



Foreign knowledge workers in the Netherlands

Factors influencing attraction and retention in the Netherlands



Davey Sebo
4009681



Leon Sleurink
4025296



Prof. Dr. O.A.L.C. Atzema
Drs. J.A.L.M. van Erp



Foreign knowledge workers in the Netherlands

Factors influencing attraction and retention in the Netherlands

Davey Sebo, BSc.
4009681
d.c.sebo@students.uu.nl

Leon Sleurink, BSc.
4025296
l.a.sleurink@students.uu.nl

Internship:
FME / High Tech NL

Master thesis
Faculty of Geosciences
Utrecht University

Supervisors:
Prof. Dr. O.A.L.C. Atzema, Utrecht University.
Drs. J.A.L.M. van Erp, FME / High Tech NL.

Date:
12th August, 2016

Preface

This is our thesis as part of the graduation of the master programme Business Geography at Utrecht University. In the past six months we have had the opportunity to do an internship at FME / High Tech NL whilst doing research and writing our thesis. A highlight of this internship was the visit with High Tech NL to the Hannover Messe 2016. It was fascinating to see the upcoming technological development and to speak with the people behind the rapid developing technology.

During our internship we have learned a lot about the lack of knowledge workers in the Netherlands, especially in the beta-industries. To cope with this lack of knowledge workers in the Netherlands, this report investigates the factors that are of influence in the attraction and retention of foreign knowledge workers. To identify these factors, we spoke with decision-making units and foreign knowledge workers. During these interviews we gained a lot of valuable and interesting information regarding this topic of increasing importance.

In retro perspective, the internship at FME / High Tech NL and the establishment of the research thesis has taught us a lot. Therefore, we would like to thank the people who have helped us during this process:

- *J.A.L.M Erp*: Mr. van Erp his enthusiasm and his knowledge about the subject of (foreign) knowledge workers in the beta industries are immense. We want to thank Mr. van Erp for sharing his knowledge and giving us the opportunity to do our internship at FME / High Tech NL. We also want to thank Mr. van Erp for sharing his network with us. Due to his network, doors have opened up for us that otherwise would have remained closed.
- *O.A.L.C. Atzema*: His critical attitude kept us sharp. At times we deviated from our initial research plan, Mr. Atzema was there to keep us on track. We would also like to express our gratitude for his feedback during the process of writing our thesis.
- *The managers of the human capital agendas*: Thanks to them we could find entries within relevant organizations and got into contact with decision-making units and foreign knowledge workers.
- *The people we have interviewed*: We would also like to thank the decision-making units and foreign knowledge workers who have participated in our research. Thanks to their honest input we were able to write this rapport.

We hope you enjoy reading this rapport,

Davey Sebo
Leon Sleurink

Summary

There is a shortage among knowledge workers in the beta-industries in the Netherlands. Because knowledge becomes increasingly specified and mobile due to globalization, companies moreover aim to seek knowledge outside their national boundaries. There are multiple factors that influence the attraction and retention of foreign knowledge workers in the Netherlands. By conducting interviews, the researchers gathered data among foreign knowledge workers that have worked in the Netherlands for a period of 3 years or longer. In addition, the researchers conducted interviews with decision-making units in the field of HRM within organizations. These interviews led to the following results:

- The high proficiency of the **English language** is considered one of the main motivations to migrate to the Netherlands. As every Dutchman is able to speak English, the foreign knowledge worker can easily adapt. Later on, when the foreign knowledge worker wants to learn the Dutch language, the advantage becomes a disadvantage, as they cannot practice the Dutch language since everyone is addressing them in English.
- The **30% ruling** is deemed essential according to DMUs in order to be able to compete with organizations in neighbouring countries, regarding the attraction and retention of foreign knowledge workers. Employers should inform and prepare their employees about the time this compensation expires.
- Foreign knowledge workers rate the **assistance of their employer**, regarding residence permits, insurance, taxes and housing, as essential. This will relieve the employee and will allow the employee to focus on the job.
- The foreign knowledge workers appreciate the **non-hierarchical working environment**. This type of environment enables them to express their creative freedom, without any discomfort from their managers. Once the foreign knowledge workers are used to this type of working environment, they will not return to their old environment.
- The foreign knowledge workers typically describe the Dutch working environment as 'work to live, rather than live to work'. This description indicates the unique **flexibility of** the Netherlands regarding **labour conditions**, which offers the employees a lot of time to see their friends and families. Downside of this flexibility is that one will not get rich in the Netherlands.
- The employer needs to consider the **private situation** of the foreign knowledge worker. They can consider the facilitation of education and language training for the foreign knowledge workers and their spouses, as the foreign knowledge workers indicate that trouble in their private situation may cause stress and is the main reason for them to leave the Netherlands.
- Decision-making units experience the government as a slow and **bureaucratic** institute. They experience annoyance from the long delays when one is, for example, applying for a visa or the 30% ruling. A more flexible approach of the government could avoid this annoyance and delay among the decision making units and the foreign knowledge workers.
- Due to a lack of provision of information regarding the **Dutch healthcare**, the foreign knowledge workers have a feeling that the general practitioner does not take their symptoms seriously. Proper information could explain how the healthcare system in the Netherlands works and could prevent discomfort at the doctor.
- Foreign knowledge workers with children state that the **quality of the Dutch education** is among the best of the world. This makes foreign knowledge workers doubt whether they want to send their child to a Dutch or an international school. The education of their children is often seen as a decisive factor for foreign knowledge workers in their decision to stay for a longer period in the Netherlands.

- The foreign knowledge workers deem their own **personal- and career development** as essential. When they feel that the organization can no longer provide this personal development or challenge, they start looking out for other alternatives within or outside the Netherlands.
- If the **size of the organization** is taken into account, it strikes that SMEs first of all have less access to foreign knowledge workers. On the contrary, when SMEs have access to foreign knowledge workers, they are reluctant to take to actually hire them. And in general, SMEs have fewer resources to spend on recruitment of foreign knowledge workers.
- When the **personal background** of foreign knowledge workers is taken into account, it turned out that personal characteristics and the family composition have a bigger influence on the attraction and retention of foreign knowledge workers.

In the case of the attraction and especially retention of foreign knowledge workers, the 'soft factors' are becoming increasingly important. Organizations have to invest in support and guidance of employees with regard to their personal situation. This includes support of their partners and children on integrating in the Dutch society. With the support of the organization, employees feel valued and this increases the probability of foreign knowledge workers to stay in the Netherlands for a longer period of time.

Dutch summary

Er is een tekort aan kenniswerkers in de bèta-techniek in Nederland. Doordat kennis steeds specifiek en mobieler wordt door de globalisering, achten bedrijven het noodzakelijk om ook buiten de landsgrenzen te zoeken naar werknemers. Er zijn verscheidene factoren die invloed uitoefenen op het aantrekken en behouden van buitenlandse kenniswerkers in Nederland. Aan de hand van interviews hebben de onderzoekers data verzameld onder kenniswerkers die 3 jaar of langer in Nederland werkzaam zijn. Tevens zijn er interviews gehouden met de gezaghebbende personen binnen de bedrijven op het gebied van HRM. Deze interviews hebben geleid tot de volgende resultaten:

- **Engels** geldt als één van de voornaamste motivaties om naar Nederland te komen. Doordat elke Nederlander in staat is om een internationale kenniswerker te woord te staan in het Engels, voelen zij zich snel welkom. Later, wanneer deze kenniswerkers Nederlands willen leren wordt dit voordeel een nadeel omdat men de Nederlandse taal niet kan oefenen.
- De **30% regeling** is volgens DMUs van essentieel belang om te kunnen concurreren met omliggende regio's wat betreft het aantrekken en behouden van internationale kenniswerkers. Werkgevers dienen hun internationale kenniswerkers voldoende in te lichten over het moment wanneer deze regeling verloopt.
- Kenniswerkers achten **assistentie** bij aankomst in Nederland met betrekking tot verblijfsvergunning, verzekeringen, belastingen, housing etc. als essentieel. Hierdoor wordt hen veel spanning ontnomen en kan de kenniswerker zijn aandacht richten op het werk.
- De buitenlandse kenniswerkers stellen het **non-hiërarchische werkklimaat** zeer op prijs. Dit biedt hen de mogelijkheid om hun creatieve vrijheid te kunnen bespreken, zonder daarbij hinder te ervaren van hun managers. Nadat zij aan deze manier van werken gewend zijn geraakt, willen zij niet meer terug naar hun oude systeem.
- Kenmerkend aan het Nederlandse werkklimaat is: "*work to live, rather than live to work.*" Dit duidt op de **flexibele arbeidsvoorwaarden** en de vrije tijd die men in Nederland heeft. Het nadeel van deze vrije tijd is dat men in Nederland, in vergelijking met bijvoorbeeld de VS, niet rijk kan worden.
- De werkgever dient tevens aan de **privé situatie** van de internationale kenniswerkers te denken. Denk hierbij bijvoorbeeld aan het faciliteren van werk, onderwijs en taalcursussen voor de partners, zodat ook zij zich in de samenleving kunnen inwerken. De kenniswerkers geven aan dat ervaren problemen in de privé situatie voor veel spanning zorgen waardoor zij minder productief zijn. Tevens vormt dit de belangrijkste reden om Nederland te verlaten.
- Vanuit de decision making units wordt de overheid als een log orgaan ervaren. Het werkt te **bureaucratisch** waardoor er lange wachttijden zijn voor bijvoorbeeld het aanvragen van een Visum of de 30% regeling. Door een meer flexibelere houding van de overheid kan dit irritatie bij DMU en de FKW voorkomen.
- Er is een **gebrek aan informatievoorziening** naar de internationale kenniswerkers op het gebied van gezondheidszorg. Zij zijn niet bekend met de Nederlandse processen in de gezondheidszorg en de 'gatekeeper'-rol van de huisarts en voelen zich hierdoor niet serieus genomen door de arts.

- Internationale kenniswerkers met kinderen stellen dat Nederland, wat betreft de **kwaliteit van het onderwijs**, behoort tot de wereldtop. Hierdoor twijfelt men tussen de internationale school en de Nederlandse school en vormt dit een belangrijk argument om langer in Nederland te verblijven.
- De kenniswerkers achten **persoonlijke-/loopbaan ontwikkeling** van groot belang. Wanneer zij het gevoel hebben dat het bedrijf deze ontwikkeling niet kan bieden, gaan ze op zoek naar andere alternatieven binnen of buiten de landsgrenzen.
- Wat betreft het **verschil in bedrijfsgrootte** valt op te merken dat MKB ten eerste minder toegang heeft tot buitenlandse kenniswerkers. Daarnaast kenmerkt het MKB zich door zijn terughoudendheid wanneer zij wel toegang hebben tot deze buitenlandse kenniswerkers. Tenslotte hebben MKB bedrijven minder geld te besteden hebben om buitenlandse kenniswerkers aan te trekken.
- Wanneer er wordt gekeken naar de **persoonlijke achtergrond** van internationale kenniswerker, blijkt dat de persoonlijke karaktereigenschappen en de familie samenstelling een grotere invloed hebben op het aantrekken en behouden van de internationale kenniswerker dan de achtergrond van de kenniswerker.

Concreet houdt dit in dat de zachte factoren steeds harder worden. Dit betekent dat bedrijven zich steeds meer moeten richten op de begeleiding van hun werknemers op het persoonlijke vlak. Denk hierbij aan begeleiding van de partner en kinderen bij het integreren in de Nederlandse samenleving. Door deze begeleiding aan te bieden voelen werknemers zich gewaardeerd en vergroot men de geneigdheid om een langere periode in Nederland te verblijven.

