Highly-skilled migration: Estonia's attraction policy and its congruence with the determinants of 'talent mobility'.

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I have written the Master’s thesis independently.

All works and major viewpoints of the other authors, data from other sources of literature and elsewhere used for writing this paper have been referenced.

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Abstract

In recent years, the phenomenon of highly-skilled migration has increasingly attracted the attention of both academia and policy makers around the world. The potential of the highly-skilled to positively impact economic development in the receiving country has led to a ‘global race for talent’, with countries competing for attracting the ‘best and brightest’. To further develop its knowledge economy, Estonia appears not to want to be left out of this race, as it has recently take active steps to attract the highly-skilled. The aim of this thesis is to provide an insight and a better understanding at Estonia’s current immigration policies and measures in the specific context of attracting highly-skilled third-country nationals in light of the theoretical determinants of ‘talent mobility’ – a proxy for highly-skilled migration. A combination of secondary research, interview analysis with highly-skilled migration stakeholders and a short quantitative analysis on issued temporary residence permits in Estonia were the methodological backbone of the work. The resulting outcome from the empirical analysis shows that Estonia, despite having a very clear objective on the attraction of highly-skilled, does not have a comprehensive policy on this topic, but it has instead a set of independently-carried policies and scarcely coordinated measures in this area. The theoretical determinants of ‘talent mobility’, in line with neoclassical economics paradigm, seem to be only partially addressed by the Estonian immigration policies and measures for attracting highly-skilled third-country nationals. Beyond the results, the author also contributes to this topic by discussing some policy implications and issues recommendations that could help better address these determinants through immigration policies and measures.
Acknowledgement

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<tbody>
<tr>
<td>AmCham</td>
<td>American Chamber of Commerce Estonia</td>
</tr>
<tr>
<td>BLRT</td>
<td><em>Grupi Laevaremonditehas</em> [Ship repair yard Group]</td>
</tr>
<tr>
<td>EAS</td>
<td>Enterprise Estonia</td>
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<td>EMN</td>
<td>European Migration Network</td>
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<td>EUIF</td>
<td>Estonian Unemployment Insurance Fund</td>
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<td>HSM</td>
<td>Highly-skilled migrant</td>
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<tr>
<td>ILO</td>
<td>International Labour Organization</td>
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<td>IOM</td>
<td>International Organization for Migration</td>
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<tr>
<td>ISCED</td>
<td>International Standard Classification of Education</td>
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<tr>
<td>ISCO</td>
<td>International Standard Classification of Occupations</td>
</tr>
<tr>
<td>MFA</td>
<td>Estonian Ministry of Foreign Affairs</td>
</tr>
<tr>
<td>MISA</td>
<td>Integration and Migration Foundation Our People</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>PBGB</td>
<td>Police and Border Guard Board</td>
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<tr>
<td>PBS</td>
<td>Points-based system</td>
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<tr>
<td>TCN</td>
<td>Third-country national</td>
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<td>UN</td>
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Introduction
International migration continues to grow, and within it, the particular phenomenon of highly-skilled migration is one of the fast-growing trends in today’s globalized world. This type of migration differs itself from others because of its relative novelty and the particular benefits linked to it. Its association with an increase in competitiveness and growth of the economy in the receiving country has resulted in a swelling interest in this phenomenon that has moved beyond scholarly attention to become a matter of importance for policy makers all around the world, as they attempt to influence these particular migration flows to the advantage of their respective countries (Solimano, 2008). It is in this context that Estonia, a small country with unfavorable demographic indicators, appears to be turning more attention into this particular phenomenon, in an attempt to further develop its ‘knowledge economy’ and uphold its competitiveness in the international arena.

This aim of this work is to provide an insight and a better understanding at Estonia’s current immigration policies and actions in the specific context of attracting highly-skilled third-country nationals (TCN’s) in light of the determinants of ‘talent mobility’. The particular objective of this paper is to determine how Estonia’s policies and measures for attracting highly-skilled third-country nationals address the theoretical determinants of this specific phenomenon. In the Estonian case, a series of developments from 2008 until last year (2013) suggest a movement towards measures and policies aimed at facilitating the migration of highly-skilled migrants (HSM). However, it is the author’s impression that these policies and measures for attracting this specific group of migrants do not fall under a unified or comprehensive policy, nor they give a clear indication of which are the factors they are trying to address. In addition to attesting this assumption, this paper efforts in contributing to the study of highly-skilled migration and the expansion of works in this area.

To achieve the objective of this paper, the following research questions need to be addressed. First of all, what is the role of highly-skilled migration (in particular that of TCN’s) in Estonia’s current immigration policy? Secondly, what are the current immigration policies and measures towards the attraction of highly-skilled migration? Thirdly, what are the so-far identified theoretical determinants in literature vis-à-vis highly-skilled migration? Lastly,
how do these theoretical determinants overlap with the existing measures and policies towards highly-skilled TCN’s in Estonia?

By reviewing the literature on international migration, I identify neoclassical economics, new economics, historical-structural and systems & networks to be the main approaches that would provide an account on the particular phenomenon of the highly-skilled. Then, I present neoclassical economics (Cadwallader, 1992; Brettell & Hollifield, 2000; Massey et al., 2011) as the general theoretical framework for this work. As the need for an interdisciplinary approach to contemporary phenomena of international migration is often acknowledged in the literature, I attempt to achieve this by using an amalgamation of notions and concepts, borrowing de Haas’ (2011) understanding of the role of the state, Freeman’s (1995) ‘client politics’ and Solimano’s (2008) determinant’s of ‘talent mobility’ in my analysis. This theoretical discussion and the identification of the theoretical determinants against which the immigration policies for highly-skilled TCN’s will be compared is the first research task of this work.

The second research task is to identify the most important strategic documents and other official sources that are relevant to the topic of highly-skilled migration and/or that make reference to this subject. This leads to the third research task, which is to map the current policies and measures in the field of highly-skilled migration, in order to determine what is – if any – Estonia’s policy for attraction of highly-skilled TCN’s. This task will be complemented with the results from the analysis of 31 semi-structured interviews with stakeholders of highly-skilled migration, from both public and private spheres, in order to gain more insight about the policies on this topic and have a more comprehensive understanding of the current measures. Once these are defined, then the fifth task is carried on, which is determining how these policies overlap with the theoretical elements identified as part of the first task. Finally, in order to present a thorough empirical picture both policy-wise and of actual flows, a small quantitative analysis based on data from the Police and Border Guard Board (PBGB) on temporary residence permits issued to third-country nationals during the last six years is carried. It is important to mention that, while the scope of this thesis extends to a short analysis of HSM tendencies based on the PBGB data, the
study refrains from claiming causal policy effects/non-effects, since this would require other, more substantiated methods, such as a thorough econometric analysis. Thus, the author’s conclusions should not be mistaken nor interpreted as evaluations of the policies, but of how these policies fit the theory and the identified theoretical determinants of HSM.

Both the theoretical and empirical parts of the present work are mainly assembled by using qualitative research methods. The theoretical part is entirely literature-based, drawing from a rich variety of sources, including specialized periodicals, books and publications from major international organizations, such as the United Nations (UN), the Organisation for Co-operation and Development (OECD) and the European Union (EU). In contrast, a combination of methods is employed on the empirical section. The first part uses a mixture of primary (strategic documents, legislation, etc.) and secondary (reports, studies) analysis, together with an analysis on raw data of 31 interviews carried on by the Institute of Baltic Studies with stakeholders of highly-skilled migration for a study entitled *Newly arrived immigrants in Estonia: Policy Options and Recommendations for a Comprehensive and Sustainable Support System*, in which the author collaborated\(^1\). The second part of the analysis comprises a small qualitative analysis on the data acquired from the PBGB regarding temporary residence permits.

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1. - THEORETICAL DISCUSSION

International migration, and any of its extensions, is a particularly complex research subject largely due to its interdisciplinary nature. Having been profoundly studied by geographers, sociologists, anthropologists, economists, historians, demographers, legal scholars and, most recently, political scientists, the theoretical and empirical differences have often led to a fragmented literature on the topic. As pointed out by Massey et al (1994, p. 700-701), social scientists approach the subject of migration from “a variety of competing theoretical viewpoints fragmented across disciplines, regions and ideologies”, leading often to poor research. The statement follows “only when researchers accept common theories, concepts, tools and standards will knowledge begin to accumulate” (Brettell & Hollified, 2000, p. 2). Theories that might appear mutually exclusive are in fact not as irreconcilable as they seem (Massey et al. 1993). Hence, this work aims at narrowing down this gap, by approaching the phenomenon of highly-skilled international migration in analyzing immigration policy with the support of notions from different theories under the paradigm of neoclassical economics, attempting to acknowledge both its macro and micro perspectives. Key terms throughout the thesis are migration determinants, highly-skilled third-country national and immigration policies and measures.

1.1 – Theories of International Migration

Neoclassical economics takes part as one of the oldest and most known theories of international migration, and Ravenstein’s ‘laws of migration’ from 1885 and 1889 are considered to be among the firsts and most important contributions to this line of thinking. King (2012) makes an excellent job at summarizing these laws as the following: “(1) Migrants move mainly over short distances; those going longer distances head for the great centres of industry and commerce. (2) Most migration is from agricultural to industrial areas. (3). Large towns grow more by migration than by natural increase. (4) Migration increases along with the development of industry, commerce and transport. (5) Each migration stream produces a counterstream. (6) Females are more migratory than males, at least over shorter distances; males are a majority in international migration. (7) The major causes of migration are economic.” These seven laws encompass in a broad way the main principles on which neoclassical economics theory has been built: economic factors as main motivators for
migration, individual rational-choice reasoning as a decision-making process and, most important for this paper, a ‘push and pull’ model conceiving factors functioning from the side of the origin country and from the side of the receiving country.

At the macro level, the focus of the neoclassical economics theory of migration argues that migration through international borders has its origin in wage differentials across geographical regions (Massey D. S., et al., 2011, p. 3). If there is an increase of wage differentials, then the volume of migration would increase. More particularly, the movement of workers will occur from low-wage countries (poor-capital countries, developing economies) towards high-wage countries (rich-capital countries, developed economies) (Massey et al., 2011, p. 8). This migration movement would result in a decrease of the supply of labor and in an increase in wages in the poor-capital country, while labour supply increases and wage decreases in the capital-rich country, implying a system that moves towards equilibrium, where the levels of supply and demand in both origin and destination areas will be balanced, and the international wage differential will only reflect the economic and psychic costs of international movement (Massey D. S., 2011, p. 3).

This macro perspective leads to several assumptions, some of which have been already underlined, such as wage differentials as a main cause for international labour migration and the notion of a system that moves towards equilibrium, where the elimination of international wage differentials would mean the end of the movement of labour across borders. But other assumptions are also implied, of which Massey et al. (2011) highlight two important ones: that (1) labour markets are the primary mechanisms influencing international migration and (2) the way for government to control migration is by regulating or influencing labour markets. These notions are crucial for the state, since acknowledges that the role of the government, through influencing the labour market, can have an impact on migration. Thus, immigration policy that aims at opening the domestic labour market to highly-skilled individuals is the attempt of the state at regulating migration, an issue that will be more thoroughly discussed at latter stages.

Neoclassical economics macro approach has a micro corresponding model, which is based on individual choice (Massey D. S., et al., 2011, p. 4). The decision to move is thought to be
made by an individual, rational actor that reaches for a cost-benefit analysis in order to decide whether to migrate or not. As the individual tries to maximize its utility, the movement of the individual (i.e. migration) occurs when the net return of all weighed items is positive. In line with the reasoning of neoclassical economics, it is assumed that the net positive return should mostly be of a monetary nature. In this microeconomic model most of the aforementioned assumptions are maintained, but individual factors are highlighted (Massey D. S., et al., 2011). For instance, that individual human characteristics increasing the likelihood of employment and better remuneration will lead to an increasing likelihood of migration. The same goes for individual characteristics that could lower the costs of migration. Furthermore, Massey et al. (2011) also underline the role of the government in controlling migration mainly by policies which would affect the expected earnings. The government can attempt to positively or negatively impact the expected earnings and benefits of the potential migrant, but as well, it can attempt to do so for specific groups, for instance, highly-skilled migrants.

This discussion above is comprised by the core assumptions and principles of neoclassical economics, but other theories have also derived from this approach. The most relevant is human capital theory, which has challenged the pronounced importance that core neoclassical economics gives to economic factors. Thus, human capital theory has placed important emphasis on ‘non-money’ factors, which it claims, are as equally important for the decision of a migrant to move or not (Sjaastad, 1962). The individual’s cost-benefit analysis takes into account issues such as the ‘psychic’ costs of moving and living conditions of the potential destination, making it possible for migration to occur even when pecuniary retribution would be lower than at present, if non-pecuniary conditions are superior (Sjaastad, 1926). Although placing emphasis on non-pecuniary factors, human capital theory is grouped under the neoclassical economic approach, as a derived theory. Unlike this, the following theories to be discussed have more substantial differences and belong to different categories.

The new economics of labour migration (NELM) challenges the aforementioned theories by assuming that migration decisions are made by groups of individuals, usually households or families (Massey D. S., et al., 2011, p. 6). A key notion of this theory is that individuals act collectively not only to maximize income, but also to minimize risks, by allocating the
group’s resources (including labour) to different members. A member of the group would be allocated to work in a foreign market, where usually the ‘wages and employment conditions are negatively correlated to those in the local area’ (Massey D. S., et al., 2011, p. 6), allowing the group to rely on that individual if the local conditions worsen, thus, averting risk.

Historical-structural theories place more emphasis, as their name indicates, in structural forces of the world economy and are mostly grounded in Marxist notions of capitalism and development. Dual labour market theory and world systems theory are the two main models following this reasoning. Dual labour market theory claims that labour migration is caused, not by push factors, but primarily by pull factors, of which the strongest is the structural demand for cheap labour (Piore, 1979). Moreover, a key notion of this theory is the existence of two parallel labour markets: a primary sector for highly-skilled with well-paid jobs; and a secondary sector, with undesired and low-paid jobs, for low-skilled (King, 2012). Since one of the chief assumptions is that ‘people do not work only for income, but also for the accumulation and maintenance of a social status’ (Massey D. S., et al., 2011), the local workers avert these jobs, creating a demand for immigrants to fill these positions under adverse conditions. According to this theory, the inequality between the primary and secondary sectors is self-perpetuating, resulting from the subordination of the underdeveloped world into the capitalist economies.

World systems theory, the second historical-structural approach, also shares similar notions, in the sense that it argues ‘global capitalist powers’ are in advantage and draw the demanded labour force from the underdeveloped, ‘peripheral’ world. This derives from a historical explanation, in which the pre-existing ties of the past colonial world are the basis for nowadays asymmetric links of ‘neo-colonialism and corporate capitalism’ (King, 2012). Opposite to the view of migration as reaching equilibria, both world systems theory and dual market labour theory have an intrinsic understanding of migration as a self-perpetuating phenomenon.

