asking if the talent attraction aspects are being currently addressed, the potential room for improvement is also reviewed.

In general, it can be conceded that since the diaspora programme has historically focused on language, culture and some repatriation issues and having been mostly under the managing domain of the Language Policy Department of the Ministry of Education and Research, it is understandable that the priorities of the policy field have dictated the main directions of the programme. As the interviewees indicated, the programme has clear budgetary constraints and while prioritising the language and cultural objectives of the programme, there is in general very little manoeuvring room for changes in activities as the finances for new or expanded activities need to be found in the framework of the current programme. According to the interviewees, there has also been no political 'demand' for more economic or labour policy focused activities. Since the core ministries implementing the programme have not included those of managing economic or labour policy, it is clear that issues belonging to these domains have received less attention. Furthermore, it has not been in the interest of the parties in the programme to include new topics or issues, while the funds are scarce for funding all the activities prioritised by implementing ministries.

However, as the demographic and labour market pressures are becoming more imminent, the questions of interrelations between different government activities and measures are being more voiced. During the process of the 2014 diaspora programme approval by other Estonian ministries, the Ministry of Internal Affairs, for instance, drew attention to the need to relate the programme activities to economic aspects and the initiative of 'Talents come home'. However, as the Ministry of Internal Affairs did not want to take responsibility for implementing and funding these activities and the Ministry of Education and Research did not view these issues to be in their domain of activities either, these were left out of the programme.

Overall, it can be said that the diaspora programme does not have a clear link with talent policies as its activities do not directly address increasing the supply of qualified labour in Estonia (on behalf of the foreign residing Estonians). However, there are several more or less indirect linkages with talent policy that have the potential to facilitate the supply of labour positively if these issues were to become important at a larger scale and be more prioritised in the programme. The following will briefly discuss these linkages and point to potential future lines of development.

The overall approach of the diaspora programme departs from the principle that Estonia should provide opportunities for its foreign residing individuals to stay connected to their home country. This is mostly being done through language and cultural activities as well as information sharing. As expressed by the interviewed programme representative, the programme is based on the idea that reaching out to the diaspora through different supportive activities signals the interest and care of Estonian state which might in the long run benefit Estonia in the form of returning citizens, increasing number of visitors, employees or students. In addition, the programme representative agreed that connecting foreign living Estonians positively with their home country also has the potential to transform them into ambassadors of Estonia promoting the country as a nice living and working

environment. However, this kind of reasoning is not given as much priority, as the financial scope of the programme allows focusing only on the very specific objectives and activities. So far, as underlined by the interviewees, the issue of promoting the return and more specifically the overall role of the diaspora in the development of Estonia have been beyond the current scope of the programme. Furthermore, there is no overall political agreement on the larger economic role or potential contribution of the diaspora.

There are three activities in the diaspora programme that have a slightly more direct link with attraction. Firstly, the programme supports the higher education and vocational studies of the diaspora youth in Estonia, covering the costs of study as well as living expenses. Although the programme is very limited in scope and can only support up to 13 new students annually (the total number of active grants has varied from 21–34)77, it is an effort to actually bring foreign living youth to Estonia for longer periods of time. This, in principle, contributes to the pool of educated people in Estonia. These youth are also potential additions to the workforce, although at this scale it can only be a marginal effect. Another question is, to what extent do these youth relate their future to Estonia and employment here? Furthermore, the extent to which employment here is promoted to these youth remains to be answered. However, as the programme focus suggests, labour market issues have not been a priority of the programme and therefore it can be expected that there has been no attention to activities beyond the provision of scholarships. The potential effect of the scholarships is complicated by the fact that the supply of the candidates has not met the expected targets. Namely, as the diaspora programme report concedes, the number of applicants has been lower than planned, in addition to the fact that the academic quality of candidates has not met the minimum standard set. This signifies a number of issues. Firstly, the limited scope of the programme potentially complicates the dissemination of scholarship information on a larger scale. As the programme representative brought out, the central communication plan has been missing until now and the main channels of information have been e-mail lists of diaspora organisations, direct contacts and the embassies and consulates of Estonia; sometimes information has been shared in Estonian newspapers such as Sirp (cultural weekly newspaper) and Öpetajate Leht (teachers weekly newspaper). Secondly, depending on the location of potential candidates, the study opportunities in Estonia might not be very attractive to youth. Youth in Western European countries and the US in particular have several more attractive alternatives to choose from and thus might not opt for study in Estonia unless they are attracted by some specific study fields offered here or prioritise establishing more permanent contacts with their country of origin in general. All in all, even though in principle the scholarship programme has the potential to contribute to talent attraction, the scope and focus of the programme cannot have had any clear effect on increasing the supply of highly qualified labour.

Secondly, the diaspora programme involves an activity which facilitates the development of national identity through bringing young people to Estonia for summer periods. Young Estonians residing abroad (starting from the 2014 programme, it is intended to raise the age limit to up to 26-year-olds) can participate in Estonian language and culture camps which introduce Estonia to foreign living youth. In 2009–2013 a total of 315 foreign living Estonian youth participated in the youth camps.⁷⁸ The camps involve teaching and learning Estonian through play and with the help of professional teachers and support students from Estonia. The participants take part in excursions, hiking, sports

-

⁷⁷ The final report of the diaspora programme for 2009–2013. <u>eelnoud.valitsus.ee</u>.

⁷⁸ The final report of the diaspora programme for 2009–2013. <u>eelnoud.valitsus.ee</u>.

competitions, etc. Through different types of activities not only language skills are developed, but also knowledge on the history, culture and ways of life in Estonia are facilitated. According to the programme report, the camps are highly valued by participants, parents and teachers. Depending on the participants' age and language skills (both of these have been varying), the camps have the potential to tighten the ties of the youth with their country of origin and lead to some of them choosing Estonia as a place of study or employment. However, it must be noted again that although this measure has some facilitating potential, it has not been designed as a talent attraction activity per se and therefore its effect mostly likely remains marginal in that sense.

Thirdly, the programme supports the repatriation of foreign living Estonians. This means that it could also include the return of the highly qualified Estonians but the programme does not target specific groups per se; vice versa, the programme underscores the importance of the right of return of every single Estonian. The repatriation support, administered by the Integration and Migration Foundation Our People (MISA), is aimed at providing financial support to returning Estonians who have lived abroad for 10 year or more or were born outside Estonia. The financial support offered applies to direct proven costs related to relocation from the foreign country to Estonia and can be currently reclaimed in the amount of EUR 2,000 per adult. The number of individuals returning and having been rewarded the relocation support has varied across the years. According to MISA data⁷⁹, the number of supported applications peaked in 2008 when 242 adults were granted funding (average funding EUR 504 per application). Since then, the number of granted support has been considerably lower, ranging from 42-97 annually with the average support varying from EUR 771 to EUR 1,058 per adult. Overall, as can be seen from the scope of the repatriation support, the extent of the programme remains rather marginal in the sense that the number of returning people and the funding is rather low. However, it has to be viewed in the context that it has not been designed to function as an attraction and talent policy measure as such but rather the goal has been to provide help to individuals or families needing relocation funding. In view of the decision-making factors of talents, the provision of relocation support is generally not a main driver but could have some importance in decision-making, especially for families with a low socio-economic background. Still, it is clear from the overview of the measure that it does not have great significance in the talent attraction policy at the moment. However, in view of the future perspective that if Estonia decides to focus on more active diaspora return policy it could be part of the attraction package.