Table of contents

1. Introduction.....	3
1.1 Objective and research design.....	4
1.2 Societal relevance.....	5
1.3 Scientific relevance.....	5
2. Literary background.....	6
2.1 Human capital.....	6
2.2 Global migration of knowledge workers	8
2.2.1 Theories about international labour migration	8
2.2.2 Regional effects of the transfer of knowledge and spill-over effects	10
2.3 Knowledge workers and competitiveness advantages of nations and regions.....	12
2.3.1 National competitiveness.....	13
2.3.2 Regional competitiveness	13
2.3.3 Triple helix and open innovation climate.....	15
3. General backgrounds of Europe and the Netherlands	18
3.1 Cultural backgrounds.....	18
3.1.1 Cultural characteristics of the Netherlands	19
3.2 Policy backgrounds in Europe	23
3.3 Policy backgrounds in the Netherlands	25
3.3.1 The Dutch top sector policy.....	28
3.4 Upcoming challenges	32
4. Method	33
4.1 Operationalization.....	40
4.1.1 Research population.....	40
4.1.2 Living environment characteristics	41
4.1.3 Labour environment characteristics	43
4.1.4 Personal characteristics.....	44
4.2 Conceptual framework	45
5. Attraction of foreign knowledge workers	46
5.1 Attraction factors according to the literature	46
5.2 Attraction factors according to decision making units.....	48
5.2.1 Working factors.....	48
5.2.2 Living factors.....	51

5.3 Attraction factors according to foreign knowledge workers.....	53
5.3.1 Working factors.....	53
5.3.2 Living factors.....	56
5.4 Overview of findings.....	59
6. Retention of foreign knowledge workers.....	61
6.1 Literature.....	61
6.2 Retention factors according to decision making units	67
6.2.1 Working factors.....	67
6.2.2 Living factors.....	72
6.3 Retention factors according to foreign knowledge workers.....	77
6.3.1 Working factors.....	77
6.3.2 Living factors.....	82
6.4 Overview of findings.....	87
7. Differences between SMEs and MNEs.....	88
7.1 Differences according to the literature	88
7.2 Differences in attracting FKWs.....	92
7.3 Differences in retaining FKWs	94
7.4 Overview of findings.....	96
8. Personal background of foreign knowledge workers	97
8.1 Differences based on country of origin.....	97
8.2 Differences based on age.....	100
8.3 Differences based on relationship status	103
8.4 Overview of findings.....	105
9. Conclusion	106
10. Recommendations.....	108
11. Reflection.....	111
12. Literature.....	114

1. | Introduction

Formerly, the growth of the economy was solely defined by neoclassical theoretical arguments. The financial capabilities of the economy received a lot of attention. However, since knowledge economies thrive on the scarcity of entrepreneurial talent and intellectual capital, as well as the exchange of tacit knowledge and the immobility of such assets, there has been a shift towards a more social approach of regional economic development. Hence, the new economy continues to be based on scarcity, but more of knowledge capital than financial capital (Cooke, 2001). This makes the regional economic growth also related to human capital. The thought behind the human capital theory states that people, rather than money, are the motor of economic and social growth. This applies especially in densely urban environments. This historical shift makes human capital a major variable in urban growth models (Saxenian, 1994). The conclusion of these growth models is that the key to regional urban growth lies in concentrating a critical core of highly educated and productive people, mainly designated as being knowledge workers. The modern knowledge economy is highly dependent on these well-trained knowledge workers. This dependence has led to a rapid increase of international migration of highly skilled knowledge workers and this phenomenon became one of the most important factors of the current globalization. An important explanation of this rapid increase must be sought in the fact that countries are better capable of handling market frictions and cyclical deficits, when they are able to attract foreign knowledge workers. By doing so, countries increase their human capital, which may lead to knowledge spill overs that generate innovations on the long term. As a result, attracting highly skilled foreign knowledge workers became a crucial part for strong, international competitiveness (PBL, 2014, p. 7).

Due to the scarcity of talented workers and the many options these workers are presented in a variety of urban regions in the developed world, Western countries find it increasingly difficult to attract and to retain appropriate talent. Some even talk about '*a war on talent*'. This situation can also be recognized in the Netherlands, as it aims to be one of the leading innovative countries in the world. Hence, the Dutch government developed the economic cluster policy ('*topsectoren beleid*'). This policy enhances the triple helix approach, in which government, industry and education cooperate. This cooperation has contributed to a more innovative ecosystem and helps the Netherlands to make the transition to a more advanced knowledge economy. This transition requires a large pool of knowledge workers. However, for years the Netherlands has experienced a growing shortage of knowledge workers, especially in the beta industries (Groot, e.a., 2013). Despite these efforts and the fact that the Netherlands is ranked as the fifth country in the Global Competitiveness Monitor 2015, mainly due to an excellent education system, efficient infrastructure, stable political situation and continued focus on innovation (Schwab, 2015), it attracts relatively few highly skilled workers. It even lags behind when it comes down to the growth of the proportion of highly skilled workers. Currently, there are approximately 100,000 international knowledge workers employed in the Netherlands. Nearly half of them originate from the European Union (Groot, e.a., 2013). These knowledge workers are highly productive and often employed at internationally operating firms, which are important for the international competitiveness of the open Dutch economy. The challenge is to keep these workers in the Netherlands before they and their tacit knowledge emigrate elsewhere.

The retention of these workers is quite a challenge as the Dutch Statistic Bureau (Groot, e.a., 2013) shows that half of these international highly skilled workers leave the Netherlands within

eight years. Hence, it is relevant to conduct a research about the attraction and retention factors of these foreign knowledge workers (FKWs) and compare the most important factors according to these workers themselves, with the factors which are most important according to the decision making units (DMUs) at employer level. To achieve in-depth insights, this research also makes a distinction between the size of the organization and the personal backgrounds of foreign knowledge workers in the Netherlands.

1.1 | Objective and research design

In this research the researchers will focus on retrieving the most important factors and motives which the foreign knowledge workers consider regarding 'coming to' and 'staying in' the Netherlands. The research is focused on foreign knowledge workers who are present in the Netherlands for three years or longer. In order to answer the research question regarding factors that influence the foreign knowledge workers to come to and stay in the Netherlands, the existing literature forms the basis of the research. Based on the most important factors mentioned in the literature, the research questions also deal with the experiences of Decision Making Units, such as Human Resource Managers (HRM) and R&D Directors. What are the most important factors in attracting and retaining foreign knowledge workers according to these decision making units? Following up on this, the research also investigates the factors mentioned by the knowledge workers themselves. How do their perspectives and motives to come and stay in the Netherlands correspond to the factors mentioned by the DMUs? Then, in order to determine whether the size of a firm has influence on the attraction and retention of FKWs, this research will make a distinction between small- and medium sized enterprises and multinational organisations. Lastly, there will be a chapter dedicated to check for differences in retention factors based on the personal background of the FKWs.

In order to get in touch with DMUs of companies in the Netherlands that have FKWs employed, the human capital managers of each corresponding top sector are approached and consulted. Their connections with the working field establish contacts between the researchers and relevant DMUs. Once the researchers get in touch with the DMUs, an access is created to reach out to the knowledge workers themselves. This way, the researchers plan to organize interviews with these knowledge workers in the form of table sessions with multiple knowledge workers at the same time. These table sessions are led by the researchers and are aimed at identifying personal motivations to come to and stay in the Netherlands by having semi-structured interviews. This research design leads to the following research question and corresponding sub questions:

"What are the most important factors to attract and retain foreign knowledge workers with a beta background in the Netherlands according to decision-making units of international operating firms, compared to the factors mentioned by the knowledge workers themselves and to which extent do they correspond to the literature?"

Sub questions:

1. What are the most important factors to attract foreign knowledge workers in the Netherlands according to the literature, the decision-making units and the foreign knowledge workers?
2. What are the most important factors to retain foreign knowledge workers in the Netherlands according to the literature, the decision-making units and the foreign knowledge workers?

3. To what extent does the size of the firm influence the attraction and retention of foreign knowledge workers according to the literature, the decision-making units and the foreign knowledge workers?
4. To what extent does the personal background of the foreign knowledge worker influence its retention in the Netherlands according to the literature, the decision-making units and the foreign knowledge workers?

1.2 | Societal relevance

The societal relevance of the research is providing information about international knowledge workers to companies, knowledge institutes and governments. To reduce the upcoming shortage of highly skilled knowledge workers in the Dutch top sectors, especially the beta industries, it is important to invest in and to increase knowledge regarding these foreign knowledge workers. In this research the factors will be examined that influence the attractiveness of regions and companies for knowledge workers and which factors are important for these knowledge workers for a permanent stay. Therefore, two stages will be distinguished; 'coming to'- and 'staying in' the Netherlands. In the 'coming to'-phase the research looks back on the most important factors for the decision of the knowledge workers to come to the Netherlands, and which factors caused inconvenience. In the 'staying in'-phase the factors that influence the happiness and the current experience in the Netherlands will be examined, for example the quality of life in the Netherlands and their participation in social networks and communities.

The international knowledge workers have shown to be a highly mobile group, showing an increasing mobility over the globe. Instead of living in a place for a long time, they often leave the region within a few years, either to move on to another more competitive region or to go back to their home country. This so-called brain drain is a major concern in the new economy as it creates costs for firms and a loss of both tangible and intangible knowledge and competitive advantage for both companies and regions (Sutherland & Jordaan, 2004). Therefore, the aim of this research is to trace the most important factors for these knowledge workers to guarantee a long-term stay in the Netherlands.

1.3 | Scientific relevance

In addition to the actualisation of the current knowledge concerning international knowledge workers, the scientific relevance of the research lies in providing new information on the attraction and the retention of foreign knowledge workers. By differentiating two phases ('coming to' and 'staying in') the researchers aim to find push- and pull factors that are important for attracting and retaining the knowledge workers according both FKWs and DMUs. This comparison approach offers a new perspective through the verification whether they both appoint the same factors as most important. In addition, the existing literature mainly focuses on the attraction of foreign students and how to retain them for the Dutch industry. As this research is focussed at FKWs who have worked in the Netherlands for a period of three years or longer, the research aims at a research group that is already adjusted to the Dutch system. Therefore this research will also add a new perspective to the existing knowledge in this respect. This will enlarge the existing knowledge about international knowledge workers and the factors that are of influence on retention management. Furthermore, this research contributes to the current knowledge concerning the influence of the size of the organization on the attraction and retention factors and the influence of the personal background of the foreign knowledge workers.

2. | Literary background

This chapter is written with the purpose to form background information of the research, hence it will include the primary literature that is used to form the foundation for this further research. This chapter will include the existing literary background on human capital, the migration of knowledge workers and regional competitiveness. Each of these subjects has its own section, which gives an in-depth overview. The literature that is specifically used to answer a sub-question is later detailed described in the corresponding chapter of the sub-question.

2.1 | Human capital

The construct human capital recognizes that not all labour is equal. By recognizing this, one acknowledges that the quality of workers can be improved through education and experience. Through this training, the workers can further enhance their unique abilities and thus increase their value for the company. This personal development human capital encompasses, is described to be a main factor for innovation. Therefore, workers are seen as the most valuable resource in every business or organization (Kucharčíková 2011, p. 62 & Rosak-Szyrocka & Botkowski, 2007). Hence, human capital and the further development of human capital within a firm is regarded as very important. Because of this importance, one would expect that human capital is a defined concept in science. However, the definition of human capital is complex and is not defined in a uniform way. In general, human capital is seen as any form of knowledge or characteristics that a worker has that corresponds to their productivity (Schütt, 2003, p.4 & Acemoglu & Autor, 1999, p.3). Another definition of human capital by the OECD (2011) is as follows: *“Knowledge, skills, abilities and other characteristics that are relevant for economic activity.”* Both the definitions assume that the amount of human capital an individual possesses differs from person to person. This means that people that possess the highest amount of human capital, are seen as high skilled workers. Highly skilled workers defined as workers that exceed a certain threshold in the education they have had in the past. In this report, a highly skilled migrant is defined as done by Wiesbrock (2010). *“A person who has completed a master’s degree or a doctorate from a Dutch University or from a non-Dutch institution of higher education which ranks among the top 150 universities on the Times Higher Education List.”*

There is no distinction made in the type of activities that the workers perform. This means that a microbiologist can be defined as a highly skilled worker, as well as a technician working at Philips Lighting. As a result, Mahroum (2000) decided to define five different types of highly skilled workers. First he describes ‘accidental tourists’, this are the managers and supervisors with whom migration is rather coincidence than deliberately planned. Therefore the decision to move abroad is not made personally, but made by the company in order to achieve further expansion. The accidental tourist can be recognized as former personal from the headquarters that is transferred to different locations worldwide to make sure the expansion can be sufficiently fulfilled. Secondly, Mahroum (2000) describes ‘economy-class passengers’. These migrants have knowledge and skills that can be used anywhere in the world and are mostly engineers and technicians. They move to countries where their qualities are most appreciated and awarded. Because this type of knowledge worker is in huge demand, loyalty is absent in most cases. Then there are the ‘explorers’. These are the entrepreneurs who propose new ideas and establish new companies. These migrants move to the locations that offer the most freedom in developing their ideas. The factor that has the biggest influence on their migration, is market supply and demand. The government can influence their choices by policies. The fourth group of

knowledge migrants Mahroum (2000) defines are the scientists, which he calls 'pilgrims'. They are called pilgrims because scientists are historically seen as people who put their job in first place, which also makes them a highly mobile group. The most important factor for them to migrate is the prestige and influence of an institution abroad. The last group of highly skilled workers are 'passengers'. These are students who make use of opportunities for international exchanges to get new experiences abroad. The choice of these students depends on the reputation of the university. This group is mostly interesting for countries that are seeking for talent.