This notion of perpetuation of international migration is broadened by the network theory. ‘Migrant networks are sets of interpersonal ties that connect migrants, former migrants and nonmigrants in origin and destination areas’ which ‘increase the likelihood of movement
because they lower the costs and risks, and increase expected returns’ of international migration (Massey D. S., et al., 2011). These networks constitute the ‘crucial meso-level’, resulting from the interaction between the macro-structural factors and the micro-individual formulations, which are dominant in most of the presented theories (Castles, The Factors that Make and Unmake Migration Policies, 2007, p. 28).

1.1.1 – An Interdisciplinary Approach under the Neoclassical Economics Paradigm

The theorizing of international migration is far from perfect, and all theories present some limitations. Both the historical-structural approaches have been criticized by over-emphasizing the socio-economic structure and viewing capital demands as ‘all-determining’, with migrants merely seen as passive actors and very little ‘human agency’ (Castles, The Factors that Make and Unmake Migration Policies, 2007, p. 27). The critique of new economics of labour migration is the fact that is only provides explanation for the supply part of labour migration, and it is mainly appropriate for rural and poor settings (King, 2012).

Despite the teeming shortcomings from different theories, they all contribute to the understanding of international migration flows, as well as to the particular phenomenon of highly-skilled migration. As Massey et al explain (2011, p. 25) ‘[…] the various explanations are not necessarily contradictory unless one adopts [a] rigid position’. Table 1 summarizes the theoretical discussion, highlighting the most important aspect of each of the aforementioned theories.

| Table 1. Summary of Discussed Main Theories of International Migration. |
|---|---|---|
| Approach | Theory | Description |
| Neoclassical Economics Macro | Neoclassical Economics | -Migration origin in wage differentials  
-Movement: low-income → high income |
| Neoclassical Economics Micro | Neoclassical Economics | -Individual: Utility-maximizing agent (incl. personal traits)  
-Rational choice |
| Human Capital Theory | Human Capital Theory | -Emphasis on non-pecuniary traits and psychic costs  
-Migration possible even if pecuniary benefits are low, provided that non-pecuniary ones are higher. |
As the other theories, neoclassical economics also has its own limitations, mainly criticized for not being able to explain why so few people (only around 2 to 3 percent of the world’s population in recent years) migrate (Castles & Miller, 2009, p. 5), or why migration in the absence of wage differentials occurs (King, 2012, p. 14). In spite of these criticisms, neoclassical economics remains the dominant theory explaining international migration – and the overall framework for this work. I take this approach for several reasons. One of them is the push-pull framework as an elemental part of neoclassical economics theory. This same model can be observed in all the aforementioned theories (with the exception of networks theory) in explaining migration: a series of pull & pull factors motivating the migrant (or collective) to migrate. In fact, Kumpikaite and Zickute (2012) concluded that in trying to find synergy among all migration theories, summarizing and integrating all of them into an all-embracing push-pull model could be the answer.

Another reason is the – partial – reflection of neoclassical economics in other theories. It can be observed that utility maximization and importance of pecuniary factors are a present element in all other theories, and despite these factors might be sidelined (for example, by structural forces in historical-structural approaches or non-pecuniary factors in human capital theory), they continue to play a key role. In addition to this, the selection of neoclassical economics

| New Economics | New Economics of Labour Migration | -Group as decision-making unit  
| | | -Income maximization & risk aversion  
| Historical-Structural Systems & Networks | Dual-Labour Market Theory | -Pull factors (labour demand) as origin of migration  
| | | -Primary and Secondary labour markets  
| | World-Systems Theory | -Core advantageous to periphery  
| | Migration Network | -Networks as ‘meso-level’  
| | | -Reduced costs and facilitated movement through networks  

economics as the main theoretical model of this work is the strong influence it has had in shaping public – more specifically, immigration – policies (Massey D. S., et al., 1998).

Finally, the neoclassical economics paradigm offers an important theoretical advantage: that it is both adaptable to macro and micro approaches. Particularly, Salt and Findlay (1989) exposed the idea that the phenomenon of highly-skilled migration should also be studied with a combination of macro and micro elements (Iredale, 2001, p. 9). Thus, neoclassical economics proves to be a suitable overarching paradigm to address the particular phenomenon of highly-skilled migration

1.2 – The phenomenon of highly-skilled migration

Nowadays, the importance of trade and capital mobility is equally important to that of the mobility of people, ideas and knowledge. These individuals, in possession of valuable ‘intangibles’ – e.g. knowledge, creativity, innovation – with the potential for developing them into ideas and objects with high economic or non-economic value, and their movement across borders, is understood as the phenomenon of highly-skilled migration (Solimano, 2008). However, it is difficult to quantify these intangibles, and thus, to define who is a highly-skilled migrant.

There is no universal definition of a highly-skilled (migrant), and the diversity of terms and definitions vary from country to country, mostly in accordance to their own legislation – i.e. their own policy objectives. Nevertheless, there are international standard concepts upon which most of the different countries’ understandings are based. ILO’s Standard Classification of Occupations and UNESCO’s International Standard Classification of Education are the most used references for who is generally considered a highly-skilled individual (Table 2).
Table 2. General concepts and criteria for defining a highly-skilled individual

<table>
<thead>
<tr>
<th>Institution</th>
<th>Definition</th>
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| ILO's International Standard Classification of Occupations (ISCO) | Based on ISCO-88 and ISCO-08, these are individuals associated and/or belonging to Major Groups in levels 1 - 3 occupations.  
  - Level 1: Legislators, senior officials and managers  
  - Level 2: Professionals  
  - Level 3: Technicians and Associate Professionals                                                                                                                                                                                                                           |
| UNESCO International Standard Classification of Education (ISCED) | In respect to education, 'highly-skilled' individuals are the ones in possession of level 5 or 6 of tertiary education.  
  - Level 5: First stage of tertiary education (Bachelor and Master Degree level, minimum of two years duration.)  
  - Level 6: Second stage of tertiary education (Doctorate degree level, resulting in publication of original research)                                                                                                                                                        |
| European Union Council Directive 2009/50/EC²    | Introduced concepts of 'highly-skilled employment', which in the EU Directive context is the employment of a person who:  
  - …in the Member State concerned, is protected as an employee under national employment law and/or in accordance with national practice, irrespective of the legal relationship, for the purpose of exercising genuine and effective work for, or under the direction of, someone else,  
  - is paid, and,  
  - has the required adequate and specific competence, as proven by higher professional qualifications  
  The concept 'higher professional qualifications' is understood by this Directive as:  
  - Qualifications attested by evidence of higher education qualifications or, by way of derogation, when provided for by national law, attested by at least five years of professional experience of a level comparable to higher education qualifications and which is relevant in the profession or sector specified in the work contract or binding job offer; |

Although some definitions might slightly differ from the ISCO and ISCED definitions, notions such as ‘foreign talents’, ‘highly-qualified professionals’ and ‘top specialists’ often

² This definitions make specific reference to third-country nationals. For more detail see. For more see Council Directive 2009/50/EC on the conditions of entry of entry and residence of third-country nationals for the purposes of highly-skilled employment. [2009] OJ L155/17
overlap with each other and share the basic understandings of the international classifications, with their respective nuances. Throughout this work, these terms are used interchangeably. International organizations such as the UN, the International Organization for Migration (IOM) and the OECD do not hold their own definitions, but instead often make reference to the ISCO and ISCED classifications. In the context of the European Union, Member States often add professional experience and salary criteria to define a highly-skilled migrant. In addition to this, it is important to mention that the concept of highly-skilled is many times constrained by data availability. The best example is ISCED’s success, which is due to the fact that tertiary educational level is the most widely available indicator for the highly-skilled.

Within the broad reality of international migration, the phenomenon of highly-skilled migration is a fast growing trend in the globalized world (International Migration Institute Oxford QHE, 2014), and as such, it has recently received increased attention from part of scholars all around the globe. However, the growing interest is not only limited to academia, but it has quickly been expanding to governments and policy makers, turning this interest into a ‘worldwide race to attract talents’ (Boeri et al., 2012, p. 2). In the end of the 90’s and beginning of the 2000’s, this so-called race was mostly between developed countries, what Kapur and McHale (2005, p. 37) called the ‘five competitors for talent’: Australia, Canada, Germany, the UK and the United States. Nowadays, the competition is not limited to these five countries or developed states, but it also applies to new emerging and inviting economies biding for positive results in attracting highly-skilled migrants (Boeri et al, 2012; Massey et al, 1993 ). The question then arises: why is it that this field of highly-skilled migration has in recent years become attractive for countries to adopt policies and measures in this area?

Their potential for positive impact in the development of the economy is a major reason. For this, highly-skilled migration phenomenon has a strong base in the idea of ‘selectivity’, which in an exaggerated manner would see the state ‘hand-pick’ individuals that would fall into the aforementioned description and that would benefit to the development of the country and the society. At present, it is evident that many countries have become more and more selective in their labour immigration policies, based many times in the country’s own understanding and circumstances (OECD, 2013).
In its International Migration Outlook 2013, the OECD makes mention that previous migration waves and policies of the past did not resulted in either positive or negative effects for the state, but in contrast, new waves of immigration will most likely see immigrants as net fiscal contributors, as a result of the growing focus on skilled labor migration. This view argues that with growing specialization in labour migration, which is mainly the case of the highly-skilled, migrants should contribute to this particular fiscal beneficial development, thus, suggesting the policies facilitating this movement. Even more, skilled migration is in fact not greatly associated with being a fiscal burden, since highly-skilled workers do not compete with unskilled locals for access of welfare or other subsidized public services (Boeri et al., 2012, p. 1)

In addition to this, highly-skilled migrants are also positively associated with the conveying ‘valuable skills, stimulating investment and growth, promoting innovation, and raising productivity’ (Boeri et al., 2012, p. 66). And this positive impacts have been confirmed by aggregate data analysis3 (Boeri et al., 2012, p. 106) Results from aggregate data analyses show that an increasing share of skilled immigrants have a positive employment effect and that there is an increase in productivity due to production specialization. Additionally, highly-skilled immigrants’ admission can lead to stabilization of demand and production (Boeri et al., 2012, p. 125).

A key aspect supporting the idea of highly-skilled migration is that it helps at filling in the demand for highly-skilled specialists that the available domestic workforce is not able to provide. The International Migration Outlook from the OECD (2013) report refers that policies in practice today, which aim at filling the positions with foreigners where there are no domestic workers available, are ‘certainly’ not prone to fail in the future.

In addition to the above mentioned benefits for reducing skill shortages, highly-skilled migration offers a benefit of a different nature which is very important for policy makers: a

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political one. According to Kapur & McHale (2005), highly-skilled migration represents a viable exit to the immigration policy dilemma because, in contrast to other types of migration, it is more directly linked to benefits for the receiving economy, for instance, being economically viable by increasing the human capital endowments per capita, which leads to greater growth rates (Boeri et al., 2012, p. 1). Furthermore, immigration of highly-skilled, as Kapur & McHale argue, carries less problems, by helping to reduce earning inequalities and having faster and easier integration into the new society.

1.3 –The role of the state through immigration policies
Notwithstanding its marginalization in neoclassical economics theory to structural factors and other forces, the role of the state as an influencing agent in migration flows and patterns should be further acknowledged. Several authors have already discussed this issue. For example, Massey (1999) pointed out at the ‘short shrift’ towards the nation-state in migration literature, while Hollifield emphasized the need of including the state more into theories of migration (King, 2008). Likewise, Mark Miller wrote that ‘what governments do matters a great deal’ (Castles, 2007). Thus, it is necessary to address the role of the state from a theoretical perspective, in order to later do it from the empirical dimension.

For this, the paper borrows the conceptual distinction used by Hein de Haas (2011), which differentiates the role of the state in comparison to the role of specific immigration and emigration policies, which are not to be confused. De Haas makes it clear that the state’s role in transforming migration processes is undoubtedly crucial, as the very idea of international migration presumes the existence of nation-states with territorial and institutional borders, inherently affecting migration tendencies and patterns (de Haas 2011). In this sense, this paper does not address this general role of the state, but it focuses on its role through the specific immigration policies, defined by de Haas as ‘laws, rules, measures, and practices implemented by national states with the stated objective to influence the volume, origin and internal composition of migration flows’ (de Haas, 2011, p. 29).

In trying to influence migration to its territory, the state (in its role through the specific immigration policies) of course cannot (and probably should not) ignore the structural factors, both micro and micro elements, defined in the theoretical discussion. Hence,
immigration policies are not *only* an influencing element but they are also to be seen as *influenced* and affected by other determinants of international migration, particularly in the context of highly-skilled phenomena, as it will be later explained.

For instance, Gary Freeman’s model, which is in line of the general principles of neoclassical theory, argues that, as any public policy in a democracy, the demand for an immigration policy is subject to the ‘play of organized interests’ (Hollifield, 2000). He considered that depending on the availability of productive factors (e.g. land, capital, labour), and the substitutability of foreign for domestic labor, immigration’s costs and benefits can be either diffuse or concentrated. Depending on the distribution of the costs and benefits, there would be a specific ‘mode of politics’. According to this model, in the specific case of immigration policy more often than not, the mode would be that of ‘client politics’, where the costs are diffused and the benefits concentrated. This means that organized interests, mostly from business lobbies and other interests groups, will be exerting pressure on the state towards more liberal approaches on immigration (Hollifield, 2000, p. 145), resulting in the aforementioned effect in which immigration policies are also affected by other determinants of migration. In policies favoring skilled migrants, Boeri et al. (2012, p. 147) has found consistent evidence that the interests are ‘actively engaged and effective in affecting’ these policies.

A consideration must be made regarding the beneficiaries of immigration which Freeman points out, since he mostly discusses non-skilled migration. In the context of the former, labor-intensive industries are mentioned as main beneficiaries from open and extensive immigration policies receptive of non-skilled migrants. For highly-skilled migration and the ‘knowledge economy’, these beneficiaries will most likely not be the same, since new interest groups might come into play demanding policies for highly-skilled migrants, while old ones might find themselves into a position where their benefits are reduced. Examples of the new actors can be business in the information technology (IT) sector, as well as R&D facilities, including universities and private sector. Thus, as client politics explains, the intersection of the interests of these beneficiary groups together with the government’s agenda, would result in the creation and integration of immigration policies in the institutional framework.
Freeman’s model then allows for a framework analysis of immigration policies and how they come into being, but it does not develop into what forms they take or what their objectives from the government’s side could be. So how can government influence migration through its immigration policies? As an answer to this query, one of the main elements of influence that the state has in international migration and that it applies in its policy is that of the control over its borders. By controlling for the rules and condition for admission into the country, the state has always the capacity, if not the will, of influencing migration flows and stocks. For instance, Boeri et al. (2012, p. 93) point that changes in legislation favoring highly-skilled immigrants are among the most consistent and important correlates affecting the selectivity of immigrants. This is because the state can influence the ‘internal composition’ (i.e. types of migrant) of these flows. In this sense, the state can intervene with its immigration policy in order to ‘promote’ a particular category of migrant, or on the contrary, to ‘prevent’ a certain category, defined as a structuring effect of the state and its policies on migration (de Haas 2011, p. 22). Moreover, immigration policies can, as it is often the case nowadays, be simultaneously ‘preventive; for one group (e.g. low-skilled workers) and ‘promoting’ for other group (e.g. highly-skilled workers).