The diaspora as a potential talent attraction target group?

Although the current diaspora programme does not actively promote the return of foreign living Estonians through attraction measures, the potential of the diaspora as a talent attraction target group was touched upon during the interviews. The interviewees pointed out several important aspects that have relevance in the context of potential activity planning in this area. Firstly, several interviewees noted that the diaspora is a very diverse group of people and thus excludes a common approach to attraction completely (as the literature emphasises). The diaspora is living across the world and in contrast to more historical diaspora centres, Estonians tend to be more scattered across countries and regions. The composition of foreign residing Estonians includes refugees, recent work migrants, students and graduates; all the more so-called cosmopolitan Estonians who move between countries; and the descendants of the diaspora. This highlights the importance of carefully analysing who should and could be potentially targeted and how.

-

⁷⁹ http://www.meis.ee/migratsioon.

A researcher interviewed during the study emphasised an important paradox about the diaspora and their possible return. The research done on the Estonian diaspora, as explained by the interviewee, suggests that the likelihood of returning is higher for those diaspora groups who have migrated most recently. The more extensive the foreign residence becomes, the smaller the likelihood of return tends to become. However, the most recent emigrants of Estonia have mostly been groups that tend to be the least attractive in view of meeting the country labour market needs. The most recent emigrants tend to be more likely lower qualified and generally working in blue collar positions, while the 'older' Western emigrants are believed to be more highly educated. This in turn suggests that convincing the latter to return is rather complicated, if not impossible. However, there is also some encouraging data. According to the 2009 survey of Estonians living in Finland, 29% of them have higher education and the same share of people are working in positions requiring lower education then their actual qualification. This can refer to a potential group of returnees. In addition, the 2011 census data shows that the share of highly educated people among the returnees have been higher than their share in the overall Estonian population suggesting that Estonia is still able to attract back highly qualified individuals.

Even though the return of the 'old' Western diaspora is generally viewed to be rather unlikely by the interviewees as they are already well-established in their country of residence and the arguments for exchanging their current life and working career with that possibly offered in Estonia tend to be weak, potential target subgroups were pointed out. According to some interviewees, recently retired representatives of diaspora who are still active and professionally 'in shape' might be reviewed as a pool of potential labour. These are mostly experts who still have a willingness to contribute to the development of their country of origin. This might especially be feasible in areas where Estonia currently lacks local expertise or where labour is scarce. Even though these experts might not be prepared to permanently relocate to Estonia, they might complement the current knowledge and skill gaps in Estonia through temporary cooperation and distance work. Therefore, it is important to carry this idea further in order to analyse more thoroughly the composition and motivation of this diaspora group.

In addition to the retired diaspora, another potential group of working age people living abroad are Estonians who have once migrated for education and/or career purposes but have reached a point in life where they want to continue living and working in Estonia. These are generally people who have realised their professional ambitions abroad and have moved to a life stage where the home country increases in value hierarchy. And said by the interviewee, these are people who follow a learn-earn-serve pattern in life. Having lived and worked abroad for 10–15 years and with children grown up, they see an opportunity to return. The benefits of living in a country you know best, being close to the friends and relatives and valuing other opportunities of a small country start outweighing the

⁸⁰ Tammaru, Tiit. 2011. Väljaränne Soome ja Eestisse tagasirände kavatsused. Tartu Ülikooli Välis-Eesti uuringute keskus. Ettekanne Eesti Statistikaseltsi konverentsil. http://www.slideshare.net/Statistikaamet/tiit-tammaru-vljarnne-soome-ja-eestisse-tagasirnde-kavatsused.

⁸¹ Tammur, Alis ja Koit Meres. 2013. Sisseränne Eestisse 2000–2011. Eesti statistika kvartalikiri. 3/13. www.stat.ee/dokumendid/72586.

advantages of their current life. Therefore, it is also important to continue investigating this type of diaspora group.

The third diaspora group with a higher return potential are, of course, young graduates. These have already been a targeted group in Estonia (see the next subsection) but continue to be important in terms of keeping track of their composition, characteristics and locations, as well as return motivators, etc.

Overall, the representatives of the diaspora revealed in the interviews that there is great potential and willingness on the part of the diaspora to contribute to the development of Estonia. This mostly relates to contributing through their own field of activities or expertise. In addition to this sense of mission and emotional connectedness, the factors attracting diaspora cooperation and even possible return are related to the smallness and openness of the Estonian society. For instance, the lack of the hierarchy in society enables comparatively quick career enhancement or lack of bureaucracy facilitates ease of doing business. However, it is the diaspora expectation that the Estonian state would express greater interest in the activities of the diaspora and initiate contact or potential discussions on the needs and expectation of the country.

The literature review provided in the first chapter clearly outlined that a comprehensive overview of the nature and composition of the diaspora is the very precondition for facilitating the impact of the diaspora on the home country development. It is complicated to implement any policies or activities unless it is well known who the diaspora are, what their interests, motivation, values, etc. are. Only a good knowledge of the nature of the diaspora can inform the policies and steps taken. As the Estonian diaspora policy (i.e. the diaspora programme) has mostly concentrated on language and cultural policies and to some extent repatriation, the focus has been on these aspects of diaspora composition and needs. For instance, the Ministry of Education and Research as well as the Ministry of Cultural Affairs are well informed of the education and cultural organisations abroad and are in close contact regarding their expectations for support or needs. Diaspora conferences have also been organised in Estonia – these also function as information sources, reading the diaspora needs and expectations. Additionally, during the last diaspora programme the contacts of all Estonian organisations were collected and mapped (a total of 585 organisations in 33 countries). 82 However, since the programme has not had an economic or labour market focus, a comprehensive overview of the diaspora composition and its characteristics is largely lacking. This is especially the case for individuals not organised under any diaspora organisations. The consulates of Estonia are also trying to maintain lists of Estonians residing in the area but these mostly serve the purpose of disseminating information on events or activities, which again do not include a specific focus on talent policy and facilitating the increase in the supply of qualified labour in Estonia.

From the previous discussions it seems that there is a need to have a better overview of the diaspora or, as Agunias and Newland (2012) call it, develop a skills inventory of the diaspora. Since different countries do not collect data on nationality, the registry data from other countries, even if it is accessible, cannot be helpful in keeping an update on the nature and composition of the diaspora. This suggests that Estonia should figure out ways of keeping the foreign living people on the 'radar'. The interviewed people, however, suggested that this should be done with care and needs to be completely voluntary by nature as the reasons for migrating are very different. Some people migrate in order to give up connections with their previous homeland; others might be employed illegally.

 $^{^{82}}$ The final report of the diaspora programme for 2009–2013. $\underline{eelnoud.valitsus.ee}.$

Therefore, the overview of foreign living Estonians should be set up in a way that it would be a channel of voluntary communication between the state and the diaspora: it should provide an easy environment for submitting information on the diaspora location, main characteristics and contact information that is available to the state. On the part of the state, it should not only be an information collection tool but also an opportunity to keep the diaspora connected to the country (information sharing, employment and cooperation opportunities, relocation assistance, etc.).