Standing out from your competitors at national and organizational level is highly important in attracting foreign talent. This is mainly done by acquiring leading human capital and therefore foster innovation rates (Marimuthu, 2009, p. 267). Accordingly, firm performance is driven by the presence of human capital. Investing in human capital is necessary to be an innovative organization. Investment in human capital is defined as anything that increases the quality or productivity of the worker. But what can organizations do to invest in human capital?

The most important factors that make up human capital are the training, education, knowledge and skills of an individual. Marimuthu (2009, p. 268) summarizes the effect of human capital on firm performance in figure 2.1.

Figure 2.1: The effect of human capital on firm performance



Source: Marimuthu (2009, p. 268).

Human capital investment starts at the recruitment and selection of employees that have had the most suitable education and have the knowledge and skills for the job. A working factor in the topic of human resource management is how to make personal features fit with the job to produce the greatest effectiveness (Wang & Shieh, 2008, p. 1013). The factor of human capital investment that can be influenced by organizations after selection and recruitment is *employee training*. To some extent this training is comparable to education, but training is done after a schooling period. The training is useful for a particular industry or working with particular technologies and increases the capabilities of an employee in performing activities of economic values. Earlier studies have also pointed out that employee training increases the longevity of companies. Wang & Shieh (2008, p. 1013) add that *employee inspiration* also is a feature of human capital investment by organizations. This factor highlights the importance for praising staff for a job well done. This will boost loyalty and productivity and will therefore influence retention of an employee as well. Human capital investment strongly correlates with the retention of foreign knowledge workers inside organizations. An elaborate analysis of retention management will be provided in chapter six.

2.2 | Global migration of knowledge workers

An important part of global migration streams is the flow of knowledge workers. These workers make up an increasing number of international labour migration. The International Organization for Migration (2015) defines labour migration as follows: *“the movement of people from one country to another for the purpose of employment.”* As an effect of globalisation, numbers and figures on the flow of human capital are increasing. Many countries see knowledge migrants as a solution for fulfilling skilled labour shortages in order to sustain economic growth (Iredale, 2001, p. 8). When looking at the GDP growth rates provided by The World Bank (2016), there are big differences visible in terms of economic growth between countries. This unevenness causes talent to have a greater choice than ever in their decision to work abroad. Qualifications and professions are therefore becoming increasingly global.

When countries maintain a sufficient level of attracting knowledge migrants, they are able to respond to cyclical shortages on the labour market of skilled workers. With more human capital and skilled workers present, the amount of knowledge spill overs is likely to increase as well. Attracting foreign knowledge workers is therefore seen as a crucial method for a creating a higher level of regional competitiveness (PBL, 2014, p. 7).

Looking at it from organizational perspective, why would an American company limit themselves in searching only in domestic territory whilst China has the most PhD graduates (Harvey, 2013, p. 37-38). The problem that arises is the fact that all organizations (and countries) have to seek in the same pool of talent, even abroad. Dutch high-tech companies such as ASML, Holst Centre and Akzo Nobel are constantly seeking for talented technicians in order to expand or complement their teams. But other knowledge regions and countries, besides the Netherlands, are on a hunt as well (van Erp, 2016). At national level, this means that if other countries proactively adjust and intensify their policies in attracting knowledge workers, the Netherlands would lag behind in their ambition to secure a spot in the global top five of knowledge economies (PBL, 2014, p.18 & Boeri e.a., 2012). Presenting and promoting the Netherlands as an attractive country to work and live in, is top priority for the Dutch Human Capital agenda (van Erp, 2016). Therefore, this so called ‘war on talent’ is more than just rivalry of companies in foreign talent. The rivalry extends to countries by attracting knowledge workers in order to achieve economic development (Harvey, 2016, p.37).

2.2.1 | Theories about international labour migration

Each of the individuals who seek work abroad have their reasons and motivations to migrate. Migrating to a different country has occurred for many years. This process does not only concern the category of skilled workers. But what are these reasons and motivations of labour migration? Theories are formed in order to make a distinction between these different reasons and motivations. Iredale (2001, p. 8-10) distinguishes the following categorizations in table 2.2.1 on the next page.

Table 2.2.1: Different theories about labour migration

Theory	Description
<i>Human capital theory</i>	<ul style="list-style-type: none"> - People move to find more appropriate work to match their formal education and training. - No room for informal training. - No room for institutional factors.
<i>Structuralism neo-Marxist Macro level theory</i>	<ul style="list-style-type: none"> - Takes into account the role of gender, race, class and the impact of the different between rich core and peripheral nations. - No room for institutional factors such as industry unions or networks.
<i>Structuration approach</i>	<ul style="list-style-type: none"> - Incorporates individuals, structural and institutional elements. - Both private capital and the state are involved in active recruitment to fill labour needs.

Source: Iredale (2001, p. 8-10)

Jennissen (2012, p. 83) stresses that international labour migration correlates with the economic situation in a country. In order to understand this correlation, Jennissen distinguishes economic theories that explain international labour migration and these can be seen as an addition to the theories mentioned by Iredale (2001, p.8). First he describes the factors that explain labour migration according to the neoclassical theory. According to the neoclassical theory, international labour flows are mainly caused by workers who migrate from lower income countries to countries with higher wage levels. Due to this process, the differences between wage levels will decrease over time and the neoclassic theory therefore describes labour migration as a temporary phenomenon. Opposed to the neoclassical theory, the social network theory explains that migration to a particular country is path-dependent. According to the social network theory it is necessary for migrants to have a social network in the country of destination in order to reduce the costs and risks (Jennissen, 2012, p.83).

Commenting on the neoclassical theory mentioned by Jennissen (2012, p. 83), one could argue that migration causes a distortion in the balance of wage levels and the economic systems of countries. Brain drain is a definition that is often associated with this distortion in balance. In short, brain drain concerns the emigration of high-skilled workers from less developed countries to developed countries. Policies in developed countries can stimulate skilled workers abroad in turning to their country by establishing favourable working conditions and proactive recruitment. Whereas skilled labour shortages are the main driving force of stimulating these workers to move. These shortages could ultimately lead to a decrease in the global competitiveness position of the Netherlands (Glennie & Chappel, 2010; Föbker e.a. 2014, p. 542).

Iredale (2001, p. 16-19) also explains the driving forces behind skilled migration. First he elaborates four different motivations for highly educated workers to migrate. A motivation to leave could be an oppressive regime in the home country of the highly educated worker. This has a great influence on the disparity of the highly educated workers. Another motivation could be the brain drain, as valuable skilled workers and human resources from the developing countries would like to challenge themselves in developed countries. The government could also play a role in the motivations of these workers, as the government may attract highly skilled workers from abroad. The last motivation by Iredale (2001) is the demand for highly skilled workers by the industry, as employers are the main actor behind the selection and the movement of skilled workers. Another driving force behind skilled migration is the nature of

source and destination. With this, Iredale (2001) means it is in the nature of some highly educated workers to move from less developed countries to more developed countries, but also vice versa.

Iredale (2001) also identifies five channels or mechanisms that enhance migration flows. These are consecutively the internal labour markets of multinationals, companies with international contracts that send their staff abroad, international recruitment agencies, smaller recruitment agencies with ethnic networks or recruitment via the internet.

The last force behind the migration of highly skilled workers according to Iredale (2001), is about the incorporation of migrant into the destination economy. This incorporation can occur in three different manners. It could be in a beneficial position, in which migrants experience upward mobility in their positions. It could be in a neutral position, in which migrants are incorporated in the market with a normal approach. Or lastly, it could be in a disadvantaged position. In this way, migrants enter the market under unfavourable conditions.

Among the European Union there is growing recognition regarding the need of knowledge workers. A problem is that the European Union, as a whole, does not attract as much knowledge workers as the United States does (Boeri, 2008). With the growing need of competitiveness, the European Union needs to invest in attracting knowledge workers and retaining them within their boundaries. Member countries each have their own programmes that compete with each other in the quest for foreign talent. In October 2009, the Netherlands established a '*Knowledge Migrant Scheme*'. Prior 2009, the Netherlands distinguished knowledge workers according to their wage level. Since 2009, the Netherlands also admitted knowledge migrants without job offers that either had a master's degree or doctorate from a Dutch university or from a non-Dutch higher education institution ranked among the top 150 universities on the Times Higher Education List (Wiesbrock & Hercog, 2010).

The problem that arises when knowledge labour migration flows are analysed at an organizational level, is that SMEs do not have the resources to attract foreign knowledge workers (van Haelst & Emans, p. 7). Too bad, according to Audretsch & Fritsch (2002) & Lengyel (2000), as they see SME development as an essential part of regional competitiveness and innovation. It are the big companies such as Shell and Nuon Vattenfall that have the means and resources to attract and retain the foreign knowledge workers for a longer period of time. This also relates to the '*Human Capital Theory*' as mentioned by Iredale (2001, p. 8-9) and the '*Economy-class passengers*' as mentioned by Mahroum (2000). As their knowledge and skills can be used anywhere in the world, the preference of the foreign workers themselves is aimed at the previously mentioned multinational companies. According to Groot e.a. (2013, p.192), foreign knowledge workers are more interested in working at an internationally oriented organization than any other type of employee. This helps them with getting recognition on their resume and moreover gives them the idea that they are able to integrate quicker into business processes. Harvey (2013, p. 38) typifies this as the 'Beckham' factor. He takes David Beckham as an example, with him having played in four different countries at four different football clubs with exposure. Beckham (in this case the knowledge worker) benefits from the exposure to foreign markets. On its turn, this facilitates his career and personal brand-development.

2.2.2 | Regional effects of the transfer of knowledge and spill-over effects

Key element in innovation is the transfer of knowledge at organizational and individual level. These transfers are strengthened by the continuous flow of knowledge migrants. These flows of

migrants are of utmost importance according to the framework of '*global cities*'. In short, this framework encloses that globalization has caused a rise in '*global cities*' as mobility increased. Global cities are "*significant production points of financial and producer services that make the global economy run*" (NewGeography.com, 2016). Whilst Sutherland & Jordaan (2004, p. 56) acknowledge that highly skilled workers are hypermobile, Sassen (2006), on the contrary, points out that tacit knowledge can only be transferred by geographical proximity. This type of proximity is more likely to create spill-overs between organizations as well as individuals. Tacit knowledge is defined as a "*special type of knowledge and dependant on a shared context.*" It therefore needs to be communicated through direct and interpersonal interaction" (Toubourg, 2011, p.3). Geographic space and location are key determinants in the process of technological change, innovation and with that, knowledge transfer (Audretsch & Feldman, 2003, p. 1). Accordingly, these processes boost the performance of regions and countries to make them more competitive on an ever-increasing global market.

Knowledge transfers are created by flows of knowledge migrants. But these transfer only limit themselves to codified knowledge; "*a type of knowledge that has a universal interpretation.*" But, the loop of efficient knowledge transfer is not only dependent on spatial proximity. There are other forms of proximity that need to be present in a similar way in order to establish efficient knowledge spill overs. Toubourg (2011, p.7) adds that relational, institutional and cultural proximity also provide a context in which tacit knowledge can be transferred and exchanged. The institutional climate therefore is a factor of influence on attracting creative talent and investments, but also on coordinating actions within and between organizations. A stable and constant institutional context causes the nature of knowledge to still be tacit, even when workers change location. Toubourg (2011, p. 14) acknowledges that the organizational environment in which you work matters greatly for your performance and social interaction at the work floor. Thus, working abroad in the same organizational context as before helps workers to settle in business processes and gradually helps them settling in social contexts as well.