But this simultaneity needs to be externalized. If the state goal is to attract highly-skilled workers, there has to be some explicit mention of it, and a distinction between the desired group of migrants from other groups needs to exist. This is because the exclusionist and/or restrictive policies towards non-skilled migrants that are far too conservative, although not directly affecting the labor prospects of skilled migrants, might be taken as hostility and thus, divert potential talents from migrating to the specific country (Boeri et al., 2012).

Iredale (2001) expanded on this idea, stating that national policies and bilateral agreement work as ‘lubricators’ that can speed up the processes motivated by the industries. These policies and agreements are, in Iredale’s (2001, p. 9) view, an important aspect in the context of highly-skilled labor, since they facilitate their flows. As de Haas observed in the literature regarding immigration policies, these are often more effective at ‘affecting the selection and composition of migration rather than the overall volume and long-term trends’. These observations would indicate that the role of the state, through its immigration policy, becomes
even more relevant in the context of highly-skilled migration, since it is ultimately the selection of migrants with specific skills mostly what these policies aim for (de Haas 2011, p 27), which are have become ‘increasingly widespread practice’ (Boeri et al., 2012, p. 23).

The practice of selection of highly-skilled migrants can take two forms ‘immigrant led’ or ‘employer led’ (Chaloff & Lemaître, 2009). In the former, the immigrant is allowed into the country based on the requirement criteria, which most of the times uses a PBS (points-based system). A PBS is an assessment tool used to measure how ‘desirable’ is a migrant by attributing different points to specific criteria, which is many times education, proficiency of destination-country language and age, as well as occupation and work experience (Boeri et al., 2012, p. 24). In the latter, an offer from the employer to the potential highly-skilled migrant must exist before the latter is allowed to enter the country, where a ‘labor market’ test is many times a requirement, making sure that the vacancy to be offered to the foreigner cannot be filled with a native worker.

It is a matter of debate which of these two systems is more successful, since both of them can have diverse impacts on the domestic labour market. For instance, the immigrant led system can have more serious consequences for the low-skilled, since the entrance of cheap labour force directly competes with the existing domestic force, having negative effects such as greater domestic unemployment. However, for highly-skilled, the qualified labour is so scarce that bringing in foreign labour does not competing with other type of domestic skilled labour, and thus does not have the same negative consequences. While most of the European countries, in addition to Japan and Korea, have employer led systems, many other successful countries in attracting highly-skilled migrants (UK, Australia, Canada, New Zealand, Denmark) also have ‘immigrant led’ schemes (Chaloff & Lemaître, 2009). Furthermore, although it is possible to say that generally highly-skilled positions are mainly fulfilled by means of the ‘employer led’ system, this is not always the case.

Hence, this section explains that the policies of the state remain an influence factor to consider, especially relevant in relation to highly-skilled migration, bearing in mind the

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4 These two systems are also often referred to as ‘supply driven’ (immigrant-led) or ‘demand driven’ (employer-led).
neoclassical economics understanding that the impact capacity of these policies is greatly impacted by structural factors and other forces. Under this principle, immigration policies should address the determinants, in this case, of highly-skilled migration, in order to expect greater impact capacity.

1.4 – The determinants of ‘talent mobility’
In order to determine how the policies for attraction of highly-skilled third-country nationals address the theoretical forces driving the specific phenomenon, then the main push and pull elements have to be identified in the theory. A number of authors have created different understandings and categorizations of these factors influencing international migration, but few have focused on highly-skilled migration. Thus, it has been the author’s choice to draw these influencing factors from more recent and specific literature on ‘talent mobility’ (i.e. highly-skilled migration), since the study of this contemporary issue needs to be addressed not only from the viewpoint of classic literature, but also with more recent focus that further take into consideration the modern complexities of highly-skilled migration. Andrés Solimano (2008) identifies the following seven determinants of talent mobility:

1. International differences in earnings and development gaps
2. Non-pecuniary motivations
3. The demand for capital and talent
4. Technology and the demand for talent
5. Agglomeration and concentration effects
6. Linguistic compatibility, networks, and sociocultural affinity
7. Policy regimes and immigration policies

Although Solimano does not present them as such, these seven elements represent factors that work under a push-pull model, since they can either push or pull an immigrant towards migrating or not. Moreover, these determinants are well in line with the neoclassical economics principles and assumptions, while also taking into account the important contributions of other theories. Yet, these seven determinants can appear somewhat contrived and complicated. Thus, the author adapted them to this work by synthetizing and amalgamating them into five determinants of talent mobility:

1. Policy regimes and immigration policies
2. International differences in earnings and development gaps
3. Non-pecuniary motivations
4. Demand for talent, capital & technology
5. Networks: professional and sociocultural

A brief explanation of each of them is promptly provided, in addition to the logic used to amalgamate and simplify them. The first three determinants remain as suggested by Solimano. The policy regimes and immigration policies determinant makes reference to the thorough discussion under the ‘role of the state’ section. It has been moved to the beginning of the list since not only is a determinant in itself, but also the point of departure and object of study in this thesis. As such, this first determinant is taken as a separate element in order to analyze, in the case of Estonia, how the policies on attraction of highly-skilled TCNs address the theoretical forces driving the specific phenomenon, that is, the remaining four determinants.

The second determinant, international differences in earnings and development gaps, is fundamentally an equivalent to the macro assumption of wage differentials. It is an indication that people are not indifferent to income differential across countries or regions, and that they will move if the expected income in some other country is higher than the income at home or current place, as well implying that this will happen from low income countries to high income countries. In regards to development, the logic is the same, where people will chose to move to more developed countries because they offer better living standards and higher productive potentials.

The third determinant, non-pecuniary motivations, refers to the other factors that are not economic in nature, but that also determine the movement of a person. These are often family or personal ties to a country, but they can include particular considerations for the highly-skilled migrant, for instance, those of personal preferences or professional nature, that make the individual more prone to migrate.

The fourth demand for talent, capital & technology determinant encompasses Solimano’s third and fourth points, since it appears to the author of this thesis that they both represent the resulting attraction of a number of productive factors of production (capital, highly-
skilled workers, talent, technology) due to an offer of ‘economic opportunities and good living’. Although Solimano separates the technology factor from others due to its relevance in the development of nowadays ‘knowledge economy’, in this work these production factors are considered to be intrinsically related, falling under the category of economic factors.

The fifth determinant, professional and sociocultural networks, is also an amalgamation of Solimano’s fifth and sixth determinants, which ultimately relate to the creation and usage of networks that stimulate highly-skilled migration. These networks can broadly be based on two types: professional and sociocultural. The former, is for instance, the talent attraction caused by the availability of other talents, since the interaction with peers is a factor that highly-skilled migrants consider important in deciding to migrate (Solimano, 2008). The establishment of clusters or centers for innovation, research and development thus play an important role in attracting highly-skilled migrants, as the experience of Silicon Valley has shown. The latter, refers to networks that are guided more on the principles of sociocultural affinity or linguistic compatibility. These are more recognizable factors that would influence migration flows, as it is widely known that, when a certain group is established in a country, it is easier for others belonging to that group to follow, because they will have established networks and other advantages while setting up in the country.

Table 3 summarizes the first part of this paper. Each discussed theory is lined up with the determinant that it most highlights. Moreover, it also exemplifies the significance it might have in the receiving country’s ‘attraction policy’ by presenting some push and pull elements that relate to the determinants of ‘talent mobility’ and theories. As it can be seen, all discussed theories can be framed under the push and pull model offered by neoclassical economics.
Table 3. International migration theories, the determinants of ‘talent mobility’ and possible implications to the receiving country’s ‘attraction policy’.

<table>
<thead>
<tr>
<th>Theory</th>
<th>Highlighted determinant of ‘talent mobility’</th>
<th>Significance for attraction policy (Examples)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoclassical Economics Micro</td>
<td>-Policy regimes and immigration policies&lt;br&gt;-International differences in earnings &amp; development gaps</td>
<td>Pull elements: -High offer of employment&lt;br&gt;-Higher income than origin country&lt;br&gt;-Tax incentives&lt;br&gt;-Immigration policies focused on desirable traits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Push elements: -Long bureaucratic process&lt;br&gt;-Less competitive salary&lt;br&gt;-Lack additional economic incentives&lt;br&gt;-Unclear definition of desirable traits</td>
</tr>
<tr>
<td>Neoclassical Economics Macro</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Capital Theory</td>
<td>-Non-pecuniary motivations&lt;br&gt;-International differences in earnings &amp; development gaps</td>
<td>Pull elements: -Attractive living conditions together with stable/high salary&lt;br&gt;-Family migration opportunities&lt;br&gt;-Social security access</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Push elements: -Lack of access to information&lt;br&gt;-Intolerance towards immigrants&lt;br&gt;-Lack of additional non-pecuniary incentives</td>
</tr>
<tr>
<td>New Economics of Labour Migration</td>
<td>-Non-pecuniary motivations&lt;br&gt;-Networks: Professional &amp; Socio-cultural</td>
<td>Pull elements: -Demand of highly-skilled&lt;br&gt;-Demand of specific IT professionals&lt;br&gt;-Promotion of bilateral agreements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Push elements: -Unspecified target of attraction policy.&lt;br&gt;-Small size of labour market&lt;br&gt;-Inflexible labour market</td>
</tr>
<tr>
<td>Dual-Labour Market Theory</td>
<td>-Demand for talent, capital &amp; technology.</td>
<td>Pull elements: -Stimulation of migrant networks&lt;br&gt;-Cooperation networks&lt;br&gt;-Promotion of bilateral agreements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Push elements: -Difficult environment to foster networks.&lt;br&gt;-Uncommon sociocultural environment</td>
</tr>
<tr>
<td>World-Systems Theory</td>
<td>-Demand for talent, capital &amp; technology.</td>
<td></td>
</tr>
<tr>
<td>Migration Network</td>
<td>-Networks: Professional &amp; Socio-cultural</td>
<td></td>
</tr>
</tbody>
</table>
2. - HIGHLY-SKILLED MIGRATION OF TCNs IN ESTONIA

2.1 – The Estonian ‘knowledge economy’ and its increasing interest in highly-skilled migration

In recent years, Estonia has implemented policies and measures aiming at the attraction of highly-skilled migrants, nevertheless, they do not seem to be part of a unified or comprehensive policy, nor they give a clear indication of which are the theoretical determinants they are trying to address. Estonia has increasingly realized more and more over recent years that in order to continue the development of its ‘knowledge economy’ it needs, in particular, more specialists that would satisfy the demands of the labour market (Turu-Uuringute AS, 2011). This topic, nonetheless, can be of course sensitive for a small country with a little over one million inhabitants, with foreigners many times seen as a potential hazard towards Estonian culture and population.

Nevertheless, the issue is that the domestic labour force is not capable to satisfy the growing demands of the industry. Estonians are of course granted with all the advantages in the labour market, and yet, for instance, the education system fails to produce all the necessary qualified individuals required, given the fast pace with which the industry grows. Attempts have also focused on giving priority for Estonians abroad, such as the Talendid koju program5, but the small number of returnees (27) can be hardly named a success, despite the positive attitude of President Toomas Hendrik Ilves towards the program (Estonian Publication Broadcasting, 2012).

With this background, is that Estonia comes more into terms with the attraction of highly-skilled TCNs and the development of a ‘talent policy’. For instance, it has been stressed that there is the need of a more comprehensive attraction policy through the further development of an immigration policy, instead of being confined, for example, with education system issues (Mürk, 2011). As well, it has been highlighted that the passive immigration policy has to be changed for a more active and thorough policy, which dynamically works towards the

5 Talendid Koju had as main objective bringing Estonian talents living abroad back to Estonia in order to offset emigration and to fill labour demands with Estonian nationals. As the program was directed only to Estonian nationals, it is not relevant for the case of TCNs. Nevertheless, it illustrates other efforts to generally attract HSM. More information: www.talendidkoju.ee
attraction of foreign talents (Eamets, 2014). Hence, the increasing interest in the attraction of highly-skilled migration seems to find greater consensus in Estonia.

As an introduction to the following analysis, it is important to underline that immigration policy in Estonia responds to two dimensions: an external and an internal one. The internal, within the national limits, is found to be highly influenced through a ‘client politics’ process, which helps define the policy outcome. The external dimension is the one enforced by the European Union as a result of Estonia’s commitment to the *acquis communautaire*. Although this external dimension has grown over the years as the EU acquires more and more competencies in areas related to immigration policy, the development of the latter remains fundamentally a state task (Boeri, Brücker, Docquier, & Rapoport, 2012). Conscious that immigration policies still remains broadly an area for the state to work autonomously, the analysis will focus on the national policies and related Estonian documents and legislation particularly related to the attraction of highly-skilled migration of third-country nationals, without neglecting EU transposed directives nor relevant elements deriving from commitments with the EU in relation to talent mobility of TCNs.

Essentially, the institutional framework regarding migration has continued to work as in previous years. The Ministry of Interior has the responsibility of developing the both migration and asylum policy, while, since 2010, the management and application of the latter is carried through the PBGB. The latter is under the administration of the former. The Estonian Unemployment Insurance Fund (EUIF), for which the Ministry of Social Affairs is responsible, administers matters regarding employment of third-country nationals and, more broadly, oversees the application of the labour policy. In addition, the Ministry of Culture handles integration issues, while the Ministry of Justice has jurisdiction over human-trafficking activities (European Migration Network, 2012, p. 6). Although the Estonian Ministry of Education and Research seems to only be tangentially involved, the present study shows that it is one of the ministries with high degree of involvement regarding the attraction of highly-skilled, particularly through the internationalization of higher education. Altogether, these authorities represent the main governmental actors involved in the developing process of migration policy, included that of the highly-skilled.
2.2 – Data and Methodology
As it was stated before, the present work aims at contributing to the understanding of the attraction policies and measures in Estonia, particularly of third-country nationals. By mapping the existing policies and measures from the neoclassical perspective and against the determinants of talent mobility derived from Solimano’s work, it will be possible to determine the overall policy of attraction of highly-skilled TCNs, as well as how do they address the theoretical drivers of highly-skilled migration phenomenon in Estonia. Figure 1 should better illustrate the theoretical and conceptual framework explained in the theoretical section, as well as how the object of the study will be analyzed in light of the determinants of ‘talent mobility’ shaped by the author.

![Diagram](image)

**Figure 1.** Research design. Relationship between highly-skilled migration and Estonia derived from Solimano's determinants of talent mobility.