Other countries' experience could also be helpful here. For instance, it is known from the UK that it recently decided to close down a registering system called LOCATE that did not meet the desired objectives. Partly, it was due to the fact that it remained unknown among foreign residing Brits but also due to the fact that it appeared too intrusive. Therefore, it was replaced with other information tools, including social media. The UK experience underscores the importance of communication in implementing such information systems (purpose, dissemination targeting, and data utilisation). It also suggests that diaspora mapping should have different focuses relating to the mapping purpose — different services should be available for different target groups. Individuals interested in employment or cooperation opportunities should have possibilities for submitting more detailed data on their skills while people wanting to be just connected should be able to receive the expected information. The Talents Come Home project in Estonia was encouraging in this type of registering activity as 706 individuals registered as "talents" on the project website and signalled to be open for cooperation or employment opportunities. However, as Agunias and Newland (2012) point out, diaspora organisations are always valuable information sources on diaspora populations along with specific diaspora studies (e.g. by Germany). The latter tend to be very costly, though.

Once Estonia decides that its diaspora would be a potential target group of the talent policy and it could be utilised for labour market supply purposes, there are already several information channels and diaspora dissemination tools in place that could be utilised for that aim. In addition to the main diaspora events, e.g. ESTOs⁸⁴ and now ESTOPs⁸⁵, there are several diaspora publications being published online that could disseminate information. The honorary consuls of Estonia are also an underutilised opportunity of attraction, as was identified by the interviewees. Embassies and consulates tend to have quite good information on permanent residents but they tend to be short-staffed for functions requiring additional specific activities. The interviews suggested that this is mostly related to lack of resources and priorities but in general foreign representations are prepared to contribute to talent attraction among the diaspora if it is politically prioritised.

Although the diaspora as the target group of talent attraction is an under-researched issue and deserves further attention in view of their potential contribution to the Estonian labour market problems, it is important to underline that whatever attraction measures would be developed, it is critical to keep the marketing honest. This includes refraining from creating false hopes and addressing expectations adequately. This mostly involves disseminating clear and sufficient information about local life and working conditions, availability of services (i.e. local context). Finding a best mix of incentives is the key in attraction management as Agunias and Newland (2012) point out – the developed measures need to be attractive to the diaspora and not incur resentment of local actors either. The latter is least likely to occur when the local population understands that the

_

⁸³ http://britishexpats.com/articles/moving-abroad/fco-locate-scheme/.

⁸⁴ ESTOs are worldwide Estonian gatherings to bring together foreign residing Estonians and introduce Estonian culture.

⁸⁵ ESTOP is an informal gathering of Estonians living abroad. http://estop.ee/index.php.

returnees are not actually displacing local employees but are rather complementing the local knowledge pool. One factor contributing to the beneficial reception of diaspora engagement is today's tendency to move away from permanent return or relocation to temporary or virtual return and engagement as Agunias and Newland conclude.

4.4.2. Talent attraction through the 'Talents Come Home' project

The 'Talents Come Home' project was implemented in 2010–2012 with the aim of connecting talents living abroad and local businesses needing qualified labour (with foreign experience or multicultural knowledge and skills). The project focused on setting up a website for advertising Estonian jobs (including distance work opportunities) for foreign living Estonians and providing useful information for returning talents. In addition, it provided an opportunity for foreign living talents to publish their CV on the website so that potential employers could browse for future employees or business contacts. The project was set up by the Estonian Chamber of Commerce and Industry and co-funded by the Estonian state and structural funds. According to the project coordinator, the idea of the project was to fill a missing niche in the market by bringing together businesses in need of internationally experienced labour and Estonians residing abroad. Therefore, the main target group of the project was Estonian youth studying or working abroad, as the project authors estimated that young people graduating their studies or on the verge of starting a family would be mostly likely to return. In addition, graduates are often at a crossroad in terms of selecting a career - either in their destination country or at some other place. The project initiators deemed it important to provide an option (offer) for foreign living Estonians to at least consider Estonia as a future employment possibility (the invitation was considered to be an important driver). This was thought to be especially important for those youth that actually wanted to return or at least maintain closer ties with their home country. The secondary target group of the programme was foreign residing Estonians that might be interested in cooperating with Estonian businesses in their destination countries, e.g. working from a distance or at their location.

The programme was implemented in Estonia for two years and it created a rather unexpected reaction in the public. It started a huge public polemic regarding the term 'talent' diverting the attention from the project's actual goals to a discussion on whom is included in the talent group and who not and what kind of people does Estonia expect back or not, etc. The project got remarkable and largely unexpected media coverage.

In terms of actual project results, the project concluded with 27 'success stories' or returning talents. 86 The project initiators attribute this modest result to several factors. For instance, the project was launched during the economic crisis that diminished the total number of vacancies in the Estonian labour market considerably. Estonian employers also lack long-term personnel policy and their understanding and appreciation of multicultural environments and foreign experience is rather modest, not speaking of lack of openness to diversity. Furthermore, it became evident during the project that there were several obstacles hindering the return of talents: some were related to practical matters (e.g. the partner's obtaining living permissions, availability of kindergartens, etc.), others with policies (e.g. burdensome bureaucracy, lack of information or assistance at state level). 87

_

⁸⁶ http://www.norden.ee/images/regionaal/info/migra/seminar 311013/Siim Raie migr 311013.pdf.

⁸⁷ http://www.norden.ee/images/regionaal/info/migra/seminar_311013/Siim_Raie_migr_311013.pdf.

As the interviewed project representative highlighted, the project initiators also overestimated the demand of some organisations for this type of service. For instance, it was expected that public sector organisations and academia would easily link with the initiative, but in the end they were the least likely to publish information on the project website.

However, in addition to the actual number of returning talents, it is rather significant that 706 individuals signed themselves up in the website as being available or open for employment offers or some other cooperation opportunities. This is rather encouraging in the sense that these types of talent inventories could be implemented if they are properly managed and updated besides the fact that interest towards Estonia is rather significant among foreign residing youth when promoted at a high level (i.e. Estonia needs you).

Today, the project has formally ended, although the Chamber of Commerce and Industry is currently maintaining the project website as a follow-up responsibility of the project. At the moment, there is no development of the project. This means that there are no real activities to promote the website which in turn means that this type of talent attraction has realistically ended. At the moment no further plans are known.

Even though the project implementation was hindered by several external factors (e.g. recession, bureaucracy, migration rules) and the project was set up as a pilot by a small group of active citizens, it appeared from the interviews that a there were some issues that could have contributed to some additional effectiveness. Although the project was co-funded by the state, it did function as a state initiative, i.e. it was not systematically linked to any other state measures in the field of labour market or economic policy. The President of the Republic acted as the patron of the project, but otherwise it did not relate to the services or activities of any state agency or organisations. More interestingly, according to the interviewees, there was not even any communication between the diaspora programme and the 'Talents Come Home' initiative which, nonetheless, have very close objectives in terms of reaching out to the diaspora and informing them about opportunities in Estonia.