2.3 | Knowledge workers and competitiveness advantages of nations and regions

The concept of competitiveness encompasses the performance of a firm, region or country in its ability to sell and supply goods and services in a given market, compared to other actors operating on the same market. However, while this may suggest that competitiveness is based on the cheapest inputs or the largest scale, it is rather based on the ability of those with the capacity to improve and innovate continually. According to Porter & van der Linde (1995) the competitive advantage of firms is not based on static efficiency nor on optimizing within fixed constraints, but on the capacity for innovation and improvement that shift the constraints. As stated, competitiveness is not only seen as a microeconomic phenomenon. On a macroeconomic scale, regional competitiveness is defined by Martin (2016, p.9) as *“a region’s economy’s ability to optimize its indigenous assets in order to compete and prosper in national and global markets and to adapt to change in these markets.”* The following definition by the European Commission (2003, p.21) is used to be able to make a distinction to the two scales: *“Competitiveness at organizational level is typified as microeconomic, whereas national as well as regional competitiveness is defined as macroeconomic.”* The key question in the discussion of national and regional competitiveness is, however: Do nations and regions compete with each other like firms? A difference between both is that firms have the ability to enter and exit markets, whereas regions or nations do not. But, when it comes to attracting creative talent and investments, both regions and nations do compete with each other (Boschma, 2004, p.1002-1005). Hence, national and regional governments have gained interest over the years in upscaling their competitive performance. To do so, governments have first identified the determinants of competitiveness and subsequently adjusted policies that foster these determinants (Kitson e.a., 2010, p. 991).

There is, however, also criticism on the comparison of micro-economic and macro-economic factors considering competitiveness. Krugman (1994) is one of these critics, as he points out three points of discussion:

- It is misleading to make a comparison between organizations and nations. An unsuccessful organization can easily go out of business, whereas there is no equivalent for that at a macro-economic level.
- Organizations compete for market share in which the success of an organization will negatively affect the share of another. On macro-economic level, the success of a nation or region will rather create than destroy opportunities for other countries.
- ‘Competitiveness’ is just another way of measuring productivity. As the growth of living standards is in fact determined by a growth in productivity.

As the last point of criticism from Kruger (1994) states, competitiveness is not really an entity itself. It is a definition that encompasses benchmarking drivers and dynamics of economic success. Therefore it is of great importance to distinguish common physical, economic, social and institutional resources or assets that influence the performance of firms in the region to be able to compare different regions with each other (Turok, 2004, p. 1070). According to Lengyel (2004), the quality of life within a region is determined by its growth of productivity, hence the elements that influence this growth of productivity are of major importance.

When examining theories about regional competitiveness and its growth of productivity, the factor that is reflected in each theory is innovation. Innovation is a key element in the growth opportunity of organizations and the quality of each location. According to Lengyel (2000), innovative activities lead to a better labour productivity. In turn, improved labour productivity

fosters economic development, which means an increase of the regional competitiveness level (Gardiner e.a. 2004, p.1048). As organizations choose to locate in regions where competitiveness is the highest, the extent to which innovation is present matters greatly. Location decisions of organizations in an imperfectly competitive industry are mainly based on two considerations: the cost of market access and growth opportunities as well as the quality and costs of inputs at each location, in which innovation plays a decisive role (Boschma, 2004, pp. 1005-1006; Audretsch e.a., 2012, pp. 589).

2.3.1 | National competitiveness

The ever-increasing interest of the European Union on competitiveness has led to the establishment of a report issued by the European Commission. It is aimed at measuring progress towards cohesion between different European nations and with that, within their regions as well. In the report of 2003, the European Commission distinguishes three main factors that determine competitiveness at a national level; infrastructure and accessibility, human resources and the productive environment. These three factors are explained further. The first factor is infrastructure and accessibility. This concerns the presence and quality of the basic infrastructure like road-, rail- and air-connections, as well as the presence and quality of the technological infrastructure such as ICT, telecom and internet. Secondly, the EU defines the factor human resources. This includes the labour force characteristics, such as productivity and flexibility. As well as management skills, which addresses the level of professionalism, the level of efficiency and the degree of internationalization. Then there is the distribution of the workforce, this concerns the relative amount of high educated people like scientists and engineers. In addition, the participation rate in post-school education, such as tertiary education and vocational training is measured. The last factor within human resource is the quality and presence of educational infrastructure. The last main factor that determines competitiveness at a national level is the productive environment of a country. This consist the following characteristics; the capital availability, the nature of the competition, the extent to which there is an entrepreneurial culture, for example having low barriers to enter its market. The degree of internationalisation is measured by the export and import, the investments and business culture. Then there is the use of technology, which is measured by its application and management. Finally, there is the level of innovation, which is measured by patents, R&D levels, research institutes, universities and linkages between business and academia (European Commission, 2003).

In addition to these national factors by the European Commission (2003, p.2-23), Lengyel (2004, p.5) states that there also are three additional main elements that complete the macro economic factors of competitiveness:

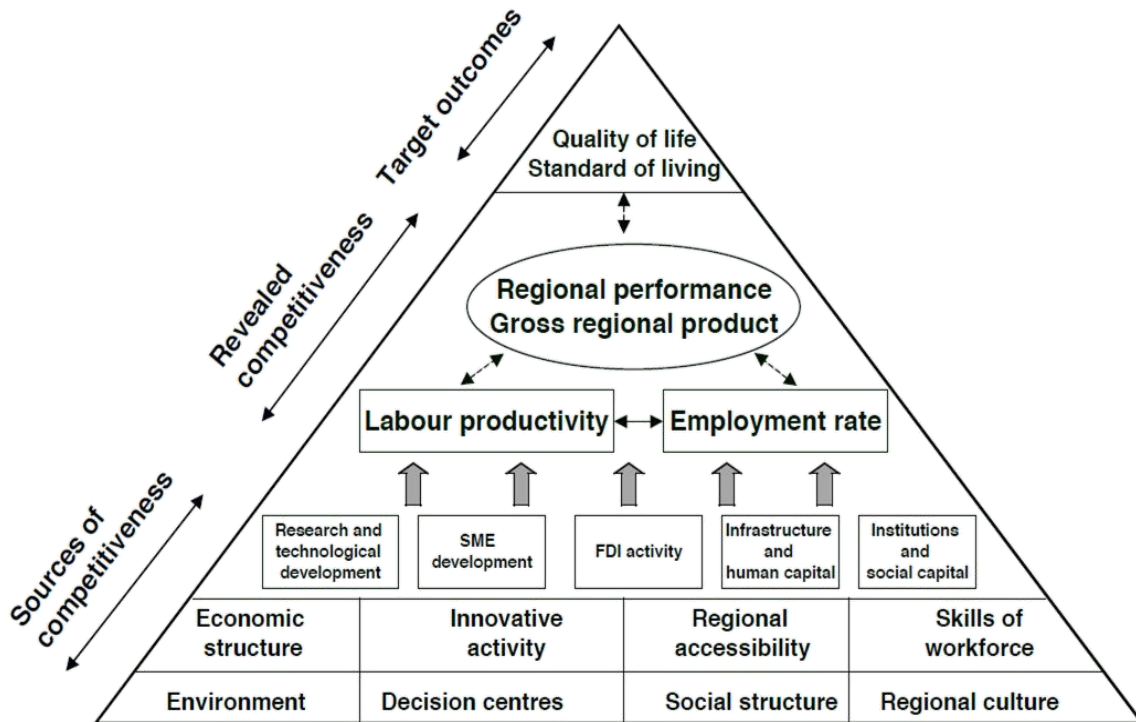
- The GDP per employee: The GDP divided by the number of those actively participating in generating the GDP. This, however, correlates with the productivity as labour force characteristic as mentioned by the European Commission (2003, p. 2-23).
- The employment rate: Whether there is a sufficient amount of jobs available for the working-age population of the region.
- The share of the working-age population from the total population.

2.3.2 | Regional competitiveness

Regional competitiveness is, as earlier stated, related to regional growth. As a region increases its performance on the factors mentioned by the European Commission (2003, p. 2-23) and Lengyel (2004, p.5), it is likely to grow and therefore be more competitive when compared to

other regions. Lengyel has theoretically visualized the process of regional growth in a pyramid form, as visualized below in figure 2.3.2. Knowledge workers can be placed in the sources of competitiveness and therefore be seen as an asset to increase the regional competitiveness.

Figure 2.3.2: Pyramid of regional performance



Source: Lengyel (2004).

With reference to the pyramid in figure 2.3.2, Lengyel (2004) distinguishes five factors that form the base of regional performance, namely:

- **Research and technological development:** Investments in R&D and technology foster innovations, as mentioned by the European Commission (2003, p.2-23) in the definition of its productive environment. In turn, innovations effectuate an increase in productivity and employment growth. Therefore innovations are seen as a main driver of an increased performance of a regional economy (Boschma, 2005).
- **SME development:** Small and medium companies influence productivity level and employment in a positive way, as they are the ones to bring new ideas to the market. Schumpeter typifies this as 'creative destruction'. Old processes in organizations are being renewed by introducing more effective processes. This causes organizations to keep innovating which creates regional development (Audretsch & Fritsch, 2002)
- **FDI activity:** Foreign direct investments create regional employment growth. Also, local companies and entrepreneurs can benefit from knowledge- and technology spill overs. FDIs can therefore have a big effect on economic development (Guimon & Filippov, 2012).
- **Infrastructure and human capital:** Potential clients and suppliers can be reached with sufficient physical and technological accessibility (European Commission, p.2-23). Human capital encompasses the skills obtained by working experience and education. These skills lead to a more efficient workforce and with that a higher production per capita. Because of this, it is assumed that regions with a great amount of knowledge workers reach the highest labour productivity (Davidsson & Honig, 2003, p. 309) & European Commission 2003, p. 23-3).

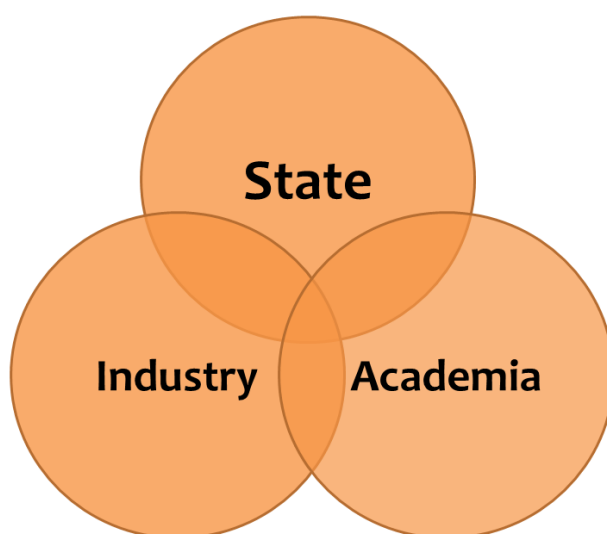
- **Institutions and social capital:** To achieve economic prosperity, an efficient cooperation among existing institutions and companies is required. A higher level of social capital contributes to this to this cooperation between companies and public institutions through the increase of trust, reliability and readiness to cooperate (Gardiner e.a., 2004).

These five factors influence the labour productivity and the employment rate. These two factors combined determine the regional performance and the gross regional product. Subsequently, the regional performance determines the quality of life in that given region. So, in conclusion of the Pyramid of Lengyel (2004), to achieve a higher quality of life, the region can adjust factors in the 'sources of competitiveness' to increase the 'revealed competitiveness' (Gardiner e.a. 2004). As stated earlier, knowledge workers can provide their expertise in the 'sources of competitiveness' of the region and this way the region benefits from their knowledge.