The present work will focus on the specifics of third-country nationals, as this group fundamentally differs from Estonian and citizens of the European Union. In the context of Estonia – and the EU –, a TCN is an individual which is not a national of Estonia nor any EU Member State, and is equated to the term ‘non-EU foreign national’ (Eurofond, 2014). This emphasis in TCNs was chosen for several reasons which make this group fundamentally different from either Estonian citizens or EU citizens. The first main difference is the access
to the labour market. While EU and Schengen Area citizens enjoy freedom of movement to visit, work and reside in Estonia, TCNs do not. Thus, TCN’s access to the labour market is intrinsically different from that of EU Citizens, requiring to go through a process of acquiring a residence permit by satisfying certain requirements and criteria. Additionally – and also as a result of this mobility freedom -, reliable statistics on the movement of EU citizens is more difficult to obtain, while the entrance and exit of TCN’s is more closely monitored by the PBGB in Estonia, therefore making statistics more readily available for the last part of the last part of the analysis.

A final reason for this distinction is the greater relevance of TCN’s in the phenomenon of highly-skilled migration for the Estonian case. As neoclassical economics explain, migration movements will mostly occur from less developed to more developed areas, which means that, in theory, movement inside the EU (and outside as well) will occur from low income countries to high income countries. In practice, evidence suggests that this is precisely what happens: with countries offering larger prospects of economic welfare, such as the UK and Finland, Estonia holds negative net migration levels, whereas with countries offering less, such as Russia and Ukraine, positive net migration levels are held (Statistics Estonia, 2013). As evidence suggests, Estonia is not very competitive compared to its Nordic or Western European counterparts and not particularly attractive for a large number of EU citizens because it finds itself in the lower-end of salaries in Europe. Thus, it is more reasonable to turn special attention on the attraction of highly-skilled migrants from outside of Europe, with countries where Estonia would be at a more competitive advantage. Thus, the author believes it is relevant to make a distinction between these two groups, and focus this work on TCN’s. Nevertheless, this should not be understood as a clear dividing line between policies for TCNs and EU citizens, since, as it will be understood from the analysis, the objectives and aims of the policies many times do not distinguish between groups, overlapping at several occasions.

The analysis of the current migration policies in the field of highly-skilled migration of third-country nationals was carried using a selection of different methods and sources, a combination that should provide for a broader analysis and a better insight to the topic. First,
a selection of material to map the current measures and policies was carried out using secondary research. This allowed for a compilation and synthesis of the most relevant and up-to-date data available from online sources, government documents and official statistics, available either in English or in Estonian language. The selection of sources and documents for this first part of the analysis was based on their relevance and direct relation to the topic of TCN’s highly-skilled migration. This method allowed to organize and synthetize the available material and bring up-to-date information to the topic, in order to map and generate an overview on the highly skilled migration issue in Estonia.

Additionally, raw data was collected from a total selection of 31 semi-structured interviews prepared for a project by the Institute of Baltic Studies entitled *Newly arrived immigrants in Estonia: Policy Options and Recommendations for a Comprehensive and Sustainable Support System*. The author of this thesis collaborated in the project and gained access and permission to use this data. Using in some cases the primary audio sources, and in other cases the transcripts and summaries of these interviews with government representatives and stakeholders related to the topic of highly-skilled migration in Estonia, this analysis had the aim, for the present thesis, to match the information gathered by the secondary research carried on in the first analysis section (See Annex 1 for questionnaire and list of stakeholders). In addition, the analysis of the respondents’ answers would give a particular and unique insight not only of what is the existing policy framework, but also on what is it composed of, what it is based on, what are the expectations and the particular interests of the parties involved.

The thesis also features a brief analysis on data that is publicly available upon request from the Police and Border Guard Board. The data includes the number and type of issued temporary resident permits in Estonia to third-country nationals over the period 2008-2013. This allows to have a more thorough empirical picture of the flows of TCNs as well as to draw some hypothesis between the data and policies. Although this data represents one of the most readily available statistics regarding TCN’s in Estonia, there are some limitations which are to be taken into consideration. For instance, the temporary residence permits issued represents positive decisions by the PBGB made to a third-country national, but it does not
imply that the latter ultimately migrated to Estonia. As well, the statistics might include third-country nationals already residing in Estonia, but that applied for a new temporary residence permit under a different reason, or TCNs that overlooked the deadline for renewal of their permits and had to re-apply for a new one. Thus, actual TCNs migration flows to Estonia are most likely to be smaller than the figures on issued temporary residence permits. Thus, discussion in the analysis regarding the number of TCN’s arriving to Estonia makes reference to the corresponding figure of residence permits issued, unless stated otherwise.

2.3 – Document and interview analysis
In this section, the existing policies and measures for the attraction of highly-skilled TCN’s in Estonia will be analyzed against the determinants of ‘talent mobility’ previously discussed in the theoretical part of this work, with the aim of elucidating how well do Estonian policies in this topic address the theoretical forces of this specific phenomenon. This will be done by analyzing both the secondary research sources as well as the 31 interviews with stakeholders on the subject of highly-skilled migration. Initially, a mapping of the current policy regime and immigration policies vis-à-vis highly-skilled migration of third-country nationals results from both the document and interview analysis, in order to later conclude how it address the remaining determinants of ‘talent mobility’.

2.3.1 – Policy regime and immigration policies
The government of Estonia has not yet produced or developed a strategic and comprehensive document outlining Estonia’s migration policy priorities, as it has done in other political areas. This fact inevitably leads to one of this paper’s preliminary assumptions: that there is not a comprehensive and overall policy framework on the attraction of highly-skilled migrants, less to say, of third-country nationals. The interviews also supported this postulation: when asked specifically about what should be the role of the country and what could it do in regards of attraction of highly-skilled migrants, several of the respondents said that Estonia should develop a policy and adopt a strategic document on this topic, indicating the lack of a comprehensive policy on the subject in question.
Nonetheless, two basic notions in the ‘Action Programme of the Government of the Republic 2011-2015’ have been identified as the most relevant ones regarding immigration and the context of highly-skilled migration:

- ‘With a view to increasing the competitiveness of Estonia’s economy, we will create a favorable environment to attract foreign students and top specialists to Estonia. This will contribute to the establishment of research and excellence centres in Estonia and help provide companies with a higher-quality workforce’.
- ‘We will oppose the mass introduction of low-skilled foreign workers’

These two points can be categorized as the defining notions of Estonia’s immigration policy (European Migration Network, 2012; 2013). In analyzing the first government action, it is stated that Estonia will actively engage in the attraction of ‘foreign students’ and ‘top specialists’, who, as discussed before, are terms equate to that of a highly-skilled migrant. Moreover, it states the increase of competitiveness of Estonia’s economy as the aim – and justification – for engaging in the attraction of highly-skilled migrants. Thus, this government action of attraction of highly-skilled migration is based on the phenomenon’s understanding explained in the theoretical part, which is that this will ultimately lead to an increase in competitiveness.

In these two notions, no distinction between EU and TCNs is made, which suggest that no difference is made between the two groups. However, a number of policy elements were identified during the secondary research and the interview analysis, which support the initial assumption that there are fundamental differences between the EU and third-country nationals in the context of attraction of highly-skilled migrants. Evidently, the main difference is of legal nature. For EU nationals, the Citizen of the European Union Act regulates the settings for their stay and residence in Estonia. Regarding third-country nationals, it is in the 2009 Aliens Act (Välismaalaste seadus) where the general provisions are set for regulating ‘the entry of aliens into Estonia, their temporary stay, residence and employment’\(^6\). The fact that the regulations dealing with these two groups are inherently

different, derives in dissimilar processes of access to the Estonian labour market. For example, it was often mentioned in interviews, how TCNs encounter far more complications than EU citizens during both the recruiting process and their time in Estonia.

Moreover, despite the fact that the main project for which the interviews were carried did not discriminated among EU nationals or non-EU nationals and the questions were open to the general topic of ‘highly-skilled migration to Estonia’, the focus on highly-skilled third-country nationals many times virtually monopolized the conversation during the interviews. As well, the interviewees acknowledged that EU citizens find Estonia less attractive, in comparison to TCNs. Thus, differences between EU and TCNs must be acknowledged, and they should be addressed by different policy elements and implemented measures.

As I could not do it from the secondary research, the respondents also could not identify an overall policy framework for the attraction of highly-skilled migrants. From the interviews it was understood – and at times mentioned – that there is a lack in Estonia of a ‘roof organization’ (katusorganisatsioon) or a body that would encompass (1) the whole ‘talent policy’ (talendipoliitika) and (2) represent the needs of the employers. An answer that reflects very well the state of affairs regarding the overall attraction policy of highly-skilled – including TCN’s – is the following: ‘There should be a talent management, but where is that roof, I don’t know’ (‘Talendijuhtimine peaks olema, aga kus see katus on, ei tea’). Ironically enough, this answer was given by the representative of Enterprise Estonia (EAS), one of the organizations that was most frequently cited by other respondents as the body that could take this management and coordination role.

A main reason for this lack of encompassing organization or management/coordination of the so-called ‘talent policy’ was found to be the animosity of the stakeholders to take such a responsibility. ‘Certainly there is a need for central management and good coordination system’ an analyst of the Centre for Policy Studies PRAXIS commented in regards to Estonia’s ‘talent policy’, and ‘unfortunately, little has been made in this regard’ she concluded (Oldermaa, 2014). The MFA and EAS were two bodies pointed out as possible coordinators, but who did not envisioned themselves as playing that role, and particularly indicating that it is not their duty nor responsibility to bear. Even local governments, (kohalik
omavalitsus) who were suggested to take a more active role in dissemination of information about the city and the services provided for highly-skilled, would not seem eager to do this because they fear to be blamed or to affect the interests of other actors in the labour market (Association of Estonian Cities).

Adding to the lack of comprehensiveness, is the lack of a concept for the highly-skilled in Estonia. It was duly noted that there is no universal definition regarding a highly-skilled migrant, although there are some underlying and internationally accepted notions regarding this concept. In the case of Estonia, although a specific definition of a ‘highly-skilled’ worker is not found in any strategic or legislative document, the Aliens Act makes a distinction for a number of occupations which can be catalogued as highly-skilled or skilled in accordance to international standards, particularly the ISCO-88 classifications (Levels 1 – 3). The professions and/or occupations that are treated as an exception to the regular employment residence permit since June 2011 – and do not require permission of the Unemployment Insurance Fund – are the following: ‘board member’, ‘expert/advisor/consultant’, ‘coach/referee’, ‘lecturer/teacher’, ‘researcher/scientific activity’ 7, ‘artistic activity’ and ‘religious professionals’. Stipulated in the legislation is the requirement of ‘professional training’, ‘experience’ or ‘preparation’ for the function to be performed by the TCN.

Furthermore, some particular measures are recognized, from both government and employers, in trying to promote highly-skilled TCNs migration to Estonia. In regards of the state, migration policies were identified to be the main channel for the Estonian government to achieve its objectives vis-à-vis migration, in this case, the attraction of the highly-skilled and the prevention of mass inflow of low skilled. The developments of 2013, which include legislation changes, measure implementation and increased attention in the topic of highly-skilled labour, suggest mainly an advancement and expedition in procedures related to the attraction of highly-skilled TCNs. In the interviews, the existing foreign representations of Estonia and the Ministry of Foreign Affairs (MFA) were also recognized as important part of the existing measures. A number of stakeholders currently use these representations to

7 For a more detailed account on the definition of ‘researcher’ in Estonia see Organisation of Research and Development Act § 8
share information regarding opportunities in Estonia abroad. However, the network is quite small and there are budget constraints (as voiced by the MFA representative) that limit the scope of their activities. The MFA representative stated that they are willing to provide more necessary assistance in cooperation with other stakeholders in attracting highly-skilled third-country nationals, but they would require very specific and accurate information regarding the events or consular activities they might need. Such informed and precise requests are very rare.

Regarding employers, most of them engage independently in the search and recruitment process of their foreign employees. Some of them use advertisements, while some of them use recruitment agencies, but virtually none of them make use of a particular tool provided by the state (with the occasional exception of the MFA). In addition, almost none of these companies communicate with the authorities or other stakeholders, except when it proves to be absolutely necessary (application process, legal issues, and specific questions). In fact, the measures are a very independent process from other stakeholders, and even one company (Playtech), has a full-time employee who not only deals with this process of recruitment, but also the foreigners’ adaptation during their initial time in Estonia. Employers often opt by these sort of independent solutions, which makes also makes evident the lack of a support system for highly-skilled third-country nationals. Hence, it is observed that many efforts in the attraction and recruiting of highly-skilled third-country nationals, are carried out independently, with certain degree of cooperation every so often.

When cooperation and communication between stakeholders do take place, the interviews made it clear that this cooperation is far from being optimal. For instance, a representative of an organization might have brought out some cooperation it had with another stakeholder, but in the interview with the other stakeholder, then there was no mention of cooperation between them. An illustrative example is the EUIF, whose representative mentioned there had been cooperation with almost all of the stakeholders interviewed, but which actually only three reciprocated with a similar comment during their interviews (PBGB, Chamber of Commerce and Industry and BLRT) when specifically asked about the subject. These divergences and mixed signals in the answers suggest that cooperation exists at some degree,
but that it is often not very significant or not very constant, and the lack of references in strategic documents supports this conclusion.

The amendments that took place in 2013 were greatly a result of debates and consultation between the government and stakeholders of highly-skilled migration (European Migration Network, 2013), as ‘client politics’ explains. In addition to the introduction of ‘top specialist’, other changes were introduced to the legislation that are now part of the policies and measure for attracting highly-qualified TCNs, which makes the ‘application for a permit [of employment] faster and simpler’ (Estonian Ministry of Foreign Affairs, 2013). It is now possible for a foreigner to fill a temporary position without the need of the three weeks public competition requirement and also for scientists and university teachers the process for short term employment can be ‘sped-up’ (Estonian Ministry of Foreign Affairs, 2013). This means that TCNs can now work on the same day the Police and Border Guard Board has been notified with the employment registration. As a manner to ‘oppose the mass introduction of low-skilled foreign workers’, the employer must pay the TCN the corresponding monthly wage to the annual average wage multiplied by the coefficient of 1.24.

In addition to the aforementioned changes, the 2013 amendments also make it now possible for TCNs that have successfully completed their higher education in Estonia at Bachelor, Master or Doctoral level to work without the EUIF permission nor filling the 1.24 salary threshold established for foreigners. Moreover, the students are also free to pursue employment while studying without the need of a residence permit for employment, as it was previously required. Additionally, students are now able to submit applications for a 6-month extension of their residence permit in order to search for employment. With this, Estonia demonstrates that it shares the general notion of categorizing international students as part of the highly-skilled migration phenomena. As it is a practice in a number of OECD countries, foreign students are valued because of two main reasons: ‘as sources of finance for educational institutions’ or as ‘new knowledge creators’ by becoming labour migrants (OECD, 2012, p. 64). In order to take advantage of the former, there must be a strategy for the attraction of international students; for the latter, they must be given a preferred access to the labour market once they have successfully finished their studies. This was already
envisioned from the year 2010 (European Migration Network, 2010, p. 13), but it was just until last year that these measures were taken in Estonia.