4.4.3. Conclusions

This section addressed the current state of the diaspora policies with the intention to investigate to what extent these policies have and could potentially contribute to the talent policy development. As the analysis suggests, there have been two major lines of development. The official diaspora programme, stemming mostly from the need to support language and cultural activities of the foreign residing Estonians, focuses mostly on aspects not related to economic or labour market issues and therefore remains rather distanced from the talent attraction issues. Even though the programme includes the objective of increasing the population of the country with the help of the diaspora, it largely remains a pure rhetoric as there are no specific activities to actually attract the diaspora back to Estonia. However, it has some indirect links (scholarships, youth camps, relocation support) with talent attraction that could be further utilised in future attraction activities. The scholarships and camps do have good potential in terms of facilitating greater diaspora inclusion and involvement in the future. For instance, the scholarships could be more clearly connected to the Study in Estonia campaign together with promoting employment or career opportunities in Estonia. The camps could also be used more for promoting study and employment opportunities in Estonia.

The other line of activity has been the 'Talents Come Home' project, which had a direct focus on increasing the labour supply in Estonia, but its effectiveness was limited due to several external and internal problems. Overall, the project has valuable experience in connecting and communicating with

foreign living talents that would provide useful learning points in developing future measures. In addition, it has established a good platform that could be developed further or integrated into other future activities.

All in all, the analysis outlines that the potential contribution of the diaspora in the development of Estonia has been rather overlooked thus far. However, at the time of increasing demand for qualified labour and the demographic pressure, it is time to open wider discussions on the extent to which Estonia could rely on foreign residing Estonians in relieving the labour market needs. This discussion should be followed by a more careful analysis of the composition and characteristics of the diaspora to inform potential policies and possible lines of activities, e.g. specific attraction. This analysis also suggests that one of the activities deserving more attention is the establishment of an information environment for the diaspora to voluntarily inform Estonia about their location, characteristics, expertise so that individuals could be contacted for information dissemination as well as for possible employment purposes. This could easily be a development of the 'Talents Come Home' project website and potentially connected to the "Work in Estonia" project.

As other countries' experience suggests, the permanent relocation programmes have generally failed. The development of diaspora networks that provide knowledge circulation and temporary mobility have been much more successful instead. Therefore, it is wise for Estonia to give preference to knowledge network activities if the diaspora is going to be seen as a talent policy target group. However, again, before proceeding with any particular activities, the diaspora and its qualities need to be researched to be able to develop concrete policy steps.

While developing diaspora policies it is vital to keep in mind the heterogeneity of the group, which was clearly stressed by the interviewees. As the literature review of other countries experience suggests, it is more important to focus on quality rather than quantity when designing any policy measures.

The research also underlined that the diaspora discussions would benefit from a revision of the terminology used (e.g. 'rahvuskaaslased' and 'väliseestlased') as these are often misunderstood and/or refer to terms that sometimes seem outdated. Moreover, as some interviewees suggested, the differentiation based on location is becoming more and more irrelevant during the time of globalisation and therefore 'Estonians' should be used for all people regardless of their residence (if they identify themselves as being Estonian). The e-residence ⁸⁸ initiated in Estonia is a first step in moving towards more virtual country communities.

-

⁸⁸ It is an initiative by Estonian government to provide e-residence, i.e. a digital ID solution, to foreigners who would like to utilize the e-services provided by the Estonian state and other service providers (e.g. digital signatures, establishing a company, etc.).

Conclusions and recommendations

Talent policy literature is booming with the claims that the countries' economic success and their populations' well-being is dependent on the ability to attract and retain the smartest people possible. Larger countries can generally rely more on their own talent pools as the greater number of people tends to provide more choice and option. However, even the largest and successful countries are nowadays looking outside their borders in search of the brightest and wisest. These may be either foreign talents or nationals of the country residing abroad. In the case of smaller countries, such as Estonia, talent shortages are especially severe as the local talent pool is significantly smaller. Moreover, the demographic decline and emigration are additionally exacerbating the situation in Estonia while the closeness of the economically well-off Nordic countries complicates talent attraction to the country. Even though the BSR aims to advance cooperation among its countries, the reality often is that countries in their efforts to facilitate greater economic development need to compete against each other for talents.

Talent policy management at state level

The analysis addressing the situation of talent policy management in Estonia concludes with the thought that thus far strategic talent policy management has been largely missing in the country. Overall, the talent policy problem has been recognised by policy-makers and there have been important steps to address the problem. However, instead of defining the problem in more detail and agreeing on the overall strategic approach, the attention has been switched to immediate operational level, i.e. ministries and their agencies started implementing activities. There is some coordination at civil servant level but no strategic policy coordination and oversight at higher policy (strategic decision-making) level. Even though the ministry officials see the need for strategic planning, they are not in a position to negotiate and agree strategic priorities. This needs to be done at higher policy-maker levels, which has been missing thus far. The lack of strategic management and leadership is, however, problematic in many ways. This could potentially lead to ineffectiveness, inefficiency, inconsistency, policy fragmentation, unsustainability and dispersing of responsibility, to name the most likely consequences.

Recommendation 1: It is important to agree on the strategic approach to Estonian talent policy (e.g. how to approach the question of lack of highly qualified foreign labour supply, which employees we want to attract and from where? which target groups should be prioritised? what value packages we could offer, etc.?) and envision it in a document so that everyone dealing with the policy is up to date and aware of the policy approach. The policy document should have clear ownership: a) in the form of one high level (strategic decision-making level) policy coordinator who oversees and coordinates all of the related activities in the countries; b) in the form of strong partner organisations and stakeholders who are committed to the implementation of the strategy in their own policy fields. In addition, any new initiatives to be developed and implemented should be designed so that they would be linked to already existing activities and not designed as separate measures adding to the fragmentation of the policy. The Ministry of Economic Affairs and Communications has taken initiative in this area and is preparing its strategy at the moment. It would be interesting to follow in the coming years to what extent their efforts have proven successful.

Highly qualified foreign labour

In the area of foreign labour, the policy mapping highlighted that at the moment Estonia does not have a clear policy for attracting highly qualified labour to the country and the issue does not appear

among the priorities of the government. However, the Estonian government has made significant efforts to ease the regulatory environment in employing international highly qualified talents. This has widened the potential talent pool of Estonian enterprises presuming that the companies have channels of recruitment in place and they are able to attract potential employees. The most direct beneficiaries of this change have potentially been international companies who can now more easily move around their employees between different locations. Another measure to facilitate greater international talent inclusion has been the national support measure for recruitment and employment of highly qualified workers with international (professional) experience (Development Employment Grant Scheme provided by Enterprise Estonia). However, it has not become as popular as was expected due to low awareness among stakeholders.

One of the shortcomings of the current government approach to talent attraction has been the assumption that removing regulatory barriers would automatically increase the supply of highly qualified labour to Estonia. However, this is very unlikely, as Estonia is unknown as a good country of employment. To make it attractive to potential employees clearly requires active and targeted branding and marketing. Estonia being a small and not very rich therefore needs to approach this attraction especially smartly. This would mean firstly carefully analysing the potential markets (countries) and target groups (occupations and sectors) and then developing the best approach to achieve the objectives.