2.3.3 | Triple helix and open innovation climate

The Dutch government has drafted policy using the theory of the triple helix approach, hence the theoretical concept of the triple helix approach is featured in the research. The triple helix approach was introduced in the 1990s by Etzkowitz (1993, p.8) and Etzkowitz & Leydesdorff (1995, p. 16). In short, the triple helix approach deals with a transition of factors influencing the knowledge economy. The transition has to do with a shift from a solely industry-government dyad to a relationship between the industry, government and academic institutions as well (Stanford, 2012). The triple helix approach should therefore benefit all actors involved and is visualised in figure 2.3.3. Compared to the previous situation, academic institutions have gained a more prominent role as a regional innovation organiser. In addition, the presence of a university is not only important for enhancing research. The students also have the potential to generate new ideas, take on new roles as entrepreneurs and therefore contribute to the regeneration of the region. Having a university in a region may therefore increase the competitive advantage of a region compared to regions that do not have this privilege (Ranga e.a., 2008, p. 700).

Figure 2.3.3: Triple helix model



Source: Etzkowitz (2001)

The state and the industry have also gained responsibilities within the triple helix approach. According to Etzkowitz (2001), the industry does no longer only take the role of sourcing and initiating productive activities. The triple helix approach has caused the industry to also do research, provide training at higher levels (e.g. PhD programs) and facilitate start-ups. Due to the triple helix approach, the government has to cope with extra responsibilities as well. Next to establishing societal rules, the government must now also: encourage collaboration between different actors through public actions, funding and programs, provide venture capital for start-ups and act as a public entrepreneur. A successful example of a triple helix case in the Netherlands is the 'Techniekpact 2020'. This involves a regeneration of the technical industry in the Netherlands. A more elaborate explanation of this pact is provided later on in chapter 3.

The size of an organization determines the extent to which innovation is present. Ranga e.a. (2008) have analysed the effect of a triple helix approach at the level of SMEs. These smaller organizations in particular deserve attention, as there are some characteristics that are of influence on their innovativeness. Large firms are generally seen as firms that profit from economies of scale. They take less risks and also have a better access to financing. On the contrary, small firms have informal control, are more flexible and have better internal communication channels. Accordingly, SMEs have the ability to exploit spill overs from research activities more efficiently than large firms.

The triple helix approach causes an innovation climate in which all actors, the state, the industry and academic institutions, are actively involved. This climate is also referred to as an 'open innovation climate'. Chesbrough & Bogers (2014, p. 7) define an open innovation climate as "*the use of inflows and outflows of knowledge to accelerate innovation using financial and non-financial mechanisms in line with the organization's business model.*" In the framework of open innovation, there also is a difference between inbound and outbound innovation. Inbound innovation refers to external knowledge that is used for internal use, whilst outbound innovation refers to the internal knowledge that is exploited external (Huizingh, 2010, p. 3).

When an open innovation climate is compared to a closed innovation climate, several advantages of an open innovation climate can be discovered. First of all, open innovation increases the costs and the complexity of technologies. Due to this increase, companies are not able to facilitate every process of innovation in-house. That means firms have to combine their knowledge and cooperate in order to innovate new technologies. Secondly, open innovation causes the convergence of technologies. Due to the fact that firms have to cooperate to be able to innovate, new collaborations between different industries establish, such as ICT, biotech, nanotech, cognitive sciences and robotics. Thirdly, the value chains of companies are extended and are more complex. This larger value chain will result in more outsourcing and offshoring. Lastly, open innovation has caused a rise in (big) data science, which drives new technologies and new business models.

The exact opposite of the open innovation approach is the closed innovation approach. Although very few firms follow a closed innovation approach, Huizingh (2010, p. 1) and van der Meer (2007, p.196) have distinguished the following differences between open and closed innovation in table 2.3.3:

Table 2.3.3: Difference between closed and open innovation principles.

Closed innovation principles	Open innovation principles
The smart people in our field of work for us	Not all the smart people work for us. We need to work with smart people inside and outside your company
To profit from R&D, we must discover it, develop it and ship it ourselves	External R&D can create significant value; internal R&D is needed to claim some portion of that value
If we discover it ourselves, we will get it to the market first	We don't have to originate the research to profit from it
The company that gets an innovation to the market first will win	Building a better business model is better than getting to market first
If we create the most and the best ideas in the industry, we will win	If we make the best use of internal and external ideas, we will win
We should control our innovation process, so that our competitors do not profit from our ideas	We should profit from others' use of our innovation project, and we should buy others' intellectual property whenever it advances our own business model

Source: van der Meer (2007, p. 196)

Setting up an effective an open innovation climate is a delicate task to fulfil. Too much open innovation can damage firm performance, whilst too less open innovation can cause a lock-in (Boschma, 2004, p. 1006). The effectiveness of an open innovation climate is a rather multidimensional construct. It does not only deal with the process of lower costs, a shorter time to the market and more sales. The framework of open innovation also encompasses the extent of innovativeness, the number of innovations and (non-)financial benefits (Huizingh, 2010, p.4). However hard to measure, these effects lead either to short or long-term strategic consequences. Leading up to these consequences, an organization has to take risks. These risks are also an integral part of an open innovation climate. Shifting the focus from exploiting resources that lay outside the company's market may disturb the organizational focus at the expense of its customers.

The theories that are treated in this chapter are used as the framework for the continuation of the research. The more in depth literature that will be used in order to give answer to the sub-questions, will be dealt with in the corresponding chapter of the sub-question.

3. | General backgrounds of Europe and the Netherlands

As the previous chapter forms the framework of the research concerning the primary literature, this chapter forms the framework of the research concerning the secondary literature and deals with the general backgrounds in Europe and the Netherlands. Hereby the cultural background of the Netherlands will be compared with its main competitors based on the Hofstede dimensions. Then, the policies regarding human capital in Europe and the Netherlands will be elaborated. It will then continue with a descriptive part on how the EU copes with increasing interest on human capital and how this can be improved. This analysis and descriptive part will also be conducted for the Netherlands in a more elaborative way, mainly because this research is focused on the Netherlands and its organizations. The chapter will continue with an overview of the Dutch top sector policy, which resulted in a joint human capital agenda. Lastly, this chapter will end with the upcoming challenges of the Netherlands.

3.1 | Cultural backgrounds

Foreign knowledge workers come from very diverse societies with their own cultural values. These cultural values consist of the values and patterns of thinking that parents have transferred to their children, teachers to their students and so on. Hence, culture is reflected in the meanings people attach to various aspects in life. Hofstede (2011, p. 3) defines culture as *“the collective programming of the mind, which distinguishes the members of one group or society from those of another.”* To be able to identify and compare the differences between the cultural backgrounds of the knowledge workers, the Hofstede dimensions will be used (Hofstede, 2011; Hofstede, et al., 2005). Hofstede got access to a large database about values and cultural related sentiments from people who worked at IBM. This database consists of over 100.000 questionnaires and data from over 50 countries. While the database was very confusing at individual level, Hofstede found correlation between the survey items when looking at country level. Based on this correlation, Hofstede developed six dimensions to identify the cultural differences between societies which will be introduced below (Hofstede e.a., 2011).

- *Power distance*

Power distance focuses on the degree to which the less powerful members of organizations and institutions accept and expect that power is distributed unequally. A high power distance indicates that inequalities of power and wealth are accepted practices and have been allowed to grow. Power distance tends to be higher for East-European, Latin, Asian and African countries and lower for Germanic and English-speaking Western countries.

- *Uncertainty avoidance*

Uncertainty avoidance indicates to what extent a culture programs its members to feel either uncomfortable or comfortable in unstructured situations. Unstructured situations are novel, unknown, surprising, and different from usual. High uncertainty avoidance indicates a structured, rule-oriented society that institutes rules, regulations, and controls in order to reduce the amount of uncertainty. The uncertainty avoidance tends to be higher in East- and Central-European countries, in Latin countries, in Japan and in German speaking countries and it tends to be lower in English speaking, Nordic and Chinese culture countries.

- *Individualism*

The individualism dimension focuses on the degree the society reinforces individual or collective achievement and interpersonal relationship. A highly individualistic society indicates that everyone is only expected to look after themselves and their immediate family. On the opposite, a low individualism dimension indicates a more collectivist society where there are strong ties between individuals. These cultures reinforce collectives where everyone takes responsibility for fellow members of their group. Individualism tends to prevail in developed

and Western countries, while collectivism prevails in less developed and Eastern countries; Japan takes a middle position on this dimension.

- *Masculinity*

The masculinity dimension measures the degree to which the society values masculine values like assertiveness, performance, success and competition prevail over feminine values like the quality of life, maintaining warm personal relationships, service, caring, and solidarity. Masculinity is high in Japan, in German speaking countries, and in some Latin countries like Italy and Mexico; it is moderately high in English speaking Western countries; it is low in Nordic countries and in the Netherlands and moderately low in some Latin and Asian countries like France, Spain, Portugal, Chile, Korea and Thailand.

- *Long-term orientation*

Societies with long-term orientation cultural properties are more oriented towards future rewards; hence these societies can be identified by characteristics such as perseverance and thrift. Societies with short-term orientation are characterized by values relating to both the past and the near future. In these societies the respect for tradition, preservation of reputation and the fulfilment of social obligations are very important. East-Asian countries are very long-term oriented. These countries are followed by Eastern- and Central-European countries. A medium term orientation is found in South- and North-European and South-Asian countries. The regions with a short-term orientation are the USA, Australia, Latin American, African and Muslim countries.

- *Indulgence*

The indulgence dimension measures to what extent a society allows gratification of basic and natural human desires related to enjoying life and having fun. A low score on the indulgence dimensions that a society is more restrained. In these societies gratification of needs is regulated by strict social norms. The regions with a high score on the indulgence dimension tends to prevail in South- and North-America, Western-Europe and in parts of Sub-Sahara Africa. Regions in Eastern-Europe, Asia and the Muslim world tend to be more restraint. Mediterranean Europe takes a middle position on this dimension.

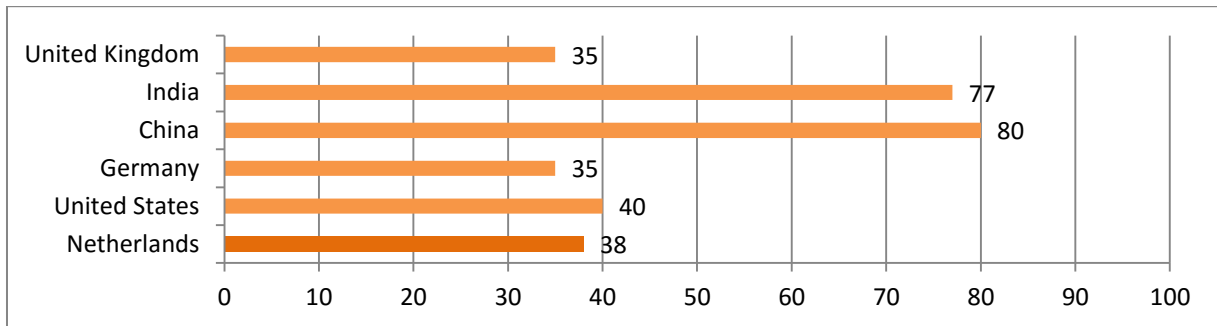
Based on the six dimensions, the cultural background of knowledge workers from different countries can be identified and argued. This way, discrepancies or remarks between societies, based on cultural differences, can be explained.

3.1.1 | Cultural characteristics of the Netherlands

When it comes to the cultural characteristics of the Netherlands, the Netherlands has a long history of social tolerance and is generally regarded as a liberal country. Important factors that contribute to this liberal image are having legalized abortion, prostitution, euthanasia and maintaining a progressive drugs policy. The Netherlands was also the world's first country to legalize same-sex marriage (BBC.com, 2013).