One other change concerns the introduction of the notion of ‘top specialist’, which is can be very well equated with the notion of a highly skilled migrant. A ‘top specialist’ is ‘an alien who has acquired appropriate professional training in any field to whom an employer registered in Estonia undertakes to pay remuneration for professional work in the amount at least equal to the annual average gross monthly salary in Estonia […] multiplied by a coefficient of 2’.\(^8\)\(^9\) As for the these changes to the legislation, the vast majority of interviewees agreed that it would most likely ‘make things easier’, but none of them would venture to say it would actually a positive impact in attracting more highly-skilled third-country nationals, given the fact that most of the interviews were carried on a few months after the 2013 amendments were introduced.

Moreover, the EU has also had an impact in regards to migration legislation in Estonia and the definition of a highly-skilled migrant, since the EU Blue Card directive required the introduction of at least two particular notions. The concepts of ‘higher qualification employment’\(^10\) and of ‘higher professional qualification’\(^11\) were introduced to Estonian legislation, and, in nature, these are exactly the same notions phrased in Article 2 of the EU Blue Card Directive\(^12\). This directive had as main objective to ‘improve the EU’s ability to attract highly-qualified workers from third countries’ and was designed to facilitate the admission of TCNs by ‘harmonising entry and residence conditions’ and simplified admission procedures (European Migration Network, 2013). The impact of this Directive in the EU is yet to be thoroughly assessed, although Estonia is one of the countries in which it has had little usage in comparison to national HSM schemes (Asari, 2014).

\(^8\) Aliens Act §106 (3).
\(^9\) In the 4th quarter of 2013, the average gross monthly salary was 986 EUR. For more detailed information see: Statistics Estonia. (2014, February 27). In the 4th quarter the growth of the average monthly gross wages and salaries slightly decelerated. Retrieved from Statistics Estonia: www.stat.ee/72409
\(^10\) Aliens Act §190
\(^11\) Aliens Act §190\(^*\) (1)
Furthermore, one of the most active actors in the topic of highly skilled migration, through the internationalization of higher education, is the Estonian Ministry of Education and Research. Mainly in cooperation with Estonian institutions of higher education and the Archimedes foundation, the Ministry of Education and Research promotes the attraction of highly-skilled and has more structured vision, reflected in strategic documents produced by this ministry. In the *Estonian Higher Education Strategy 2006-2015* it is pointed out that the availability of study programs does not correspond to the actual needs of the labor market, as well as an ‘insufficient’ international cooperation and academic mobility as main problems (Estonian Ministry of Education and Research, 2006). One of the strategic objectives brought forward in this document, is the need to bring ‘highly qualified specialists’ and to substantially increase the number of international students in higher institutions in Estonia. Similarly, the *Estonian Research, Development and Innovation Strategy 2007-2013* (2007) also touches upon these issues.

As well, in 2007 the Ministry of Education and Research also produced a strategic sub-document, the *Estonian Higher Education Internationalization Strategy 2006-2015*, as a more direct and explicit prioritization of the interest in attracting students and persons with tertiary education – i.e. foreign talents. Here, it is mentioned that the immigration policy at the time needed to provide for more and easier opportunities to foreigners to ‘study and work at higher institutions in Estonia’. In addition to this, the strategic document states that ‘the high percentage of foreign students in our student body will become an indicator and guarantee of the quality and competitiveness of the education offered in Estonia’. As it is observed, the current Higher Education Strategy in Estonia provides some insights of the country’s policy for attracting highly-skilled third-country nationals.

As both the documents and interview analysis evidenced, it is at this level where the most institutionalized cooperation is found. For recruiting and attracting international students to Estonian higher education institutions (e.g. Tartu University, Tallinn Technical University, Tallinn University, Estonian University of Life Sciences), there is an active process of marketing of Estonia, travelling to fairs and other events and disseminating information about the study programs in close cooperation with related agencies (e.g. Archimedes Foundation,
EURAXESS). They have identified a specific target countries on which they focus their efforts, and they try to have an active presence in those countries by participating in university fairs and similar events abroad. As Estonia is very small, and there is not much knowledge about it overseas, the universities decided to cooperate in bringing international students to Estonia, instead of competing among themselves\textsuperscript{13}. The portal ‘Study in Estonia’ is the result of this cooperation, which can be seen as a success compared to other aspects of the policy and the lack of cooperation between other organizations.

The Ministry of Economic Affairs and Communications, in its recent Estonian Entrepreneurship Growth Strategy 2014-2020, also sets as one of its actions to manage an effective talent policy that would facilitate ‘finding and recruiting talent’. Here, specific reference to cooperation with the Ministry of Interior is mentioned. Likewise, the state-run institution Arengufond presented in a report to the Estonian Parliament that global competition for talent is one of six megatrends that would have great impact in Estonia’s future. These documents, however, fall short on presenting specific measures, although they serve to highlight that the topic has been introduced into the political and economic agenda.

Lastly, an important element of Estonia’s policy is the establishment of an immigration quota in the Aliens Act, which ‘shall not exceed 0,1 percent of the permanent population of Estonia annually’\textsuperscript{14}. In general, the mentioned groups of third-country nationals that are considered to be highly-skilled fall under this quota, including also the EU Blue Card holders and ‘top specialists’. Regarding highly skilled third-country nationals, only the ones that come under the purposes of studies and research activity are exempt from the quota, as well as individuals staying in Estonia for purposes of Employment after having completed their studies at an Estonian institution of higher education. This immigration quota then limits the number of highly-skilled third-country nationals on a yearly basis, and operates independently from the labour demand forecasts, which then could be viewed as a main conservative element of Estonia’s immigration policy.

\textsuperscript{13} The fact that their study programs are quite different from one another and they do not directly compete for the same persons has also helped in this regard.

\textsuperscript{14} Aliens Act §113. Citizens from Japan and the US are not included in the quota.
2.3.2 – International differences in earnings and development gaps

From these practices and procedures one can also start concluding on how the current policies in Estonia address the theoretical forces driving the specific phenomenon of highly-skilled migration of TCN’s – and how they do not. The first and – according to neoclassical economics theory – most important determinant is the international differences in earnings and development gaps, which is somewhat taken into account. From the respondents’ answers, it is understood that Estonia does not offers very competitive salaries in comparison to Nordic or many West-European countries and that this fact in itself is an obstacle for recruiting. So with this in mind, a few policies for attraction have been put in practice. It was mentioned by the MFA representative that, given the fact that Estonian competitiveness is not as strong as in other ‘bigger’ and ‘richer’ countries, Estonia must make priorities for the countries where it can compete and labour markets that are closer. This is why there is a growing presence of Estonian foreign representations in Asia (as part of a strategy in this area), from where more people come because the salaries are more competitive than in those countries. In regards of international students, the strategy has a focus on countries like Russia, Ukraine, Turkey, and China, where little by little the reputation of Estonia has been growing. In short, the strategies focus more at attracting highly-skilled TCN’s in those countries where international differences in earnings and development gaps play for Estonia’s advantage.

As well, the wage requirement established for the highly-skilled15 may be understood as an assurance for the potential employee that he will receive a competitive salary if offered employment in Estonia, thus addressing the first determinant regarding differences in earnings. Nevertheless, this wage is more a safety mechanism to avoid the influx of cheap labor, and the lack of tax incentives or other of such kind, make it clear that the determinant in question is somewhat addressed.

15 The multiplier coefficient differs among qualified individuals. For the specific categories mentioned on the first part of the analysis (including EU Blue Card holders in these categories) it is 1.24. For EU Blue Card holders in general is 1.5. For top specialists, the coefficient is 2. See Aliens Act for further information.
2.3.3 – Non-pecuniary motivations
But as the theoretical discussion suggests, there are also non-pecuniary factors to take into account together with the pecuniary ones. From the document analysis, it seems that current legislation attempts to address some of these factors. Highly-skilled third-country nationals (i.e. the occupations and professions marked as exemptions in the Aliens Act) hold a right to take along their immediate family, without the requirement of living with the spouse for at least two years before applying to them. Additionally, it is important to note that TCNs arriving for these purposes of family reunification do not fall under the immigration quota. These measures aim at positively influencing the decision of a TCNs to come to Estonia, given that family ties are of utmost importance.

Integration to society is also an important aspect to consider, and in this regards, the Aliens Act includes a section stating that the PBGB can send TCNs to an adaptation programme upon grant or extension of a residence permit\textsuperscript{16}. However, the implementation of this clause will only happen after the adaptation programme is fully developed (European Migration Network, 2013). The pilot program, launched in 2009 by the Integration and Migration Foundation Our People (MISA) should be composed of the most basic information regarding Estonia, its society, its culture and the practicalities needed to living in Estonia in order to help the newly arrived migrant better and quicker adapt to Estonian life (Integration and Migration Foundation Our People, Estonian Ministry of Culture, 2014). Given that the program is not fully developed and the clause on the Aliens Act is not enforced, the integration of highly-skilled third-country nationals falls under the responsibility of the employer, imposing an extra burden on the employer’s responsibility. This lack of development in the offer of opportunities for integration was also reflected in the respondents’ answers, where it was revealed that most of the TCNs hired did not attend these courses.

In a study related to integration and newly arrived immigrants in Estonia, integration difficulties were pointed out as main limitations to the foreigners’ adaptation to society. The lack of Estonian language knowledge and the lack of cultural knowledge from part of the immigrants, particularly those from completely different settings, such as Asia or Africa,

\textsuperscript{16} Aliens Act §121
were mentioned as key problems (Kriger & Tammaru, 2011). Although these problems might be more accentuated with family migration or low-skilled migrants, it is not limited to these groups and they could also have a negative impact in the attraction potential of Estonia towards highly-skilled migrants, or create adverse conditions for the ones already here, such as isolation. Thus, embedding such opportunities as integration and knowledge of Estonian must be part of the policies and measures for attracting highly-skilled third-country nationals.

Also pertaining to these non-pecuniary motivators is the availability and access to information. In the opinion of some stakeholders (mainly from the government side: PBGB, MFA) the information for TCN’s highly-skilled migrants is available, and accessible in at least Estonian, English and Russian. For some others (mainly employers), the information available is many times only in one language, and if in English, it is not understandable and difficult to find. Despite these competing point of views regarding the current practices, both sides acknowledged that this non-pecuniary element (i.e. availability and access to information) is of outmost importance and needs to be addressed by the attraction policy of highly-skilled TCN’s, if Estonia wants to be successful at achieving its goals in this subject. A recent study on integration in Estonia focused on the experience of third-country nationals also highlighted this lack of information as a wide problem experienced by immigrants (Uus & Kaldur, 2013). It was concluded by the analysis, that generally, the information is indeed available, but it lacks a centralized platform that could act as a hub, as well as it is very difficult to understand.

Moreover, while there was a broad acknowledgement by employers and other stakeholders that some main reasons for foreigners to come and work in Estonia is because it is exotic and because the quiet, safety, simple and nature-friendly way of life, there was no mention of particular practices or measures for attraction that would emphasize or use these non-pecuniary features as a tool. Furthermore, a more concrete example is the fact that representatives, from both private and government institutions, stated that a benefit of the compact Estonian labour market is the possibility of building a career in quite a short period of time. For young people, this could be a very attractive tool for recruiting, but despite the constant reference to this element, it was not used as means to attract third-country national
highly-skilled individuals. From the secondary research and the interview analysis, it is then visible that the non-pecuniary elements seemed not to be very well addressed. Although these non-monetary elements could work for the benefit of Estonia considering its labour market size and the small competitiveness of its salaries, they seemed to be only partially addressed by current policies.

2.3.4 – Demand for talent, capital & technology
Neoclassical economics, in its macro approach, assumes that labour markets are the primary mechanisms influencing international migration, and that the way for the government to affect migration flows, is by means of influencing the labour market. This is well understood – and addressed – by the current policies and measures. As the secondary research shows, the demand for highly-skilled workforce by the labour market (as stated in the two principal notions of Estonia’s immigration policy) have triggered – or at least have been used as justification for – the measures by the government to facilitate the entry of a highly-skilled migrant, particularly TCNs. By mentioning ‘companies’ and ‘workforce’, the government is tacitly presenting a justification to the goal of bringing highly-skilled labor from abroad. It is acknowledging the need of highly-skilled workers by companies in Estonia, and thus, it turns labour demands for highly-skilled workforce into the main driver of policies and measures aimed at achieving this goal. Additionally, these migration policy notions were integrated as government actions into the ‘labour market’ policy area, which also suggests the Estonian government shares the understandings of neoclassical economics.

The Estonian labour market is currently experiencing labour shortages in certain sectors, and a number of different actors – private, public and from the third-sector – have expressed this as a growing source of concern, noting that highly-skilled migration could help in the short term to alleviate these issues. This has been particularly the case of stakeholders in the IT industry, one of the major axis of the country’s development as an ‘e-country’ and a ‘knowledge economy’. The American Chamber of Commerce Estonia considers ‘talent attraction and retention as a pillar of Estonian national competitiveness’ (AmCham, 2013). Companies such as Skype and Playtech are well known for advocating ease of access of TCNs to the labour market, given their lack of highly-skilled technical manpower. Remarks
of this kind, associated with the shortages of the IT-sector, were made by several stakeholders during the interviews, although there were no particular measures focusing on the attraction of these individuals. This might be related to the fact that the development in the IT industry moves so rapidly, that it becomes very difficult to make long-term predictions (Institute of Baltic Studies, 2012, p. 27).

Already in 2008 there was an increased demand for foreign labor due to the growth of the economy, the decline of unemployment, a negative population growth and negative emigration trends, among other factors (European Migration Network, 2010). That same year, a series of measures were implemented in order to help satisfy this demand for foreign labour, such as the increase of the immigration quota from 0.05% to 0.1% of the total population and faster processing of employment applications. Hence, the new developments favoring the attraction of highly-skilled migrants in 2013 might as well be another responsive measure to the adverse conditions of the labour market.

The Ministry of Economic Affairs and Communications has forecasted that by 2016 there will be a need to fill 11,500 jobs every year and the Bank of Estonia has also projected that there will be a need in forthcoming years of specialists and highly-skilled individuals to fill these thousands of jobs (European Migration Network, 2010). According to the most recent forecasts, during the period 2011-2020 the Estonian economy will experience an occupational structural change where the employment for specialists will grow more than any other occupations. This will create a need of over 1,000 specialist every year, and Estonia’s educational system seems not to be producing them as quickly as the labour market needs them (Ministry of Economic Affairs and Communications, 2013). Moreover, these forecasts have been criticized for not producing a more detailed account of the type of specialists or the specific sectors in which they are needed. In the interviews, there was a consensus among the respondents regarding the need of foreign workforce, but concern was raised regarding a more detailed labour market projections and a better understanding of labour needs. In addition to this, employers in Estonia many times do not hold long-term views regarding estimations of future labour demand (Institute of Baltic Studies, 2012). This renders a problem, which is that the labour shortage is not, at a deeper level, specifically well
established, being founded on very general data and facts. If the labour shortage problem is poorly founded or not clear enough, it could explain that the actions responding to this problem will also lack a clear and complete framework in the stage of policy implementation.