Recommendation 2: Analyse and develop an active attraction strategy to brand Estonia as a favourable working and investment location. This should include the design of value packages for targeted markets. For a potential framework, see the Toolkit on Talent Retention developed as part of the ONE BSR project. The potential target countries for attracting highly qualified foreign labour could be neighbouring countries with which Estonia shares the similar cultural heritage (e.g. Russia, Ukraine, Moldova, Belarus, etc.). The "Work in Estonia" initiative has already been started, hopefully it will be based on a strong strategic approach that would not only include website building but would be supported with a clear vision on attracting the needed talents. The Study in Estonia programme does provide a number of experiences and learning points here.

Recommendation 3: The analysis underlined that investment promotion suffers from a lack of incentive schemes. At the moment it is difficult to stand out as an attractive location for knowledge-based investors because Estonia is not able to offer anything unique for potential investors. There is a clear need to analyse and develop specific investment incentives that could help Estonia stand out as a favourable target country. Additionally, to put the investment promotion higher on the agenda and facilitate success, it would be important that a high-level policy-maker or official would take on the leadership role on this task. An internationally recognised policy-maker would be in a suitable position to lead investment promotion and negotiate with potential investors. Without doubting their expertise, lower level officials at Enterprise Estonia simply lack authority and visibility to lead this activity.

One issue of Estonian foreign talent attraction has concerned the lack of knowledge on the demanded skills as the systematic labour market monitoring has been ineffective in the sense that it does not provide sufficiently detailed information on the skills shortages. The improvement of labour market monitoring needs to be clearly improved as it is one vital input to the attraction strategy.

Recommendation 4: Improve labour market forecasting systems to enable more targeted attraction. A system of improved labour market forecasting is being implemented at the moment in Estonia. The following years will reveal its value and usability.

One important problem concerning absorption of foreign talents in the Estonian labour market is related to the entrepreneurs' limited readiness and interest in hiring foreign labour. On the one hand, it is caused by their comfort, lack of knowledge, uncertainty and psychological barriers. On the other hand, the cost of recruiting foreign labour becomes very high, as employers often use specific companies or law firms for helping them to recruit and deal with the adaptation of foreigners. The lack of system of services supporting the adaptation, including adaptation programmes and absence of support networks, is considered to be one of the main obstacles.

Recommendation 5: The government in cooperation with the private sector, academia and third sector should find ways of facilitating easier employment of foreign talents. The development of an adaptation programme would be certainly useful and the government of Estonia has started to develop that kind of programme already (includes adaptation training and development of support services for newcomers). The development of social and professional networks for easier transition of foreigners would be needed in addition to overall awareness raising among companies to become better employers for talents in general and to become more aware of the potential that lies in hiring international talents. For particular measures see the Toolkit on Talent Retention.

International students

In the sphere of attraction of international students, Estonia has been implementing the "Study in Estonia" marketing strategy as part of the internationalisation of higher education strategy. The results of the marketing strategy are contradictory. On the one hand, the number of incoming international students in Estonian universities has increased significantly and the target indicator has been reached earlier than expected. On the other hand, the internationalisation strategy prioritises the attraction of gifted and motivated foreign students in order to facilitate the improvement of Estonian higher education. The extent of obtaining this goal remains unknown as the gifted and talented students have not been the target group of "Study in Estonia" campaign; rather those that are young, active, fun-seeking, and adventurous are sought in Estonian higher education promotion. Another related issue concerns the unanswered question of to what extent should the international student attraction have any linkage with the local labour market policy. Thus far, this has not been addressed.

Recommendation 6: Strive for greater policy coherence in foreign student attraction with setting a clear focus on attracting by: a) focusing on quantity and welcoming any foreign students (that meet the entrance criteria of Estonian higher education institutions), or b) focusing on the quality of applicants instead by emphasising search for the more talented ones. The latter one does seem more relevant in the Estonian context.

As the attraction of foreign students to Estonia has proved rather successful and the supply of highly qualified labour is insufficient it is highly relevant to discuss their retention in the country. Foreign students do have several advantages compared to hiring foreign employees as they are already familiar with the local environment and have gone through the adaptation process. However, the transition of foreign students to local labour market has been rather neglected so far. Firstly, it has not been clearly promoted as the universities have only been concerned with admitting international students and not facilitating their transitions to the Estonian labour market. It can be said that the universities have silently assumed so far that the foreign students are not interested in being employed in Estonia. However, in the times of severe high-skilled labour shortage, it would be important to at least familiarise the students with local employment opportunities. At the same time, it is generally known that the readiness of employers to hire foreign people is limited and hence the chances of being employed are rather low.

Recommendation 7: Establish a clear vision on the role of foreign students in contributing to the Estonian labour market. The improved labour market forecasting systems should provide a clear input in terms of what sectors need what type of skills. This should then be followed by a strategy on attracting these particular foreign students to Estonia as well as a strategy on their retention in local labour market. The cooperation of different ministries as well as other stakeholders (academia, companies, and third sector organisations) is vital here to bring about significant change. See also the Toolkit on Talent Retention on particular suggestions and best practices.

Diaspora policies

In the aspect of the diaspora policies in the countries and their linkage to the talent policy problem, the analysis identified two major lines of activities. The official diaspora programme, stemming mostly from the need to support language and cultural activities of the foreign residing Estonians, focuses mostly on aspects not related to economic or labour market issues and therefore remains rather distanced from the talent attraction issues. It has some indirect links (scholarships, youth camps, relocation support) with talent attraction that could be further utilised in future attraction activities. The other line of activity has been the 'Talents Come Home' project, which had a direct focus on increasing the labour supply in Estonia, but its effectiveness was limited due to several external and internal problems. Overall, the project has valuable experience in connecting and communicating with foreign living talents that would provide useful learning points in developing future measures. In addition, it has established a good platform that could be developed further or integrated into other future activities.

Recommendation 8: Establish a clear labour market and economic focus for the diaspora programme together with connecting the current activities more with other talent attraction activities. For instance, the scholarships could be more clearly connected to the "Study in Estonia" campaign together with promoting employment or career opportunities in Estonia. The camps could also be used more for promoting study and employment opportunities in Estonia.

All in all, the analysis outlines that the potential contribution of the diaspora in the development of Estonia has been rather overlooked thus far. However, at the time of increasing demand for qualified labour and the demographic pressure, it is time to open wider discussions on the extent to which Estonia could rely on foreign residing Estonians in relieving the labour market needs. This discussion should be followed by a more careful analysis of the composition and characteristics of the diaspora to inform potential policies and possible lines of activities, e.g. specific attraction. This analysis also suggests that one of the activities deserving more attention is the establishment of an information environment for the diaspora to voluntarily inform Estonian state about their location, characteristics, expertise so that individuals could be contacted for information dissemination as well as for possible employment purposes. This could easily be a development of the 'Talents Come Home' project website and potentially connected to the "Work in Estonia" project.

Recommendation 9: Open wider discussions on the extent to which Estonia could rely on foreign residing Estonians in relieving the labour market needs. If the role is deemed important, the next step would be getting an overview of the diaspora composition and skills (developing a skills inventory).

As other countries' experience suggests, the permanent relocation programmes have generally failed. The development of diaspora networks that provide knowledge circulation and temporary mobility have been much more successful instead. Therefore, it is wise for Estonia to give preference to knowledge network activities if the diaspora is going to be seen as a talent policy target group. However, again, before proceeding with any particular activities, the diaspora and its qualities need to

be researched to be able to develop concrete policy steps. While developing diaspora policies it is vital to keep in mind the heterogeneity of the group. As the literature review of other countries' experience suggests, it is more important to focus on quality rather than quantity when designing any policy measures.