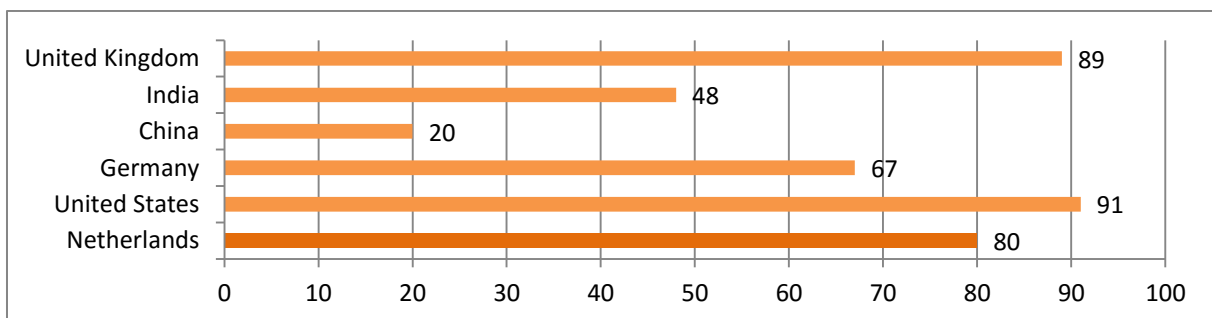
In order to be able to compare the FKWs cultural background with the Netherlands' cultural background, the cultural characteristics of the Netherlands will be analysed. To rate and identify the cultural characteristics of the Netherlands and to be able to compare them to other countries, the earlier mentioned Hofstede dimensions are used (Hofstede, 2011). To put the scores of the Netherlands in perspective, the cultural dimensions of China, Germany, India, the United Kingdom, and the United States are also retrieved. These countries have been chosen as comparison because they either are a main competitor of the Netherlands or an important supplier of knowledge workers in the Netherlands (Groot et al., 2013).

Power distance



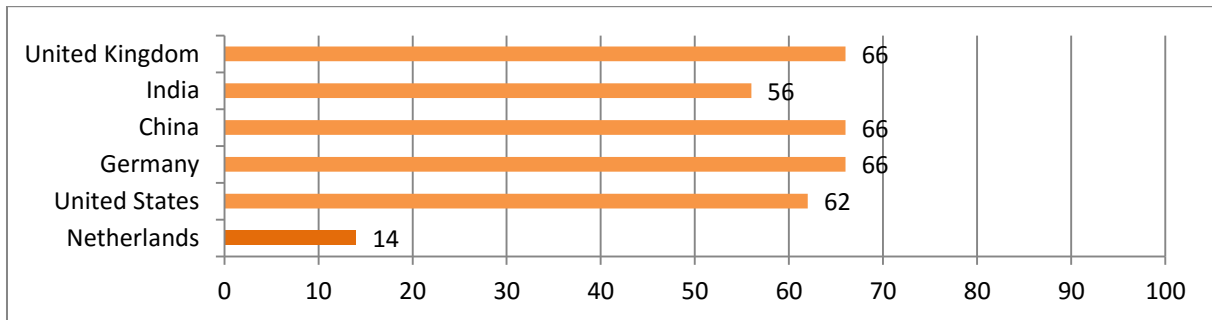
According to Hofstede's cultural dimensions, the Netherlands scores 38 on the power distance dimension, which indicates that power is rather decentralized. One can identify this in the Netherlands by the fact that people like to be independent: Dutch people like to give their opinion. In addition, the rather low power distance in the Netherlands also indicates that Dutch people expect that they all have equal rights. This is reflected in the non-hierarchical working environment; this is shown in the attitude and accessibility of superiors. This contact is informal and on a first-name basis. It also indicates that employees expect to be consulted in a direct and participative manner (Hofstede, 2011). When compared to the competitors, it is notable that those countries have almost equal scores on this dimension. On the other hand, India and China have a high score on power distance. This means that people accept social inequalities and that they are obedient to formal power. Due to this difference, people from India and China may have trouble adjusting to the more equal society in the Netherlands.

Individualism



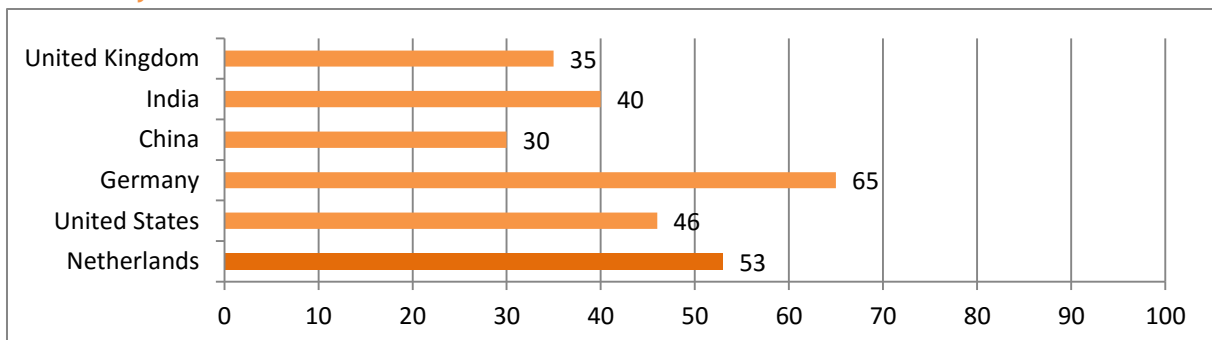
The Netherlands scores 80 on the Individualism dimension, which makes it a rather individualistic society – only the United Kingdom and the United States have a higher score. This generally means that the Dutch prefer a loose social framework in which everyone is expected to take care of themselves. In a Dutch working environment, the high score on individualism can be recognized by the focus of the management on managing individuals. While in China and India, the focus will be most likely on the group. The relationship between the employer and the employee in the Netherlands is a contract based on mutual advantage. Loyalty should not be of significant importance since hiring and promotion decisions are supposed to be based on merit only (Hofstede, 2011). Whereas China is the most collectivistic country and the Chinese people act in the interest of the group rather than the individual. This makes them more loyal to their boss and to their colleagues.

Masculinity



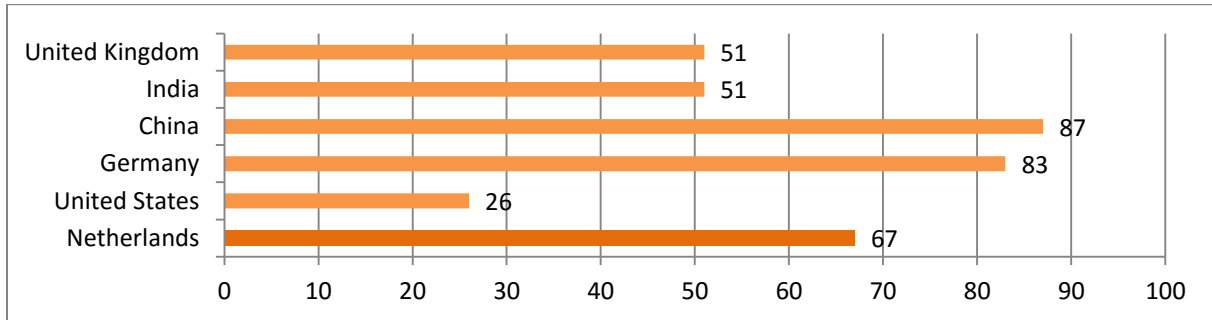
The Netherlands scores 14 on the masculinity dimension and is therefore a feminine society. This indicates that people rather do what they like, than that they want to become the best in what they do. This mind-set is more common in the more masculine countries like the United Kingdom, China and Germany. In the Netherlands it is important to keep balance between life and work, while career is more important in the other countries. In the Netherlands, managers strive for consensus and employees value equality, solidarity and quality in their working lives. In the more masculine countries, authority from a manager is higher valued. Conflicts in the Netherlands are resolved by compromise and negotiation and Dutch are known for their long discussions until consensus has been reached, while conflicts in masculine countries are settled through a tougher approach.

Uncertainty avoidance



Compared to the other countries, the Netherlands scores quite high with 53 on the uncertainty avoidance dimension. Countries like Germany and the Netherlands with high uncertainty avoidance are very strict to the rules and are intolerant of unorthodox behaviour and ideas. In these cultures is an emotional need for rules and laws. Due to these strict rules the society values precision and punctuality. As a result of these boundaries, innovation may be resisted. While the countries with a lower score, like China and the United Kingdom, are more flexible to rules and laws and show a more pragmatic attitude. Therefore, countries with lower uncertainty avoidance tend to be more entrepreneurial and adaptable. Consequently, the Netherlands may seem bureaucratic to foreign knowledge workers from China, the United Kingdom or India.

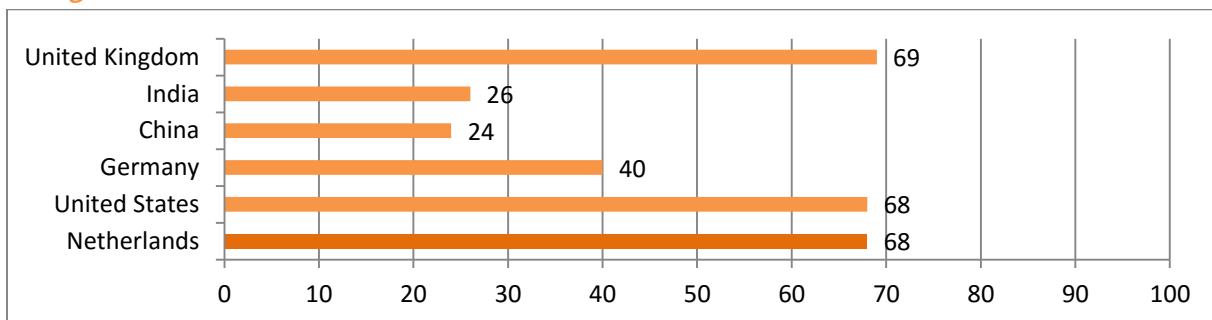
Long term orientation



The Netherlands, along with China and Germany, has a high score on the long-term orientation dimension, which means that these cultures have a pragmatic nature. These cultures show a strong propensity to save and invest, thriftiness and perseverance in achieving results.

The United States have a short-term orientation, this is reflected in the fact that employees and employers strive for quick results within the work place. To achieve this, people are more easily fired from their jobs than in countries with a higher long-term orientation like the Netherlands and Germany (WEF, 2016).

Indulgence



People who live in societies classified with a high score in indulgence generally exhibit a willingness to realize their impulses and desires with regard to enjoying life and having fun. With a high score of 68 and 69, the cultures of the Netherlands, the United States and the United Kingdom are clearly indulgence orientated. These cultures possess a positive attitude and have a tendency towards optimism. In addition, they place a higher degree of importance on leisure time, act as they please and spend money as they wish. On the other hand, the lower score of China and India indicates that these societies are more restrained. They do not put much emphasis on leisure time and control the gratification of their desires. People with this orientation have the perception that their actions are restrained by social norms.

3.2 | Policy backgrounds in Europe

In terms of producing scientists and engineers, China and India are the two leading countries. China produces four times as many scientists and engineers as the United States of America (USA). Recent trends have also made India one of the leading sources of technological talent. This includes numbers of young professionals that obtained their degree in the USA and the EU (Bartlett, 2007). Thus it is not surprising that the USA is seen as the main competitor of Europe in the global war on talent. Not only does the USA offer educational institutions of high levels, also the higher wage levels matter in the decision of foreigners to obtain a job in the USA. Benchmarking Europe is therefore one of the most rational ways in comparing it to its main competitor, the USA.

Table 3.2: Statistics of the EU versus the USA.

	European Union	United States of America
Surface area (in km²)	4.325.000	9.857.000
Population (in units)	505.670.000	321.418.820
Population density (per km²)	120	35
GDP in 2014 (in euros)	13.957.764.400.000	15.703.824.054.765
GDP per capita in 2014 (in euros)	33.420	49.201

Source: World Bank (2016), OECD (2016) & XE.com (2016) with exchange rate 1 USD = 0.905213 EUR

The most noticeable statistic from the table above is the GDP per capita. The brightest individuals may therefore choose for a career in the USA when they prefer higher wages. Also, when one takes the reputation of universities into account, the USA scores significantly higher on the Times Higher Education List (2016). 13 out of the top 20 universities on the list are based on American soil. And generally known, loads of students choose a career in the country they studied. Based on these figures, the USA definitely has advantages in attracting foreign talent when compared to the EU. Therefore, the EU has to pull the strings in order to increase its competitiveness. So what has the EU done over the years?