Furthermore, the demographic indicators in Estonia only impose more challenges in meeting these labour demands, compelling the government to use immigration as a tool to overcome this obstacles for economic development. On the one hand, the natural population growth has been largely negative, being -1,643 in 2013 (Vabariigi Valitsus, 2014) while the population is also aging, which means more people leaving the labour market for retirement. On the other hand, it has been forecasted that the outflow of workers would be greater than the inflow of workers to the labor market by the year 2016 (Estonian Ministry of Economic Affairs and Communications, 2013). This continuously decreasing trend of the Estonian population translates into less workers entering the labour market. Additionally, net migration not only continues to be negative, but it has also reached its higher maximum over the past few years, as emigration exceeded immigration by over 6,000 in 2013 (compared to merely 735 in 2008) (Kallas, Ortega, Kaldur, & Pohla, 2014). Of these Estonian emigrants, an increasing part of them are young and highly-skilled (Berjer & Wolf, 2011, p. 2).

However, it is important to mention that the importing of highly-skilled labour is not used by the government as a tool to offset or counter these demographic challenges. The government has been clear in one thing, is in using immigration as ‘a political measure for filling the gap of certain skills’ rather than ‘being a solution for demographic changes’ (European Migration Network, 2010). Immigration needs to be part of the solution to tackle the democratic challenges ahead (Horgby & Nordlund, 2013). From this, it can be concluded that the ultimate goal is to meet the demands of the labour market, and that immigration is seen as a politically viable option for achieving this objective. This is consistent with the theory, which states that highly-skilled migration is seen by the government as an option because of the greater benefits and fewer difficulties associated with it.

Furthermore, Estonia’s overall approach for the attraction of highly-skilled migrants is based on the ‘employer-led’ system. This system, which requires the employer to choose the potential employee and subsequently make a job offer, purportedly has the flexibility of
identifying the shortages of labour quickly by the companies themselves (i.e. the labour market). Then, it allows them to engage promptly in the recruiting process, allegedly made easier by the new amendments. This is also consistent with the macroeconomic assumptions of neoclassical theory, in which the labour market itself is identifying its own labour shortages and then filling them adequately, with the state playing a mere role as facilitator. But the ‘employer-led’ system also has its shortcomings, which were voiced during the interviews. On one hand, government institutions emphasized this approach, saying that if that if companies are the ones looking for highly-skilled specialists, it should be them making the greater effort. On the other hand, the employers (which already have the greater responsibility) expressed the need for more support from the government and its institutions. To find this balance of tasks, has proven to be complicated so far.

In addition, the ‘employer-led’ process for hiring a highly-skilled third-country national has certain ‘safety mechanisms’ in place to make sure that the domestic labour market is actually failing to provide the company with the adequate workforce. Generally, if an employer decides to hire a third-country national, the first step is to make a public competition for at least three weeks. After this, the requirement is to get permission from the Estonian Unemployment Insurance Fund (UIF), which by means of a ‘labour-market test’, would confirm that it is ‘impossible to fill the vacant position by employing an Estonian citizen or a citizen of the European Union or an alien residing in Estonia on the basis of a residence permit[…]’17. In other words, the hiring of highly-skilled specialists is understood, as by law, to be the only the last resort for filling labour shortages, when all other options have been exhausted.

2.3.5 – Networks: Professional & Sociocultural
As explained before, this determinant consists of two elements: professional and sociocultural networks. The first element is in a way embedded in the two points identified as the basis of Estonia’s highly-skilled attraction policy. The purposed activity of ‘establishing research and excellent centres in Estonia’ with the support of bringing foreign students and top specialists, reflects the very notion of the Agglomeration and concentration

17 Aliens Act §177 (1)
effects that Solimano suggested. The addressing of these professional networks can be better appreciated by the efforts put forward in the Estonian Higher Education Strategy 2006-2015.

According to EHIS (Estonian Education Information System), by the academic year 2013/2014 over 3500 international students were in Estonia\(^\text{18}\), when the goal was established to be 2000 by 2015\(^\text{19}\). This success has been greatly due to growing networks: with the growing exchange of international students between Estonia and different third countries, a familiarization process is built and more students feel curious about coming to Estonia. Additionally, several practices were noted during the interviews in trying to achieve the intended goals. The portal ‘Study in Estonia’ is a particular practice regarding the attraction of highly-skilled through an online platform. Services like Google Ads, social media and other type of online advertisements are used by universities to promote particular study programs in Estonian institutions of higher education, and, at a lesser extent, by employers to promote job vacancies. Nonetheless, it is the networks created with the exchange of international student the responsible for a great deal of success.

EURAXESS is another example of how this professional networks element can be address in order to attract highly-skilled, including TCNs. The existence of talented specialists in Estonia, recognized research environment and related development activities have helped bring other talents to Estonia, and EURAXESS helps in multiplying these opportunities. For lecturers and teachers of the university, there seems to be no better way of looking for foreign talents than within the existing personal networks or scientific circles in which current employees move. Similarly, the use of EURES as a network for offering jobs and recruiting personnel from abroad is a preferred mechanism by employers, and additionally, there is a consensus that networks play an important role in recruiting HSM (Turu-Uuringute AS, 2011). In general, there was a consensus among the interviewees that the best recruiting tool was that of personal networks and contacts.

\(^{18}\) ‘Level of Education of Foreign Student in Higher Educations Institutions in Estonia 2005-2013’ [Eesti Hariduse Infosüsteem (EHIS), koostanud: Raul Ranne, SA Archimedes, raul.ranne@archimedes.ee, andmed enne 2013. aastat Mariann Lugus, mariann.lugus@ttu.ee.]

As for the second element, sociocultural networks, it seems to be also addressed by some existing practices, although they are not very much institutionalized. Examples of this are doctors brought in from Russia, Ukraine, Belarus and Moldova to Ida Virumaa region, where the knowledge of Russian allows the foreign medics to practice in Estonia. Moreover, the universities also target Finnish students, for which Estonian language share common features with their own. Latvians and Lithuanians, although not sharing common features in regards to language, they do share a common past and cultural affinities with Estonians, which are used to attract them. Granting these cases are not from TCN’s, it is worth mentioning them as examples of how these compatibility and affinity determinants are being addressed by the some existing policies.

In spite of the large acknowledgement of the role networks play in attracting HSM, specific measures are used independently by employers and other stakeholders, even when they are the same tools. With the exception of EURAXESS and ‘Study in Estonia’ web portal, there use of networks seems to be poorly institutionalized and is a determinant more on its own than as a conscious tool or measure towards the attraction of highly-skilled.

2.3.6 – Summary on the analysis of highly-skilled migration
From the analysis above, it can be observed that the policy for attracting highly-skilled third-country nationals in Estonia does not addresses all of the determinants of ‘talent mobility’. The emphasis on the needs of the labour market address the demand for talent, capital & technology determinant, but this seems not to be as thoroughly documented, as a number of interviewees suggested. Although widely acknowledged, the technology element is not very much taken into account for specific mechanisms aimed at this particular and valuable group. The international differences in earnings and development gaps is also widely acknowledged by the interviewees, but only the MFA and the Ministry of Education and Research seem to actually focus in it. Although the high wage limit might also try to address this determinant, the lack of fiscal incentives for highly-skilled make this wage more of a safety mechanism to avoid the influx of cheap labor.

Additionally, non-pecuniary motivations were also attributed overall importance by the respondents, who emphasized the provision of different services not only for the talents
themselves, but also to their families, nevertheless, this point is poorly addressed by the current measures and immigration policies. The professional and sociocultural networks are largely acknowledged as playing a key role in the attraction of HSM, but they seem only to be only institutionalized and embedded into measures used by higher-education institutions.

The document analysis showed that it is mainly through legislation policies how the state attempts to influence, while the interviewees confirmed that these policy regimes and immigration policies have an important impact on the decision of highly-skilled immigrants to come to Estonia. This also confirmed the relevance of the research design established for this work, since the stakeholders expressed – tacitly or explicitly – the need for both ‘policy regime and immigration policies’ to take into account all other determinants in order to achieve the goal of attracting highly-skilled third-country nationals. To make the last point more clear, although there were many discrepancies between the answers of the stakeholders and mixed responses for same questions, the determinants of talent mobility were always identifiable as a constant in the comments of the participants.

2.4 – Analysis on TCNs data by residence permits.
This third analysis section serves to present a thorough empirical picture of migration flows, as well as to identify any patterns that might be consistent with the above explained policies and determinants. Positive decisions for TCNs in the work, studies, business and family reunification categories during the years 2008-2013 were analyzed\textsuperscript{20}. A total number of 15,577 (approx. 2,580 per year) residence permits were issued during the 2008-2013 period to TCNs (Figure 2). According to the data, the main reason for immigration to Estonia among TCNs is family reunification. In second position, are individuals arriving under the purposes of work, while persons arriving under the purposes of studies are the third reason. Residence permits for the purpose of business had the smallest share. Majority of residence permits were issued to men (ca 60%), and this was stable across years. In regards to age, most residence permits were issued to young adults (25-29 years for men; 20-24 for women).

\textsuperscript{20} Data from Police and Border Guard Board. Individuals issued residence permits under international agreement and individuals with undefined citizenship are not included in these figures, since a large number of them are individuals living in Estonia for a long time, but which have not acquired citizenship. Thus, they do not represent migration.
From non-EU countries, Russia maintains the first place of immigration to Estonia, with over 40% (6,315) of the temporary residence permit issued to its nationals during the studied period (Table 1). Ukraine occupied the second place, with just under 24% (3,699). Together, Russia and Ukraine are accountable for over 60% of the immigrant population from third-country nationals to Estonia. In third place, with just under 1,000 residence permits issued, is the US. Moreover, from Table 1 it can be seen that there is no uniform or main reason among the Top 10 countries for coming to Estonia. Russian, Belarussian, Israeli and Armenian citizens migrate to Estonia mainly for family reunification purposes. In contrast, Ukrainians, Americans and Indians mostly move for the purposes of employment. China, Turkey and Georgia come mainly for study purposes. From these irregular patterns, it can only be seen clearly that international differences in earnings and development gaps play an important role, since Estonia can be considered as more developed than these top-10 countries (with the exception of the US).
### Table 4. Top 10 immigration countries of origin to Estonia 2008-2013

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Family Reunification</th>
<th>Work</th>
<th>Studies</th>
<th>Business</th>
<th>Country Total</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>Count</td>
<td>%</td>
<td>Count</td>
<td>%</td>
<td>Count</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>Russia</td>
<td>3882</td>
<td>61</td>
<td>1561</td>
<td>25</td>
<td>506</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Ukraine</td>
<td>853</td>
<td>23</td>
<td>2613</td>
<td>71</td>
<td>183</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>USA</td>
<td>242</td>
<td>25</td>
<td>493</td>
<td>50</td>
<td>238</td>
<td>24</td>
</tr>
<tr>
<td>4</td>
<td>China</td>
<td>45</td>
<td>7</td>
<td>261</td>
<td>42</td>
<td>322</td>
<td>51</td>
</tr>
<tr>
<td>5</td>
<td>Turkey</td>
<td>68</td>
<td>14</td>
<td>49</td>
<td>10</td>
<td>377</td>
<td>76</td>
</tr>
<tr>
<td>6</td>
<td>Belarus</td>
<td>243</td>
<td>51</td>
<td>162</td>
<td>34</td>
<td>56</td>
<td>12</td>
</tr>
<tr>
<td>7</td>
<td>Georgia</td>
<td>86</td>
<td>20</td>
<td>101</td>
<td>23</td>
<td>243</td>
<td>57</td>
</tr>
<tr>
<td>8</td>
<td>India</td>
<td>61</td>
<td>24</td>
<td>122</td>
<td>48</td>
<td>71</td>
<td>28</td>
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<tr>
<td>9</td>
<td>Israel</td>
<td>86</td>
<td>52</td>
<td>72</td>
<td>43</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>Armenia</td>
<td>82</td>
<td>58</td>
<td>33</td>
<td>23</td>
<td>26</td>
<td>18</td>
</tr>
</tbody>
</table>

An analysis on the specific ‘work’ category was carried out, in order to have a closer look at the composition of immigrants that are coming to Estonia and see what can they tell regarding the match between the determinants of ‘talent mobility’ and the attraction policy of highly-skilled TCN’s in Estonia being pursued by the government. During the 2008-2013 period, a total of 6006 residence permits were issued to third-country nationals for the purpose of work, from which the vast majority were issued to men (80%).

The data allows to classify work-related migration into the following six categories: ‘higher education’, ‘high-school’, ‘vocational’, ‘secondary’, ‘other’, or ‘not mentioned’. Unfortunately, this data is not the most optimal since it might be too general at grouping people with different degrees of education into a single category. For instance, an individual holding a Bachelor’s degree and an individual holding a PhD will both be allocated to the ‘higher-education’ category, despite the obvious difference in educational attainment. Nonetheless, the available data allows to have a more detailed look at the composition of work-related immigrants coming to Estonia, allowing also to bring up some conclusions of the type of migrant is coming to Estonia for the purposes of work.
As it can be observed in Table 2, the number of migrant workers arriving to Estonia does not shows a very consistent trend over the last six years, since it has been increasing and decreasing each year, with the notable exception of 2011, where a peak of 1,415 residence permits were issued for the purpose of work. Despite this inconsistencies, a relative stability remains throughout the 2008-2013 period.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Higher Education</th>
<th>High-School</th>
<th>Vocational</th>
<th>Secondary</th>
<th>Other</th>
<th>NM</th>
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<tbody>
<tr>
<td>2008</td>
<td>908</td>
<td>308</td>
<td>176</td>
<td>398</td>
<td>12</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>2009</td>
<td>1061</td>
<td>405</td>
<td>198</td>
<td>434</td>
<td>11</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>2010</td>
<td>937</td>
<td>575</td>
<td>126</td>
<td>204</td>
<td>12</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td>2011</td>
<td>1415</td>
<td>715</td>
<td>144</td>
<td>533</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>2012</td>
<td>828</td>
<td>375</td>
<td>76</td>
<td>356</td>
<td>13</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>2013</td>
<td>857</td>
<td>375</td>
<td>110</td>
<td>356</td>
<td>11</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>6006</td>
<td>2753</td>
<td>830</td>
<td>2281</td>
<td>61</td>
<td>54</td>
<td>27</td>
</tr>
</tbody>
</table>

It is observed that the largest group is comprised by people with higher-education (45.8%). The second largest group is composed by people with vocational education (37.9%), while persons with high-school education comprise the third largest group (13.8%). Moreover, at the beginning of the period individuals with vocational education had a largest share, but this changed in 2010, when the share of individuals with higher education exceeded the number of individuals with vocational education. This composition shift would be consistent with one of the notions on which Estonia’s immigration policy is based, which is bringing highly-skilled immigrants (i.e. selectivity notion of highly-skilled migration).