Recommendation 10: Prefer developing diaspora knowledge networks to permanent relocation programmes as these have proven ineffective. In addition, take into account the heterogeneity of the target group while developing any measures.

Bibliography

- 1. Aikins, K., Sands A., and White, N. (2009). *The Global Irish Making a Difference Together. A comparative review of international diaspora strategies.* The Ireland Funds. http://www.irelandfunds.org/pdf/globalIrish.pdf
- Agunias, D. R., and Newland, K. (2012). Developing a Road Map for Engaging Diasporas in Development: A Handbook for Policymakers and Practitioners in Home and Host Countries. Migration Policy Institute, International Organization for Migration. http://www.migrationpolicy.org/research/developing-road-map-engaging-diasporas-development-handbook-policymakers-and-practitioners
- 3. BCG&WEF. (2011). *Global Talent Risk: Seven Responses*. Boston Consulting Group and World Economic Forum.
- 4. Brinkerhoff, J.M. (2006). *Diasporas, Skills Transfer, and Remittances: Evolving Perceptions and Potential. In Converting Migration Drains into Gains: Harnessing the Resources of Overseas Professionals. Draft manuscript.* Asian Development Bank, Manila, Philippines.
- 5. CEDEFOP. (2010). Skills supply and demand in Europe: Medium-term Forecast up to 2020. European Centre for the Development of Vocational Training (CEDEFOP). http://www.cedefop.europa.eu/EN/publications/15540.aspx
- 6. Cerna, L. (2010). Policies and practices of highly skilled migration in times of the economic crisis. *International Migration Papers No 99*. International Labour Organization.
- Cerna, L. (2011). Selecting the Best and Brightest. Policy Primer. The Migration Observatory, University of Oxford. http://migrobs.vm.bytemark.co.uk/sites/files/migobs/Selecting%20the%20Best%20and%20Brightest%20Policy%20Primer 0.pdf
- 8. Chaloff, J., and Lemaitre, G. (2009). Managing Highly-Skilled Labour Migration: A Comparative Analysis of Migration Policies and Challenges in OECD Countries. *OECD Social, Employment and Migration Working Papers No 79*. OECD.
- 9. Collett, E., and Zuleeg, F. (2008). *Soft, Scarce, and Super Skills: Sourcing the Next Generation of Migrant Workers in Europe*. Migration Policy Institute.
- 10. Cully, M. (2011). Skilled Migration Selection Policies: Recent Australian Reforms. Migration Policy Practice, 1(1), 4–7.
- 11. Dempsey, P. (2013). The Laws of Attraction. Engineering & Technology, March 2013.
- 12. Doomernik, J., Koslowski, R. and Thränhardt, D. (2009). The Battle for the Brains: Why immigration policy is not enough to attract the highly skilled. *Brussels Forum Paper Series*, March 2009. The German Marshall Fund of the United States.
- 13. The Economist. (2013). Plight of the sea turtles. *The Economist, Jul 6th 2013*. Available at: http://www.economist.com/news/china/21580470-students-coming-back-home-helped-build-modern-china-so-why-are-they-now-faring-so-poorly
- 14. EMN. (2012). *Immigration of International Students to the EU*. EMN Inform, European Migration Network.
- 15. EMN. (2013). Attracting Highly Qualified and Qualified Third-Country Nationals. Synthesis Report. European Migration Network Study.
- 16. Ernst&Young. (2011). Tracking Global Trends. Ernst&Young.
- 17. Estonian Development Fund. (2011). *Kõrghariduse rahvusvahelistumine* (*Internationalization of Higher Education*). Estonian Development Fund.
- 18. Estonian Ministry of Economic Affairs and Communication. (2012). *Tööjõuvajaduse prognoos aastani 2019 [Labour force forecast until the year 2019]*. http://www.mkm.ee/public/Toojouvajaduse_prognoos_aastani_2019_luhikirjeldus.pdf
- 19. Estonian Ministry of Education. (2014). *Diaspora programme 2014–2020 [Rahvuskaaslaste programm 2014–2020]*. *Background and development principles of the programme*. http://www.hm.ee/sites/default/files/rahvuskaaslaste programm 2014 2020.pdf

- 20. European Commission. (2013). *Immigration of International Students to the EU: EMN Synthesis Report*. http://emn.intrasoft-intl.com/Downloads/prepareShowFiles.do;jsessionid=12CD65770405D327E0D54B7F8F52745
 7?entryTitle=06 Immigration of INTERNATIONAL STUDENTS to EU Member States
- 21. European Commission. (2012). *Social Climate. Special Eurobarometer 391*.Retrieved from: http://ec.europa.eu/public_opinion/archives/ebs/ebs_391_en.pdf
- 22. European Commission. (2010). *Geographical and labour market mobility. Special Eurobarometer 337*.
 - http://ec.europa.eu/public_opinion/archives/ebs/ebs_337_en.pdf
- 23. Eurostat. (2000). *Push and Pull Factors of International Migration: A Comparative Report*. Eurostat.
- 24. EWSI. (2013). *Recognition of Qualifications and Competencies*. EWSI Integration Dossier. http://www.migpolgroup.com/wp_mpg/wp-content/uploads/2013/06/EWSI_Integration-Dossier_recognition-of-qualifications_FINALb.pdf
- 25. Felbermayr, G. J. and Reczkowski, I. (2012). International Student Mobility and High-Skilled Migration: The Evidence. *Ifo Working Paper No 132.*
- 26. Florida, R. (2002). The rise of the creative class. Basic Books. New York.
- 27. Gamlen, Alan. (2008). Why Engage Diasporas?. *Working Paper No. 63*. University of Oxford. ESRC Centre on Migration, Policy and Society.
- 28. Gwynne, P. (2012). America's New Brain Drain: The Loss of the Sea Turtles. *Research Technology Management, Nov/Dec 2012, Vol. 55, Issue 6.*
- 29. Harvey, (2014). Winning the global talent war: A policy perspective. *Journal of Chinese Human Resource Management, Vol. 5 Issue: 1*, 62 74.
- 30. Harvey, W. (2013). Victory can be yours in the global war for talent: Social factors and lifestyle help to attract top employees. *Human Resource Management International Digest, Vol. 21, No. 1*, 37 40.
- 31. Harvey, W. S. and Groutsis, D. (2014). *Reputation and talent mobility in the Asia Pacific*. Asia Pacific Journal of Human Resources. DOI: 10.1111/1744-7941.12047.
- 32. Hawthorne, L. (2008). *The Growing Global Demand for Students as Skilled Migrants*. Migration Policy Institute.
- 33. Hercog, M. (2008). The Role of State in Attracting the Highly-skilled Migrants: The Case of Netherlands. European Institute of Public Administration, EIPASCOPE, No 3, 2008. http://www.eipa.eu/files/repository/eipascope/20090130170607_SCOPE2008-3_3_MetkaHercog.pdf
- 34. Higher Education Authority. (2013). *Making the EU more attractive for foreign students and researchers*.
 - $\underline{\text{http://www.eurireland.ie/news/making-the-eu-more-attractive-for-foreign-students-and-researchers-.1781.html}$
- 35. Immigration New Zealand. (2014). *Skill Shortage Lists*. http://www.immigration.govt.nz/migrant/general/generalinformation/media/lists.htm.
- 36. Ionescu, D. (2006). *Engaging Diasporas as Development Partners for Home and Destination Countries: Challenges for Policymakers*. International Organization for Migration Geneva. www.iom.int/jahia/webdav/site/myjahiasite/.../mrs26%20interior.pdf
- 37. Iredale, R. (2001). The Migration of Professionals: Theories and Typologies. *International Migration* 39(5), 7–24.
- 38. Janczak, A. (2011). Practicing Talent Mobility for Economic Growth. World Economic Forum.
- 39. Kaarna, R., Masso, M., and Rell, M. (2012). *Väikese ja keskmise suurusega ettevõtete arengusuundumused [The developments of SMEs]*. Tallinn: Poliitikauuringute Keskus Praxis. http://www.praxis.ee/fileadmin/tarmo/Projektid/Innovatsiooni poliitika/VKE aengusuundu mused aruanne.pdf