The European Union adopted the 'Lisbon Strategy', named after the European Council of March 2000. The strategy is aimed at economic growth and social cohesion. European member states reached consensus about the value of human capital in economic growth and cohesion. First of all, the EU recognizes that an increased value of human capital has a significant influence on productivity growth. Recent research has shown that an extra year of average school attainment increases the level of productivity by around 5% immediately and a further 5% on a long term. Second of all, the EU member states agreed that human capital is a main driving force of technological change and diffusion. Human capital is a substantial driving force of new technologies and the enhancement of existing production processes (de la Fuente & Ciccone, 2003, p.3). More highly skilled workers results in more human capital and vice versa. Therefore, an increase on the amount of human capital goes hand in hand with the migration with high-skilled workers. Where knowledge flows, knowledge is present. Proper management on high-skilled migration therefore is of key importance for the European Union (Kahanec & Zimmermann, 2010, p. 1).

Sufficient immigration policies have the potential to decrease labour market shortages where necessary. A survey conducted by Kahanec & Zimmermann (2010) has revealed that immigration policies in the European Union rather hinder than foster low-skilled labour migration (65.2% of the low-skilled respondents experienced a hinder or strong hinder on

labour migration). When comparing these statistics to high-skilled respondents, it becomes clear that the European Union puts the emphasis making it easier for high-skilled migrants. Only 39.6% experienced a hinder or strong hinder on labour migration among high-skilled migrants (Kahanec & Zimmermann, 2010, p.5).

The European Union did not have a consistent policy regarding high skilled labour migration over the years. Only recently, with the Lisbon strategy as cornerstone, the EU has realized that enhancing labour mobility solves problems of labour shortages. The EU addresses the labour shortages in two ways. The first one is free labour mobility between EU member states. This channels emigrants to places where their skills are most productive. The second possibility is the inflow of labour immigrants outside the EU. Though free mobility within the EU is not the same as people moving from state to state in the USA. Especially high-skilled migrants face administrative burdens. This includes lengthy and complex procedures in obtaining health insurance and social-security benefits. Consequently, some countries have established special trajectories for high-skilled immigrants from other EU member states. For example, Germany's so called 'Arbeitsmigrationssteuerungsgesetz' causes no obligation to have a work permit for high-skilled migrants with recognized qualifications (Kahanec & Zimmermann, 2010, p.6).

It is essential to make it possible for knowledge workers to have a smooth transition from their host country to their new destination. It is the task of the EU to minimize the hurdles that can possibly be encountered. As the EU has to deal with the differences between its member states, creating a coherent labour migration policy is a trajectory that comes with lots of hurdles. Demand of labour can swing between the highs and lows in the future and is difficult to predict. But it still is important as the EU to take precautionary steps in the process of high-skilled labour migration (Holtstag e.a., 2012, p. 30).

One of the steps that have to be taken by the EU is to improve the coordination of social security rights. The differences in laws and regulations between EU member states is regarded as one of the major hurdles in high-skilled migration. In creating convergence between member states, it is recommendable to have as little discrepancies between rules on social security. The mobility of pension schemes is still subject of improvement. This stimulates the movement of high-skilled workers between EU member states.

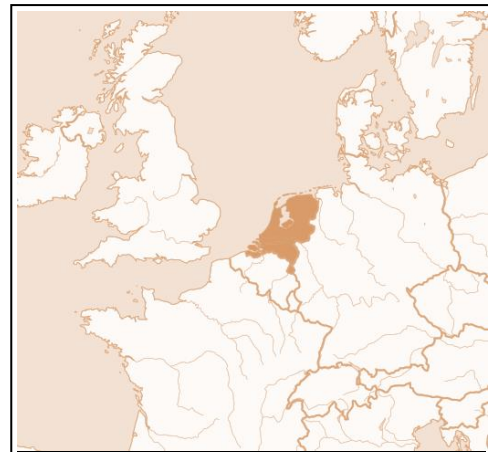
Holtstag e.a. (2012, p. 30) advises the EU to stress the importance of integration of foreign knowledge workers in its different member states. Currently, the EU started an integration programme focussed on the inflow of knowledge workers from outside. But according to Holtstag e.a. (2012, p. 31), also EU-workers have the need to get assistance in moving between different EU member states.

In order to compare the performance of the different EU member states, Ederer e.a. (2015) established a Human Capital Index. They distinguished various factors that determine the power of human capital presence: endowment, utilisation, productivity and demography and employment. *Endowment* is a measurement of the costs of all types of education and training in a country per person active in the labour force. *Utilisation* measures the amount of human capital that is actually deployed. *Productivity* is measured by dividing the GDP by the human capital deployed by a country. *Demography and employment* looks at the existing demographic, economic and migratory trends in order to estimate the number of employed people by the year 2030. Ederer (2015) also estimates that Europe will see more divergence than convergence in terms of Human Capital as policies will remain unchanged.

3.3 | Policy backgrounds in the Netherlands

To describe the situation on foreign knowledge migration and knowledge workers, it is important to first distinguish the background of the Netherlands. Where is the country located, how many people are there, how many of these are foreign knowledge workers and what is its economic situation?

The Netherlands is a small country, located in Western-Europe. The Netherlands borders Germany to the east, Belgium to the south and the North Sea to the west and north. Due to the location on the border of the North Sea and the predominant southwest wind direction, the Netherlands has a temperate maritime climate. This causes cool summers and moderate winters. Rainfall is distributed throughout the year, with a dryer period from April to September. The Netherlands' largest and most important cities are Amsterdam, Rotterdam, The Hague, Utrecht and Eindhoven. It has two major 'mainports'. The port of Rotterdam is the largest port of Europe and the airport of Amsterdam, Schiphol, is the fifth largest airport of Europe.



Inhabitants	16,9 million
GDP	\$866,4 billion
GDP per capita	\$51.373
World Bank (2015)	

Throughout history, the Netherlands has always been focused on foreign regions. In the golden age of the Netherlands, the Dutch introduced and invented the stock market by trading the merchandise through the Dutch East India Company. The Netherlands is also a founding member of the European Union, the OECD and the World Trade Organization. Therefore, the strong international connectivity has always been a unique selling point of the Netherlands.

Economic characteristics of the Netherlands

According to the World Economic Forum (2016), the Netherlands has a prosperous open economy that heavily depends on foreign trade. As the fifth-largest exporter of goods in the world, the Netherlands occupies a prominent position when it comes to world trade. In 2014, the Netherlands exported goods worth a total of almost 672 billion US dollars, which is about 3.6% of the world's total exports. As well as being a major exporter, the Netherlands also imports large quantities of goods: \$588 billion worth in 2014. With about 3.1% share of the global total, the country is the eighth largest importer of goods in the world. With \$157 billion in 2014, the Netherlands is also a significant importer of commercial services, which placed the Netherlands seventh in the world rankings (Holland Trade & Invest, 2016).

Currently, the Netherlands has the 17th largest economy of the world (World Bank, 2016). The most notable properties of the Dutch economy are the stable industrial relations, the low unemployment rate and the low inflation rate. In addition, the economy also greatly benefits from the excellent infrastructure, which is ranked as the 3rd best of the world (WEF, 2016). The open and efficient goods market of the Netherlands has a significant role in its GDP per capita of \$51.373. These inhabitants are part of one of the most sophisticated (5th) and innovative (8th) economies in the world (WEF NL, 2016).

Industrial activity is predominantly in food processing, chemicals, petroleum refining, high-tech, financial services, creative sector and electrical machinery. The highly mechanized agricultural sector employs no more than 2% of the labour force, but provides large surpluses for the food-

processing industry and for exports. This makes the Netherlands one of the wealthiest countries in the world, but it lacks on its financial market development (31st) (WEF NL, 2016).

The Dutch financial sector has suffered as a result of the global financial crisis in 2008, mostly due to the high exposure of some Dutch banks to US mortgage backed securities. To prevent more losses, the government nationalized two banks in 2008 and injected billions of dollars of capital into other financial institutions. After 26 years of uninterrupted economic growth, the Dutch economy, highly dependent on an international financial sector and international trade, shrunk by 3,5% in 2009. To recover, the government sought to boost the domestic economy by accelerating infrastructure programs, offering corporate tax breaks for employers to retain workers, and expanding export credit facilities. The stimulus programs and bank bailouts resulted in a government budget deficit of 5,3% of GDP in 2010 that contrasted sharply with a surplus of 0,7% in 2008. The government of Prime Minister Mark Rutte began implementing austerity measures in early 2011, mainly reducing expenditures, which resulted in an improved budget deficit in 2011. However, in 2012 tax revenues dropped, GDP contracted, and the budget deficit deteriorated. In 2013, the government budget deficit decreased to 3.3% of GDP due to increased government revenue from higher taxes. However, spending on social benefits also increased, due to a rise in unemployment benefits and payments for pensions. The high unemployment rate and tax increases have contributed to continued decreases in household disposable income, causing the Dutch economy to contract (CIA fact book, 2016).

The participation of high-skilled migrants in the total Dutch labour force is as low as 2.4%. These statistics are significantly lower when comparing the same numbers to the United Kingdom and Sweden (Kremer & Schrijvers, 2013, p. 74). The most obvious solution for decreasing labour shortages is increasing the number of students in that particular industry. Yet there will always be a need for foreign knowledge workers. The Dutch educational system cannot instantly react to developments in the labour market and some skills can only be obtained 'on the job'. Besides, organizations are increasingly searching for specialists. They could for example have specific knowledge about growing markets outside the EU (Kremer & Schrijvers, 2013, p. 74).

When looking at the scores of the Netherlands on each of the four factors mentioned earlier by Ederer (2015), Human Capital Utilisation is of an exceptional level. When comparing it to the other countries in Europe, the Netherlands is positioned first in how much of the human capital in the economy is represented in the active workforce. Ederer (2015) explains this as 'the Dutch cure'. This principle is further explained in figure 3.3.1 on the next page.

Figure 3.3.1: Human Capital Utilisation explained by ‘The Dutch Cure’ principle.

The Dutch Cure

The case of the Netherlands illustrates how Human Capital Utilization can increase significantly – if society is ready to take the necessary steps. Over the years, Dutch policy makers and social partners have cooperated to overcome prejudice against new entrants and immigrants, retain mature workers in the workforce and make it easier for companies to hire disabled workers. Not is the country resting on its laurels. Increasing quantity and quality workforce participation is still a top policy priority and enjoys cross-partisan consensus. The following are recent initiatives to make best use of the economy's existing resources:

- Cum l'Oude Prize – a national award for companies with age-friendly employment practices.
- Age Mirror – a questionnaire and check list for employers to create awareness of and remove prejudices towards older employees.
- Life Course Saving Scheme (LCSS) – allows Dutch citizens to save up to 12% of their pre-tax earnings for funding up to three years of future non-employment such as educational sabbaticals or parenting periods.
- Expertise Centre for Age and Society (LBL) – an information collection and distribution centre addressing age policy and age discrimination.
- 2004 Social Agreement – unions agreed to abolish all early retirement schemes.
- Revamped disability insurance – employers have to adapt the work environment so that employees with a disability of up to 35% can work.

Source: Ederer (2015)

But using the existing human capital is not the only determining factor in attracting foreign knowledge workers. The question remains if the Netherlands is competitive enough in attracting the best and brightest students and workers. To give a general overview of the situation on high-skilled migration and foreign knowledge workers in the Netherlands, it is recommendable to look at some key statistics. From 1987 until now, the Dutch Statistics Bureau has recorded statistics of non-Dutch migrants. In 1995, the bureau started to record more detailed migration statistics, especially labour migrant statistics. Groot e.a. (2013) established a report that indicated about 100.000 foreign knowledge workers in the Netherlands, out of the 600.000 foreign workers in total in 2010. Only a sixth of the total amount of labour migrants can be considered a knowledge worker. This amount is little when compared to Dutch nationals, where one third can be considered a knowledge worker. Table 3.3 illustrates the most important statistics about foreign knowledge workers in the Netherlands.