However, in absolute numbers, the total number of persons with higher-education levels (2,753 or 45.8%) is actually smaller than the total number of persons with lower levels of education (3,172 or 52.8%) over the period studied, not including the individuals registered

21 ‘High-school’ refers to ‘keskharidus’ and ‘kesk-eri’ terms used by PBGB. ‘Vocational’ refers to ‘kutseharidus’
with ‘other/not mentioned’ levels of education (which would amount to 3,253 or 54.2%). Only in the years 2010 and 2011 was the share of highly educated immigrants larger than the sum of other individuals with lower levels of education. On the one hand, it is seen that in more recent years, highly-skilled migration has had an increased share among work-related migration, which also is consistent with the aims of the government. On the other hand, middle and low-skilled workers continue to be the majority of workers. These irregular patterns make it difficult to draw some solid conclusions on this subject.

To verify if the general tendencies were reflected by individual countries, data on levels of education was analyzed separately for the Top 10 countries under the category of work, which together account for 91.2% of all issued residence permits for working purposes during the 2008-2013 period. What this analysis by country showed, is that the overall tendencies are not reflected by the individual country cases. In fact, it is actually the opposite. The overall data shows that highly-skilled migrants represent less than 50% of the individuals granted a residence permit for work. Contrary to this tendency, almost all of these Top 10 countries (Russia, USA, China, Belarus, India, Israel, Turkey and Brazil) actually have a share of more than 50% of highly educated migrants (Table 3), well in line with the government strategy of selectivity of highly-skilled migrants. Nevertheless, the particular case of Ukraine represents a critical contrast, and actually is the one pulling the overall trend, since is the country that most contributes (43.5%) to the migrant labour force. In this regard, it is mostly individuals holding vocational education levels (68.1%) arriving from Ukraine.

<p>| Table 6. Temporary residence permits by country and level of education, work category 2008-2013 |
|------------------------------------------|----------|----------|----------|----------|----------|----------|----------|</p>
<table>
<thead>
<tr>
<th>Country</th>
<th>High Edu</th>
<th>High School</th>
<th>Vocational</th>
<th>Secondary</th>
<th>Other/NM</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>%</td>
<td>Count</td>
<td>%</td>
<td>Count</td>
<td>%</td>
<td>Count</td>
</tr>
<tr>
<td>Ukraine</td>
<td>459</td>
<td>17.57</td>
<td>344</td>
<td>13.16</td>
<td>1781</td>
<td>68.16</td>
</tr>
<tr>
<td>Russia</td>
<td>1224</td>
<td>78.41</td>
<td>95</td>
<td>6.09</td>
<td>194</td>
<td>12.43</td>
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<td>165</td>
<td>33.47</td>
<td>17</td>
<td>3.45</td>
</tr>
<tr>
<td>China</td>
<td>139</td>
<td>53.26</td>
<td>18</td>
<td>6.90</td>
<td>104</td>
<td>39.85</td>
</tr>
<tr>
<td>Belarus</td>
<td>103</td>
<td>63.58</td>
<td>20</td>
<td>12.35</td>
<td>34</td>
<td>20.99</td>
</tr>
<tr>
<td>Country</td>
<td>Value</td>
<td>52.46</td>
<td>23</td>
<td>18.85</td>
<td>21</td>
<td>17.21</td>
</tr>
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<td>-------</td>
<td>------</td>
<td>-------</td>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>India</td>
<td>64</td>
<td>52.46</td>
<td>23</td>
<td>18.85</td>
<td>21</td>
<td>17.21</td>
</tr>
<tr>
<td>Georgia</td>
<td>45</td>
<td>44.55</td>
<td>29</td>
<td>28.71</td>
<td>18</td>
<td>17.82</td>
</tr>
<tr>
<td>Israel</td>
<td>47</td>
<td>65.28</td>
<td>13</td>
<td>18.06</td>
<td>10</td>
<td>13.89</td>
</tr>
<tr>
<td>Turkey</td>
<td>33</td>
<td>67.35</td>
<td>11</td>
<td>22.45</td>
<td>4</td>
<td>8.16</td>
</tr>
<tr>
<td>Brazil</td>
<td>25</td>
<td>55.56</td>
<td>16</td>
<td>35.56</td>
<td>2</td>
<td>4.44</td>
</tr>
<tr>
<td>Subtotal</td>
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<td>734</td>
<td>13.40</td>
<td>2185</td>
<td>39.88</td>
</tr>
<tr>
<td>Other</td>
<td>309</td>
<td>58.63</td>
<td>96</td>
<td>18.22</td>
<td>96</td>
<td>18.22</td>
</tr>
<tr>
<td>Total</td>
<td>2753</td>
<td>45.84</td>
<td>830</td>
<td>13.82</td>
<td>2281</td>
<td>37.98</td>
</tr>
</tbody>
</table>

Georgian nationals, despite not surpassing the 50% barrier of highly-skilled migrants, were very close to this limit, and as all other countries, it maintained highly-skilled migrants as their largest share.

An analysis was also carried on the category of work the migrants perform in Estonia. Unfortunately, as with the statistics regarding education, the information available on the type of work permit the migrants are issued can be too general. It is only known the type of work permit the applicant will be given, but no particular or detailed information in regards of the specific job or position he or she will be performing is collected. During the six year period, residence permits for work were given under the total of 16 different categories. Figure 4 shows the nine categories under which were issued over 100 residence permits, which represents the main nine professions that TCNs occupy in Estonia. The remaining seven categories were grouped under ‘others’, which together represent about 1% of the total types of work permits issued. Two of these categories, ‘specialist’ and ‘higher education acquired in Estonia’, were just recently introduced in the year 2013 to the legislation, thus explaining the small number of work permits issued under them. The EU Blue Card has been also recently introduced (mid-2011), although it has already been criticized for not having the expected effect on attraction of highly-skilled migrants.

About one-third of the residence permits for work purposes were issued to board members or individuals that would be performing supervisory or directing functions of a legal entity in Estonia (Figure 3). A quarter of the residence permits under were given for ‘regular
employment’, which means any employment that does not belong to any of the other specified categories. The third largest share, 20% of the total work permits, was issued for posted workers, which is defined as ‘natural person who usually works in a foreign country on the basis of an employment contract, and whom the employer has posted to work in Estonia for a certain period, in the framework of the provision of services’\textsuperscript{22}. Remarkably, individuals to perform as ‘experts’ or similar jobs were issued almost as much work residence permits as individuals performing as ‘clergy members’ or ‘ministers of religion’, making the latter be at a noteworthy 5\textsuperscript{th} position, considering the large share of people in Estonia with no religious affiliation.

![Pie chart showing the distribution of work permits by type]

**Figure 3. Issued temporary residence permits by type of work category, 2008-2013**

As it has most likely been noticed by the reader, the schemes specifically designed to attract highly-skilled migrants are not displayed in Figure 4 because of their scarce numbers, a reason being their recent introduction, as already explained. Nonetheless, it is interesting to note that these highly-skilled migration scheme together account for less than 1% of the total residence permits under the basis of work, and can provide some insights of how challenging

\textsuperscript{22} Working Conditions of Employees Posted to Estonia Act §3 (1)
it will most likely be to bring a significant amount of highly-skilled migrants to Estonia in the recent future through these schemes.

Despite the lack of specific schemes for the highly-skilled in the years prior to 2013, near to half of the work residence permits were issued to individuals with levels of higher education. Slightly over 50% (1,395) of these individuals with higher education were granted residence permits to perform as board members. The second work category with most highly-educated was the regular work permit, with 12.5% (345). In third position, the category of ‘expert’ is found, with 266 (9.6%).

Unsurprisingly, those categories that by definition require higher education evidently hold very high percentages of highly educated migrants. The clearest examples are those categories of ‘researcher/scientific activity’ and ‘teacher/lecturer’, which are virtually composed only by individuals with higher education. The same goes for the ‘EU Blue Card’, ‘Specialist’ and ‘higher education acquired in Estonia’, for which higher-education is a requirement. Furthermore, highly educated migrants composed 84.4% of the ‘experts’ category and 70% of the ‘board member’ category. Less expected than these results, were the higher shares of highly educated among the ‘sports’, ‘artistic’ and ‘clergy’ categories, ranging from 35% to 57%.

As it is observed in Table 4, the type of work residence permit varies also on a country by country basis. While half of the Top 10 countries under the reason for work - Russia, China, Belarus, Georgia and Turkey – come mainly to perform in ‘board member’ positions, it would be implausible to call this a regular pattern. Ukrainian and Indian nationals, for instance, come mainly to fill regular job positions, while Israelis are almost evenly distributed between the expert, board member and regular employment categories. Surprisingly enough, most of the American citizens are invited to Estonia to perform in clergy occupations, and not only this but it is mostly only American citizens who come under these purposes, representing 78.5% of the total migrants under this work category.
Table 7. Issued residence permits, top 10 countries by type of work category, 2008-2013

<table>
<thead>
<tr>
<th>Country</th>
<th>Board #</th>
<th>Board %</th>
<th>Work #</th>
<th>Work %</th>
<th>Posted #</th>
<th>Posted %</th>
<th>Expert #</th>
<th>Expert %</th>
<th>Priest #</th>
<th>Priest %</th>
<th>HSM #</th>
<th>HSM %</th>
<th>Other #</th>
<th>Other %</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<td>12.4</td>
<td>1082</td>
<td>41.4</td>
<td>1071</td>
<td>41.0</td>
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<td>3</td>
<td>0.1</td>
<td>6</td>
<td>0.2</td>
<td>99</td>
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<td>2613</td>
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<tr>
<td>Russia</td>
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<td>70.6</td>
<td>111</td>
<td>7.1</td>
<td>65</td>
<td>4.2</td>
<td>91</td>
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<td>23.6</td>
<td>2</td>
<td>2.8</td>
<td>21</td>
<td>29.2</td>
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<td>72</td>
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<td>7</td>
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<td>2.2</td>
<td>12</td>
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<td>2.2</td>
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<td>80</td>
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<td>20</td>
<td>3.8</td>
<td>6</td>
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<td>24.9</td>
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</tbody>
</table>

Student migration to Estonia seems to represent not only an important pool for potential international talents, but a growing one too. 71% of the total amount of residence permits issued for the purpose of studies were issued to individuals between the ages 20-29, suggesting that most of them pursue higher education and close to their most productive age in the labour market. TCNs arriving to Estonia for study purposes is the only category that has experienced a continuous growth year after year (Figure 3). This might reflect the more coordinated effort between universities and other foundations in bringing more international students to Estonia.

A look at the individual performance of the Top 10 countries allow speculate on how could the internationalization strategy be impacting – or not – its target countries. As it has already been mentioned, the category of students has been growing every year, and in 2013, 9 out of the Top 10 countries experienced an increase in comparison with 2012 (Figure 4). The share
of Russian students has been almost without halt experiencing an increase. Moreover, the case of South Korea and India also represent interesting growing trends, since at the start of the period studied they had virtually no representation whatsoever, and they are now positioned among the Top 10. The particular situation of two target countries for the attraction of international students must be highlighted. Chinese students experienced a very unique decline in residence permits. While in 2008 they were – by far – the nationality holding the largest share of residence permits under the basis of studies, the following years they experienced a sharp decline that placed them in lower positions, only to recover in 2013. Turkish nationals, which at the start of the period increased their share, also experienced a decline in recent years, only to show a slight recovery in the last year.

![Figure 4. Top 10 countries for studies categories, by year, 2008-2013](image)

To conclude this section of the analysis, it can be highlighted that some of the ‘talent mobility’ determinants can, at some extent, be identified in the current trends of migration flows to Estonia. *International differences in earnings and development gaps* seem to be driving TCN’s migration to Estonia, from less developed countries, in line with neoclassical economics expectations. The *professional networks* component also could help explaining the rising numbers of international students, if one would consider the growing role of Estonia as a recognized pole of higher education.
in the Baltic States and Eastern Europe. Moreover, the growing percentage of highly-skilled individuals over the last years might indicate demand talent, although the absolute numbers prevent from drawing such conclusions. Furthermore, the fluctuating patterns between origin countries of migrants could be indicative of a lack of policy effectiveness, since individuals arriving for family purposes, as well as with medium and low skills make the majority of them, hardly in line with the aims of addressing labour shortages and contributing to the economic development of Estonia.

2.5 – Discussion and Policy Implications
The attraction of highly-skilled third-country nationals is undoubtedly climbing steps in Estonia’s political agenda, with the aim at contributing to the country’s economic development. Increasingly and progressively, policies and measures fostering the attraction of highly-skilled TCNs have been implemented in Estonia as the study indicates. Nevertheless, when comparing and contrasting the current approaches of Estonia in this field against the five theoretical determinants of ‘talent mobility’ elucidated by the author, not only progress is identified, but shortcomings as well. Thus, having carried extensive research and analysis, the issue deserves not only a discussion of the results, but also merits important policy implications.

It is found that the understanding of the highly-skilled migration process in Estonia is well in line with the neoclassical economics paradigm, at both its macro and micro levels. The ‘employer-led’ system that is very much supported by the state and its stakeholders is a strong indication of the labour market being the main mechanisms influencing international migration, including highly-skilled. In addition to this, the recent amendments in 2013 – and previously introduced ones – are mostly measures and policies facilitating and expediting the recruitment process of the foreign employees, which essentially enhances the clouts of the labour market. As well, the fact that it is mostly through legislative changes to the Aliens Act the way in which Estonia approaches the attraction of highly-skilled third-country nationals, is an acknowledgment of the influencing role the state has mainly through immigration policies. Hence, as a determinant on its own, policy regimes and immigration policies is definitively well address by Estonia.
Moreover, it is through this *policy regimes and immigration policies* determinant – and more specifically, through its ‘attraction policy’ – that Estonia attempts to address the other elements and factors in order to have a greater and more successful effect. The objective of creating a favorable environment to attract ‘foreign students and top specialists to Estonia’ is identified as the foundation of a comprehensive policy, would there be one. Hence, the first policy implication is the need to develop a strategic document that would outline the specific aims, objectives and basis of the Estonian ‘attraction policy’, establishing a clear managerial and responsible body, as well as demarcating a national highly-skilled definition.

Without such a strategic document, the existence of a fragmented and uneven set of policies and measures aimed at attracting highly-skilled TCNs, as the results of the analysis indicate, might continue to be the norm and would further limit the policies’ success. The step-by-step efforts of the government and the generally independent – although at times cooperative – efforts of the various stakeholders involved should be embedded into a comprehensive and cohesive ‘attraction policy’ of Estonia. In addition to this, the lack of a definition for a highly-skilled or a highly-skilled third-country national contributes to the ‘abstractness’ of the policies and measures. In this sense, the concepts differentiating the individuals by schemes and professions in the *Aliens Act* on which Estonia bases its selectivity policy on (e.g. ‘highly-qualified’ concept), could serve as a more concrete definition for ‘foreign talents’ that should be included in such document, contributing to a more clearly defined ‘attraction policy’. Such a definition would share the understanding of the EU and other international notions of ‘highly-skilled’.