- 40. Kahanec, M. and Králiková, R. (2011). Pulls of International Student Mobility. *Discussion Paper No 6233*. Institute for the Study of Labour (IZA).
- 41. Kallas, K., Kaldur, K., Kivistik, K., Plaan, K., Pohla, T., Ortega, L., Mürk, I., and Väljaots, K.(2014) Uussisserändajate kohanemine Eestis: valikud ja poliitikaettepanekud tervikliku ja jätkusuutliku süsteemi kujundamiseks [Newly-arrived immigrants in Estonia: Policy Options and Recommendations for a Comprehensive and Sustainable Support System]. Balti Uuringute Instituut. https://www.siseministeerium.ee/public/TOF uussisserandajad lopuaruanne.pdf
- 42. Khallash, S. (2010). *Global Talent Rally: International Workforce Mobility*. Presentation at Estonian Development Fund's Futures Forum 4.
- 43. Knight, J. (2006). Higher Education Crossing Borders: A Guide to the Implications of the General Agreement on Trade in Services (GATS) for Cross-border Education. UNESCO.
- 44. Krusell, S. (2013). *Eesti elanike töötamine välismaal [Estonian citizens working abroad]*. Pilte rahvaloendusest/Census snapshots. Statistics Estonia, Tallinn.
- 45. Kuptsch, C. and E. F. Pang (eds.) (2006). *Competing for Global Talent*. International Labour Organization.
- 46. Kuusk, K. (2011a). *Talendikõrb kesk rahvaküllust [Talent Desert in the middle of People Abundance]*. Fututuba.ee, Estonian Development Fund. http://www.fututuba.ee/2011/07/talendikorb-kesk-rahvakullust.html
- 47. Kuusk, K. (2011b). Sinu uus kolleeg millenniumilaps [Your New Colleague Millennial]. Fututuba.ee, Estonian Development Fund. http://www.fututuba.ee/2011/10/sinu-uus-kolleeg-millenniumilaps.html
- 48. Kuusk, K. (2011c). *Inimeste ajastu lävepakul [At the Doorstep of Human Age]*. Fututuba.ee, Estonian Development Fund. http://www.fututuba.ee/2011/11/inimeste-ajastu-lavepakul.html
- 49. Larner, W. (2007). Expatriate experts and globalising governmentalities: the New Zealand diaspora strategy. *Transactions of the Institute of British Geographers, Vol.32, Issue 3.*
- 50. Lee, E. S. (1966). A Theory of Migration. *Demography, vol. 3*, 47–57.
- 51. Lucas, R. (1988). On the mechanics of economic development. *Journal of Monetary Economics, Vol. 22, 1,* 3–42.
- 52. Maasing, H. (2013). Labour migration to Estonia from third countries. Presentation at Norden Conference 'Migration and Demographic Challenges in the Nordic-Baltic Region' on 7 & 8 March 2013, KUMU Art Museum, Tallinn. http://www.norden.ee/et/regionaalne-koostoo/ettekanded
- 53. MAC. (2009). *Analysis of the Points Based System: Tier 1*. Migration Advisory Committee (MAC).
- 54. Mahroum, S. (1999). *Highly Skilled Globetrotters: The International Migration of Human Capital in Mobilizing Human Resources for Innovation*. Proceedings from the OECD Workshop on Science and Technology Labour Markets, OECD.
- 55. Manpower. (2010). Talent Shortage Survey Results 2010.
- 56. Manpower. (2011). *Entering the Human Age*. http://www.manpowergroup.com/humanage/entering-the-human-age.html
- 57. Meriküll, J., and Eamets, R. (2009). *Teadmistepõhise majanduse suunas liikumiseks vajalik* tööjõud ja koolitusvaldkonnad. *Uuringu lühiversioon.* [Labour and fields of study necessary to move towards the knowledge-based economy. Short version]. Riigikantselei. http://valitsus.ee/UserFiles/valitsus/et/riigikantselei/strateegia/poliitika-analuusid-ja-uuringud/trukised/Riigikantselei poliitika-analyysi sari nr 1.pdf
- 58. Meyer, J.-B., Charum, J., Bernal, D., Gaillard, J., J. Granés, J., Leon, A., Montenegro, A. Morales, Murcia, C., Narvaez-Berthelemot, N., Parrado, L. S., and Schlemmer, B. (1997). Turning Brain Drain into Brain Gain: the Colombian experience of the Diaspora Option. *Science, technology and Society, Vol.2 No.2.*

- 59. McKinsey Global Institute. (2005). Part I: The emerging global labour market: The demand for offshore talent in services. McKinsey Global Institute. http://www.mckinsey.com/insights/employment and growth/the emerging global labor market demand for offshore talent
- 60. Migreat. (2014). UK Entrepreneur Visa Report. A UK Immigration System open to Innovation and Promising Entrepreneurs?
- 61. Migration Policy Institute (2012). *Top 10 of 2012*. www.migrationinformation.org/Feature/display.cfm?ID=916
- 62. Mitacs. (2012). Attracting & retaining international students: Canada is on the right track. Mitacs. http://www.mitacs.ca/n/2012/05/attracting-retaining-international-students-canada-right-track
- 63. Morehouse, C., and Busse, M. (2013). *Unblocking the Lifeline of Talent. Spotlight Europe, No 2013/05.*
- 64. MPG. (2012). *Mobile Talent? The Staying Intentions of International Students in Five EU Countries*. Migration Policy Group. http://www.migpolgroup.com/portfolio/mobile-talent-the-staying-intentions-of-international-students-in-five-eu-countries
- 65. Münz, R. (2013). The Global Race for Talent: Europe's Migration Challenge, Policy brief, 2/2013.
- 66. Mürk, I. (2011a). *Tulevikutöö kümme võtmeoskust (Ten Key Work Skills for Future*). Fututuba.ee, Estonian Development Fund. http://www.fututuba.ee/2011/08/tulevikutoo-kumme-votmeoskust.html
- 67. Mürk, I. (2012). Talendiseire mõttealgatus: Globaalne talendiralli ja mõju Eestile (Talent Foresight Provocation Paper: Global Talent Rally and Impact for Estonia). Estonian Development Fund.
- 68. Ng, P. T. (2013). The global war for talent: responses and challenges in the Singapore higher education system. *Journal of Higher Education Policy and Management, Vol. 35, No. 3,* 280–292. DOI: 10.1080/1360080X.2013.786859
- 69. OECD. Better life Index. http://www.oecdbetterlifeindex.org/
- 70. OECD (2008). Tertiary Education for the Knowledge Society. Multilingual Summaries. OECD.
- 71. OECD (2011a). Migrant Entrepreneurship in OECD Countries in International Migration Outlook 2011. OECD.
- 72. OECD. (2011b). Education at a Glance OECD Indicators. OECD
- 73. OECD. (2012). International Migration Outlook. OECD.
- 74. OECD. (2013). *Recruiting Immigrant Workers: Germany*. OECD. http://dx.doi.org/10.1787/9789264189034-en
- 75. OECD. (2013). International Migration Outlook 2013. OECD.

 http://www.keepeek.com/Digital-Asset-Management/embed-oecd/social-issues-migration-health/international-migration-outlook-2013 migr outlook-2013-en
- 76. Papademetriou, D. G., Somerville, W. and Tanaka, H. (2008a). *Hybrid Immigrant Selection Systems: The Next Generation of Economic Migration Schemes*. Migration Policy Institute.
- 77. Papademetriou, D. G., Somerville, W., and Tanaka, H. (2008b). *Talent in the 21st century economy.* Migration Policy Institute.
- 78. Papademetriou, D. G., and Sumption, M. (2011a). *Eight Policies to Boost the Economic Contribution of Employment-Based Immigration*. Migration Policy Institute.
- 79. Papademetriou, D. G., and Sumption, M. (2011b). *Rethinking Point Systems and Employers-Selected Immigration*. European University Institute and Migration Policy Institute.
- 80. Patune, K. (2011). *Tuleviku teadmustöökohta kujundavad tegurid [Factors Influencing the Future Knowledge Job]*. Tartu University.
- 81. Platonova, A., and Urso, G. (eds.) (2012). *Labour Shortages and Migration Policy*. International Organisation for Migration. http://www.labourmigration.eu/research/report/22-Labour%20Shortages

er_Article_2012.pdf

- 82. Porter, M. E. (1990). The Competitive Advantage of Nations. MacMillan Press: London.
- 83. Power, S., Staunton, L., and Roe, G. (2012). *International academic talent attraction and retention: The view from Ireland*. Conversation Starter for European Association for International Education Conference 2012. http://www.icosirl.ie/content/download/1558/9513/version/1/file/EAIE_Conversation_Start
- 84. PricewaterhouseCoopers. (2011). *Millennials at work: Perspectives of a New Generation*. http://www.pwc.com/gx/en/managing-tomorrows-people/future-of-work/millennials-survey.jhtml
- 85. PricewaterhouseCoopers. (2013). 6th Annual Global CEO Survey Country summary: Key findings in Estonia.

 http://www.pwc.com/ee/et/assets/document/16thceosurveycountry_estonia_engl_final.pdf
- 86. Ravenstein, E. G. (1885). The Laws of Migration. *Journal of the Royal Statistical Society, vol.* 48, 167–227.
- 87. Ravenstein, E. G. (1889). The Laws of Migration. *Journal of the Royal Statistical Society, vol.* 52, 214–301.
- 88. Richardson, S. (2007). What is a skill shortage? National Centre for Vocational Education Research.
- 89. Romer, P. (1989). Human capital and growth: theory and evidence. *National Bureau of Economic Research Working Paper no. 3173*.
- 90. Saar Poll OÜ (2012). Elanike rahulolu kohalike avalike teenustega [The satisfaction with local public services among residence].
 https://www.siseministeerium.ee/public/Rahulolu kohalike_avalike_teenustega_ARUANNE_SaarPoll.pdf
- 91. Salt, J. (1997). International Movements of the Highly Skilled. *OECD Social, Employment and Migration Working Papers, No. 3, OECD Publishing*. http://dx.doi.org/10.1787/104411065061
- 92. Schwab, K. (2012). World Economic Forum, Annual Meeting press conference. http://english.cntv.cn/special/2012wef/homepage/index.shtml
- 93. Strack, R. (2013). *The Looming Global Talent Crisis How to Counteract Workforce Imbalances*. Boston Consulting Group presentation in Düsseldorf.
- 94. Sumption, M. (2012). Visas for Entrepreneurs: How Countries are Seeking Out Immigrant Job Creators. Migration Policy Institute. http://www.migrationinformation.org/USfocus/display.cfm?ID=896
- 95. Sumption, M. (2013). *Tackling Brain Waste. Strategies to improve the recognition of the immigrant's foreign qualifications*. Migration Policy Institute. http://www.emnbelgium.be/sites/default/files/publications/mpi credentialing-strategies.pdf
- 96. Sutrop, M. (2013) Miks Eesti uksed avanevad pigem ühtepidi? [Why do Estonian doors open one way?] *Postimees 08.06.2013*. http://arvamus.postimees.ee/1263642/margit-sutrop-miks-eesti-uksed-avanevad-pigem-uhtepidi.
- 97. Tammaru, T. (2011). Väljaränne Soome ja Eestisse tagasirände kavatsused. [Emigration to Finland and return intentions]Tartu Ülikooli Välis-Eesti uuringute keskus. Ettekanne Eesti Statistikaseltsi konverentsil. http://www.slideshare.net/Statistikaamet/tiit-tammaru-vljarnne-soome-ja-eestisse-tagasirnde-kavatsused.
- 98. Tammur, A, and Meres, K. (2013). Sisseränne Eestisse 2000–2011 [Immigration to Estonia]. Statistics Estonia, Quarterly Bulletin of Statistics Estonia. www.stat.ee/dokumendid/72586
- 99. Tech City News. (2013). *Is Immigration Harming the Startup Economy?* http://techcitynews.com/ImmigrationReport TechCityNews.pdf
- 100. UN. (2012). *Population Facts No. 4.* United Nations, Department of Economic and Social Affairs, Population Division, New York.

- 101. UNDP. (2007). *Case evidence on 'brain gain'*. A UNDP Capacity Development Resource. lencd.com/data/docs/228-AB-brain%20gain.pdf
- 102. Vabariigi Valitsus. (2009). Rahvastikupoliitika alused 2009-2013 [The principles of population policy 2009-2013]. 30.04.2009 Valitsuse protokolliline otsus (kiita heaks). http://valitsus.ee/et/valitsus/arengukavad/Peresobralik-riik/Rahvastikupoliitika-alused-2009-2013.
- 103. Wald, J., and Leventhal, J. (2014). What The Rise Of The Freelance Economy Really Means For Businesses. Forbes, 07/01/2014. http://www.forbes.com/sites/waldleventhal/2014/07/01/a-modern-human-capital-talent-strategy-using-freelancers/
- 104. WEF. (2010). *The Global Competitiveness Report 2009-2010*. http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2009-10.pdf
- 105. WEF. (2014). *The Global Competitiveness Report 2013–2014*. http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2013-14.pdf