The *international differences in earnings and development gaps* is partially addressed by Estonia’s policies and measures for the attraction of highly-skilled third-country nationals. This is mainly through the strategies in use by Estonian universities and partner institutions in the recruitment process of foreigners that take this first determinant as a key influencing factor of HSM. By focusing in countries where, generally speaking, Estonia is in an advantageous position vis-à-vis salaries and development, it is recognized that the likelihood for attraction of highly-skilled TCN’s is higher than it would be in other countries, for instance, Nordic or western EU member states. The MFA, following this principle, also
focuses many of its efforts to the countries where Estonia could be more prone to have a successful recruitment as offering numerous advantages in comparison to those countries, such as with its ‘Asia’ strategy. The second policy implication is thus, to extend these approaches by the MFA and higher education institutions in Estonia to other stakeholders (i.e. employers), by means of more cooperation, experience and best-practice sharing.

The non-pecuniary motivations determinant is as well only partially addressed. The interviewees acknowledged that many non-pecuniary elements that Estonia offers (e.g. fast career, relaxed lifestyle, etc.) could serve – and sometimes have – as deciding factors for foreigners to come. Nevertheless, these issues are not very much part of current practices or measures for attracting highly-skilled TCNs. The right for highly-skilled TCNs to take their immediate family with them, is one of the few ways in which Estonia attempts to attract the needed qualified labour. Another way mentioned is the integration program, but as it was pointed out, it has not yet evolved into a complete and full program, and thus, might count as a negative aspect when weighing aspects of coming or not to Estonia.

Accordingly, the third policy implication for the Estonian ‘attraction policy’ is then to identify, develop and include non-pecuniary factors, such as integration and access and availability of information, into the current policies and measures, even with a possible close link to Estonia’s tourism policy. As human capital theory states, not only the role of money is important, but nowadays, and particularly for the case of highly-skilled, other elements might be perceived and valued in as much as pecuniary elements. Thus, the need to turn attention to these elements could give a competitive advantage to Estonia in the race of talents. In addition, the current inability of Estonia to compete with other major European countries in terms of salaries, could be alleviated by a strategy that offers non-pecuniary elements which in a way could compensate for the less-competitive salaries.

In regards to the demand for capital, talent & technology, the analysis suggests that this third determinant is well-addressed, with the exception of the technology element. The demand for highly-skilled experienced by the labour market is the justification for the attraction of highly-skilled TCN’s, and the ‘employer-led’ system in place is thought to be the best way to address this determinant. Nevertheless, criticism has been made to the base of this demand,
which lies in the labour forecast, principally towards its shortcomings at specifically pointing the type of skills and the particular sector where they are needed. In addition to this, I identified that although the IT industry in Estonia is one of the main advocates of the attraction of highly-skilled TCNs and one of the industries that is in most need of them, there is no particular or coordinated action or measures that would be specifically aimed at attracting this group.

Having this in mind, the fourth policy implication would be to further develop and make more specific the labour demand forecasts, given that it is the main tool for basing the attraction policy. Close cooperation with other stakeholders of HSM as well as with the employers from all industries is needed, and this cooperation should be established in the strategic document suggested by the first policy implication. A fifth policy implication would be to develop more specifically targeted measures and actions towards professionals of the IT sector and link it very closely with the country’s flagship of ‘e-Estonia’.

The networks: professional and sociocultural determinant is, overall, well addressed and acknowledged, although it was demonstrated that it is not very much institutionalized. For instance, the particular strategy set up by the universities and their cooperation with other stakeholders address the perpetuity issue that is brought up by the networks theory approach, by creating links and connections in other countries. EURAXESS is the best example here, using networks of professionals to fill the demand of professionals in Estonia. However, outside these two particular measures, other stakeholders do not seem to pay particular attention to networks. The networks that foreign employees have are often used to attract other highly-skilled individuals, but mostly on a case-by-case and work more as an independent tool on themselves than as a concrete measure for attraction.

The same is the case for sociocultural networks. Although it is difficult for Estonia as a small country to find such affinities outside the EU, an example of how networks can be used is the case of Ida-Virumaa region that recruits Russian-speaking specialists to work in same-language environments. The analysis suggests that networks play an important role when properly embedded in concrete practices and measures for the attraction of HSM. Thus, the final policy implication has to do with the institutionalization of networks, both professional
and sociocultural, as a concrete measure in the attraction of highly-skilled third-country nationals. This institutionalization should contribute to a more sustainable ‘attraction policy’.

Hence, the final result of the analysis is that Estonia’s policies and measures for the attraction of highly-skilled third-country nationals only partially address the theoretical determinants of ‘talent mobility, since some of the features of these remain largely neglected in the existing policies and measures. Furthermore, in an EMN study (European Migration Network, 2010) it was mentioned that the government was not placing as much emphasis at ‘importing labour’ as it was on developing other measures for a more active involvement of the domestic labour force. With the analysis made, I would consider that this statement is no longer valid. While the Estonian government might continue to develop its policies towards the involvement of its local labour force, it has also certainly dedicated more and more attention to the opportunity that migration and foreign labour represent in satisfying the demands of the Estonian labour market.
CONCLUSION
The objective of the presented analysis was to determine how Estonia’s policies and measures for attracting highly-skilled third-country nationals address the theoretical determinants of the specific highly-skilled migration phenomena. For this, it was first necessary to establish what are the current policies and measures in this topic. The results of the analysis support the initial assumption that there is no comprehensive or overarching framework presented by the Estonian government in the subject of highly-skilled migration, less to say, third-country nationals. There is no particular ministry or government agency responsible for the management of the so-called ‘talent policy’ in Estonia, and, the data gathered from the interviews shows that there is no political or ministerial leadership that would be ready to take responsibility for a coordinated effort towards the attraction and retention of highly-skilled migrants at the state level. In addition to this, the current trends where family reunification and non-highly-skilled migration hold larger shares than work migration or highly-skilled one, also shed light on the lack of a comprehensive policy on this matter.

Nevertheless, and in spite of the general lack of a comprehensive and overarching policy framework on the topic of highly-skilled migration, the aim of attracting highly-skilled migrants is unambiguously stated in the Action Programme of the Government of the Republic, which at least demonstrates the relevance of the topic and the more active – even if mostly at a political level – engagement in this area. Consequently, this current aim is the sole basis of the strategy for the attraction of highly-skilled migrants. In order to address this issue, a vital policy implication is suggested by the author, in which a strategic document clearly outlining Estonia’s ‘attraction policy’ and a coordinating body would be a good starting point for the development of a more comprehensive policy.

Furthermore, the theoretical discussion proved to be effective at studying the issue of highly-skilled migration in Estonia, in particular to the case of third-country nationals and the choice of neoclassical economics as the main theoretical framework enclosing the contributions of other theories. On the one hand, the analysis makes it clear that the understanding of Estonia’s policies and measures for the attraction of highly-skilled individuals is strongly based on neoclassical economics theory, strengthening the justification of the use of this approach. On
the other hand, the thorough discussion of other theories and their inclusion in a push and pull framework opens the possibility to highlight important issues in contemporary international migration that might have been otherwise neglected or sidelined by a rigid focus on the neoclassical economics approach. This interdisciplinary aspect when analyzing highly-skilled migration proved then to be of utmost importance.

This significance of this interdisciplinary approach is particularly reflected in the theoretical determinants of ‘talent mobility’. Solimano’s seven determinants of ‘talent mobility’ reflected various important aspects of the discussed theories, such as the importance of networks as explained by the networks approach or the significance of non-pecuniary motivations, such as human capital theory suggests. Moreover, these determinants are also in line with the main assumptions of neoclassical economics. However, in an attempt to make the analysis more clear and to extend the author’s particular contribution to the literature, I provide the reader with an alternative, streamlined account of these determinants. This resulted in five determinants of ‘talent mobility’, which relevance were reaffirmed and verified by the document analysis and the semi-structured interviews.

Policy regimes and immigration policies made reference to the policies, legislation and institutional framework in place to attract highly-skilled individuals, particularly third-country nationals. In addition of its function as a determinant, the policy regimes and immigration policies was also the object of study of this work. This was approached by the perspective that, in order to have a comprehensive and successful ‘attraction policy’, this determinant should take into account the remaining four determinants offered by the author. The international differences in earnings and gaps determinants related to the neoclassical economics assumption that people will move for better income or the expectation of higher earnings. Non-pecuniary motivations, in contrast – but also acting as a complement – referred to the importance of non-monetary factors for highly-skilled. The demand for capital, talent & technology is the need of these factors of production – in particular highly-skilled individuals – to further develop the economy and, particularly, the ‘knowledge economy’. The networks: professional and socio-cultural refers to the creation and use of networks as a tool for attracting highly-skilled immigrants. The correct addressing of the last four
theoretical determinants by the first determinant, would be the desirable ‘attraction policy’ that Estonia should pursue.

The analysis shows that Estonia still has to further develop its ‘attraction policy’, since the main outcome was that Estonia’s current policies and measures towards the attraction of highly-skilled TCNs only partially address the determinants of ‘talent mobility’. The less addressed determinants were international differences in earnings and development gaps as well as non-pecuniary motivations. The former, since there are no particular incentives for highly-skilled TCNs, as well as only the MFA and higher education institutions actually have strategies that take into account this determinant. The latter, since other non-monetary elements are not systematically used in order to promote attraction to Estonia. Despite the partial addressing, there is indeed a large acknowledgement that by interviews and documents alike, that both determinants are essential for a comprehensive and more successful attraction policy.

The demand for talent, capital & technology is well addressed, given the fact that this is used as the main base and justification of the scattered efforts that now compose the ‘attraction policy’. Better forecasting and more targeted emphasis on the IT foreign professionals would address this determinant at an optimal level. As for the networks: professional and socio-cultural, it is interestingly enough well addressed by employers and different stakeholders alike, and in particular higher education institutions. The role of networks and contacts was largely acknowledged by the interviews and it is often used to recruit HSM from third-countries. Nevertheless, in both professional and socio-cultural settings these networks were not institutionalized or embedded in current policies, measures or strategies. A notable exception was the strategy pursued by higher education institutions, which do place an important emphasis on networks, and it would seem to have a positive impact on the increasing number of international students, as the analysis on residence permits shows. Thus, more emphasis on these networks by other stakeholders could rise Estonia’s attraction profile.

It is still early to determine the successfulness or the impact of the more recent changes undergone by the legislation and the new schemes that particularly aim towards attracting
highly-skilled third-country nationals, but there seems to be a consensus that their impact will be positive. The new schemes in place directed particularly at HSM, the introduction of the ‘highly-qualified’ concept, the opportunity for foreign students graduating in Estonia to access the labour market upon graduation with a less bureaucratic process and the family reunification for HSM are, for instance, improvements that contribute to the more taking into account the determinants of talent mobility.

In conclusion, Estonia currently aims at attracting highly-skilled third-country nationals, but it lacks a comprehensive strategy. The government documents and interviews are in line with neoclassical economics theory, and the scattered set of policies and measures partially address the particular determinants of highly-skilled migration identified by the literature. Estonia has demonstrated its decision of not being left out from the global race of talents, but if one needs to be critical, the gradual and reactive approach might fall short to the quick changes and demands of the labour market. A more active role from the government, starting from the adoption of a strategic document on this subject, establishing the management and coordination of a comprehensive policy on attraction of highly-skilled, including third-country nationals, would be a valuable starting point.
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Media articles & online sources


Reports, policy documents and studies on Estonia


**Reports, policy documents and studies (Others)**


**Miscellaneous**

Appendix
ANNEX 1 – Interview questionnaire

SIDUSGRUPPIDE PERSONAALINTEKVJUU

Oluline on intervjueritavate reaalne kogemus ja konkreetset näited!

PS! Enne intervjuude tegemist olla kursis uussisserändajate statistika ja välismaalaste seaduse muudatusega.

============================================================================================================

Intervjuerija:
Kuupäev ja asukoht:
Intervjueritav:
Intervjuu kestus:
============================================================================================================

EESTISSE MEELITAMINE


2. Mis põhjustel on tavaliselt Eesti kasuks otsustatud ja millised on peamised takistused välisööjtajate/välisüüupilaste värbamisel? Kas takistused on seotud riigi poolt pakutavate teenuste ja toega, Eesti majanduse konkurentsivõimega või on muud sotsiaalset tüüpi?

3. Kas välismaalaste seaduse muudatused, mis jõustsid 1.09.2013, on toonud/toovad muutusi teie tegevusse välisööjtajate/välisüüupilaste värbamisel?

============================================================================================================

EESTIS PAKUTAVAD TEENUSED


3. Informatsiooni/ teenuste kättesaadavus uussisserändajate jaoks (oluline on eristada teenuste pakkujat, kas riik, KOV, MTÜ või erasektor):

Eesti riiki, kohalikku elu-olu ja kultuuri tutvustav informatsioon (enne ja pärast riiki tulekut)

Asjaajamise kohta käiv informatsioon

Õigusalane informatsioon (ka vajadus selle järele)

Haridusteenused lastele või abikaasadele (kool, laseaed, täiendusõpe, täpsustada kooli/ lasteaia nime)

5. Kas vääristöötarjad / välisüülipilased kasutavad riigi ja KOV-ide poolt pakutavaid e-teenuseid? Milliseid teenuseid kasutatakse ja milline on rahulolu? Kas e-teenuseid peaks rohkem olema?


------------------------------------------------------------------------------------------------------------------

INSTITUTIONSAALNE KOOSTÖÖ


2. Miline peaks olema järgmist Institutsioonide / asutuste välispäritolu tipspetsialistide riiki meelitamisel, teenuste pakkumisel ja kohanemise ning lõimumise toetamisel?

   Riigi roll

   KOV-ide roll

   Tööandjate roll

3. Kas teil on veel ettepanekuid erinevate osapoolte koostöö korraldamiseks ja teenuste ning toe osutamiseks välispäritolu tipspetsialistidele Eestis? Kes peaks mida tegema?

4. Head näited ja praktikad teenuste pakkumise ja institutsionaalse koostöö kohta teistest riikidest.
DISKRIMINEERIMINE, VIHAKÕNE JA ÜHISKONNA AVATUS VÄLISPÄRITOLU TIPPSPERTIALISTIDELE

1. Kas välistöötajatel/välisüüõpilastel on isiklikult olnud kokkupuudet vaenu õhutamisega, rahvusliku või rassilise, usulise diskrimineerimise või vihakõne juhtumiga? Kirjeldage konkreetseid näiteid.

2. Milline on Eesti ühiskonna suhtumine välismaalastesse, nende Eestisse meelitamisele ja nende siin hoidmisele?

MUUD MÄRKUSED

List of interviewed stakeholders:

- AIESEC
- American Chamber Estonia
- Archimedes
- Association of Estonian Cities
- Baltic Defence College
- BLRT Group
- Competence Centre for Cancer Research
- Enterprise Estonia
- Estonian Biocentre
- Estonian Chamber of Commerce
- Estonian Ministry of Foreign Affairs
- Estonian Unemployment Insurance Fund
- Estonian University of Life Sciences
- Euraxess
- Ida-Viru Keskaigla
- Law Firm Tamme Otsmann Ruus Vabamets
- MISA Foundation
- Playtech
- Police and Boarder Guard Board
- Service Industry Chamber
- Silmet Group AS
- Tallinn City Government
- Tallinn International School
- Tallinn University
- Tartu Science Park
- Tartu University
- Vanemuine Theater
- Viru Keemia Group
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