Table 3.3: Foreign knowledge worker statistics in the Netherlands

	Unit	Knowledge workers		Non-knowledge workers	
		Foreign	Dutch	Foreign	Dutch
Employees	x1	100,645	2,400,762	500,238	3,970,457
Average age	Years	40.5	42.2	38.6	40.4
Hours per week	x1	36.8	35.6	31.2	30.6
Hourly wage	Euros	31.4	28.3	13.7	15.8
Annual wage	Euros	60,920	52,581	22,579	25,213
Share of women	%	34.5	31.2	46.2	53.1
Share of part-time	%	24.0	31.5	55.2	57.6

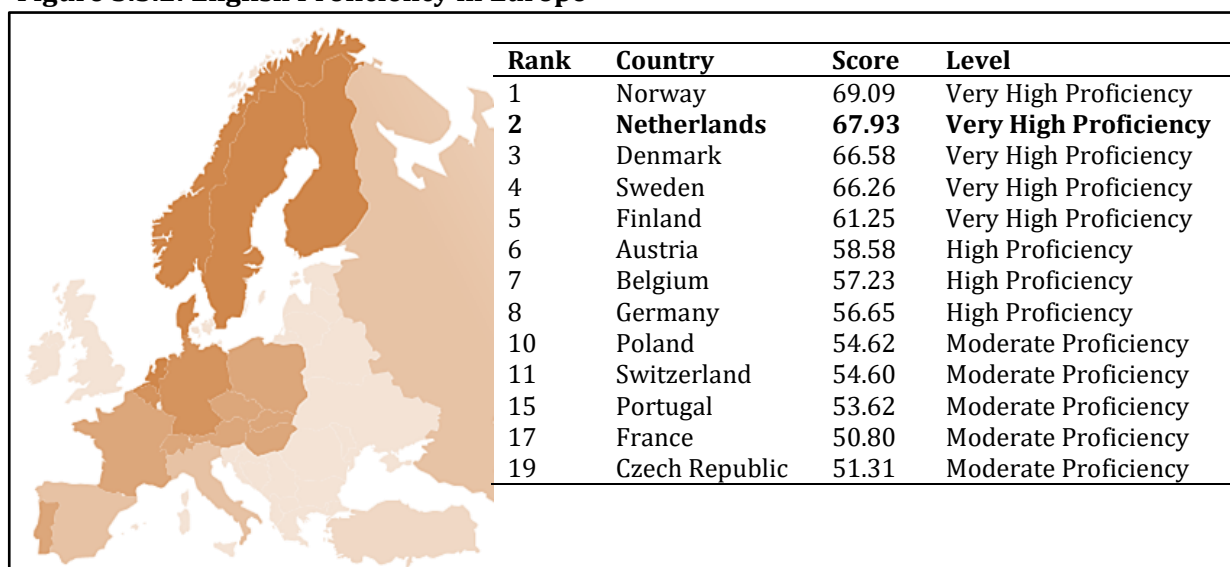
Source: Groot e.a. (2013)

The vast majority of the foreign knowledge workers are employed at international companies. Previous research has also shown that many foreign knowledge workers, especially from non-EU countries work for a company from their home country (Groot e.a., 2013, p.198).

Level of English in the Netherlands

Last but not least, the Netherlands is known for its English proficiency. According to the EF English Proficiency Index 2011, a standardized measurement of adult English proficiency, Europe is remarkably strong in English. As shown in figure 3.3.2 below, especially Norway, the Netherlands, Denmark, Sweden and Finland stand out and score a very high level of proficiency. This is mostly due to the fact that these countries start to learn English at a very young age, have an excellent schooling system and the fact that these countries have English as their first foreign language results in a higher proficiency. The lower score of Germany and France are due to the fact that these countries start learning the English language at an older age and the fact that most of the English-speaking television programs are dubbed into their own language (EF, 2011). When put into perspective, the high level of English in the Netherlands could be a strong pull factor for foreign knowledge workers who are more restrained to learn Dutch or another local language.

Figure 3.3.2: English Proficiency in Europe



Source: EF English Proficiency Index (2011)

3.3.1 | The Dutch top sector policy

With the ever-increasing interest of the Dutch government and policy makers in making the Netherlands as competitive as possible, it is important to stand out in the race on attracting talent. In order to do so, the Netherlands has created the so-called 'top sector' policy.

In addition to the Triple Helix approach, which encompasses all Dutch industries, the Netherlands has also established so-called 'top sectors'. The current Dutch top sector policy was founded in 2010 by cabinet Rutte-1. The policy focuses on the strongest and most competitive industries of the Netherlands and aims to enhance these industries even further through providing financial support for innovative enterprises. These investments allow companies to bring their innovative products and services onto the market more quickly. This will lead to economic growth and the creation of new jobs. To achieve this, the Triple Helix approach is of great importance (Overheid, 2016).

The Netherlands has nine top sectors; horticulture and propagation materials, agro-food, water, life sciences and health, chemicals, high-tech, energy, logistics and creative industries. The

relevant top sectors with strong ties into the beta field will be further analysed and described. These will be the industries that are most dependent on beta-educated employees.

High-tech systems and materials

The HTSM sector develops and produces high-tech equipment for clients all over the world and consists of a number of interconnected manufacturing industries; the machine and system industries, automotive, aerospace and materials. In addition, the ICT and the development of software is not a core activity within HTSM, but also plays an integral part of the sector. In these specific niche markets of the high-tech sector, the Netherlands has achieved a strong position (CBS, 2014). Within the Netherlands, HTSM is the largest sector in terms of turnover and in terms of production. The HTSM sector is also the largest export sector, with an export value of €45 billion in 2012 (CBS, 2014). The government aims to further increase this and reach an export value of 74,6 billion in 2025 (Holland High Tech, 2015). Its innovative features also characterize the HTSM sector. Almost half of expenses in R&D in the Netherlands is done within the HTSM sector.

The high-tech sector in the Netherlands has regional concentrations. A major portion of the HTSM sector is concentrated around the Brainport Region in Eindhoven. There are also concentrations of high-tech companies and universities in the region of Twente and Delft.

Labour shortages have increased a lot over the years in the HTSM sector in the Netherlands. Software engineers, mechanical engineers and physicians are just a few types of professionals that the Netherlands is in need of (van Erp, 2016). The need to attract foreign knowledge workers has also urged the government to increase interest among Dutch students to choose for studies in the technical sectors. A good example of cooperation at Triple Helix level in the Netherlands has for example established the so-called “Techniekpact 2020” (NOS.nl, 2015). This agreement has been confirmed in May 2013 and has several targets that will benefit the technological sector of the Netherlands by 2020:

- The influx of students from high school to university must rise significantly.
- A significant rise in the amount of technology oriented students that actually choose for a job in the sector of technology.
- Workers that are already active in the field of technology must be maintained for the sector and unemployed workers must enrol in the field of technology again (TechniekPact, 2015, p. 4).

Energy

The main interest of the energy sector is to reduce the CO² emission and develop the Dutch energy system into an affordable, reliable and sustainable energy system. In addition, there is also the ambition to develop the Netherlands as the energy hub of Europe. To achieve this, the sector makes use of the present gas in the Netherlands and the excellent gas infrastructure and the optimal location of the Netherlands; with the connection to the North Sea on the Northwest and the efficient ports the Netherlands is very accessible by (Topsector Energie, 2016). These goals combined strengthen the Dutch competitiveness, employment and prosperity. In terms of number of firms and number of employees the sector Energy is a relatively small sector. However, since the energy industry is a very capital intensive industry, the energy sector adds a significant contribution of 5% to the national product (CBS, 2014). Most of this contribution is earned by the export of gas.

Chemical sector

The chemical industry creates raw materials and products that can be found in almost all objects around us. Some examples of these objects are plastics, coatings, dyes and cosmetics. The chemical sector is divided into three subsectors: petroleum processing, chemical industry and the plastic- and rubber industry. The petroleum processing includes all activities around the processing of crude oil, including refining. The chemical industry embraces activities like the manufacturing of industrial gases, chemicals, detergents, artificial fibers and dyes. In addition to the creation of plastic and rubber, the production of tires, tubes, containers and building materials is also considered as the plastic- and rubber industry. The chemical sector produces 8% of the total Dutch national product and is the sector with the highest proportion of innovative companies from all sectors; almost 75% of the companies in the chemical sector claim to be innovative (CBS, 2014).

The Netherlands has a strong chemical industry and will play a leading role in the transition to green and sustainable chemistry. Worldwide there is a demand for clean energy, healthy food, affordable care and dry feet. Netherlands is strong in finding solutions to these major issues. They offer growth opportunities our country on the world. That the Netherlands is one of the leading countries in this theme is apparent from the fact that nineteen out of the twenty-five largest chemical companies in the world have production locations in the Netherlands. In addition, the chemical sector has many smaller businesses, including innovative start-ups which have their origin in university research (Topsector chemie, 2016).

Agro & food

The core of the Agro & food sector consist of the production of foods and the processing of these foods. When one thinks of the production of foods, one must think of farmers who are active in the production of crop or livestock. The processing of these products like meat, dairy products, sugar, fruit and vegetables is the other major sector within the Agro & Food sector. The innovation within Agro & Food focuses primarily on the processing of food products. In 2014 the Agro & Food sector provides about 6% of the production and 3% of the added value of the Dutch economy and is after HTSM and Chemicals the largest sector in terms of production (CBS, 2014). That the Dutch Agro & Food sector is highly sophisticated is evident from the fact that only 2% of the labour force works in this sector, and yet the Netherlands is after the United States the second largest exporter of Agro & Food. Apart from this remarkable efficiency rate, it also provides stability in the Dutch economy and can therefore be seen as a very robust engine for the economy (ELI, 2014).

The Dutch suppliers in the Agro & Food sector are very innovative and do often have a globally leading position in their field of expertise. Some examples are firms in the food ingredients like DSM, CSM and CSK, firms in slaughter lines like Stork and firms that are active in crop protection like Koppert (ELI, 2014).

Human capital agenda of the Dutch topsectoren

To optimally benefit from the different top sectors in the Netherlands, a successful economy cooperation between the mentioned sectors is of great importance. For example, ICT plays an integral role in the technological development worldwide. Hence, the HTSM sector will play an important role in collaboration with other sectors like energy, chemical and agro & food. To reinforce these partnerships the joint human capital agenda is organized. Since each sector has its own hot topics, each sector has established a human capital agenda. This agenda service two main purposes. The first goal is to improve the link between the industry and education, this will

further benefit each top sectors agenda. The second goal is to increase the attractiveness of the different sectors by improving the professional perspective. This resulted, among other things, in the creation of the joint human capital agenda. This agenda includes an analysis of the need for human capital in the different top sectors and emphasises on topics such as 'een leven lang leren', public-private cooperation and the forming of an attractive job perspective.

3.4 | Upcoming challenges

In the upcoming period until 2020, more than 70,000 construction workers, installers, electricians, metal workers, engineers and system analysts will be retiring each year. Although each year the education system provides tens of thousands of fresh skilled young people to take their job, this is not enough. As stated in the introduction, there is a shortage of beta educated people. To be able to compete on a global level and to take advantages of market opportunities, the Netherlands needs more highly skilled workers. They are needed at all levels, because businesses in promising industries, such as energy, horticulture, chemicals, life sciences and health have thousands of challenging jobs for hands-on vocational graduates as well as for talented academic researchers. In recent years, any valuable initiatives have been launched across the regions and across the top sectors. Despite all the existing initiatives and plans, the number of technology graduates is not increasing fast enough. Analyses by the Research Centre for Education and the Labour Market (ROA) show that we will need to produce 30,000 additional technology graduates a year to meet the growing demand for skilled technologists. The Netherlands now needs to expand and pick up the pace. This was the impetus for agreeing on the Dutch Technology Pact (Techniek Pact, 2015).

This requires additional efforts. Education providers, employers, workers, young people, the top sectors, and regional and central government have therefore agreed a national Technology Pact. The Technology Pact unites the ambitions of the existing plans and initiatives, but aims to achieve them more quickly (by 2020) and with increased vigour.

Another upcoming challenge is the fact that the Netherlands has a small market. Compared to its main European competitors, the Netherlands lacks on the economic benefits that are associated with a large population and a high density. As a result, the regions in the Netherlands have less economic power and have more difficulty with keeping up with the competitors (PBL, 2014).

To compensate for the lack of urbanization benefits, the PBL (2014) report advises to strengthen the clusters of specific top sectors, to even further specialize. A second advice is to improve the infrastructure between Dutch regions. By doing so, the connectivity and the network capabilities increase and the regions could benefit from each other by borrowed size. The last advice from the PBL rapport is to enhance specific assets and resources in the region, such as private knowledge and universities (PBL, 2014). The human capital agenda can hereby be used in order to tackle topsector transcending challenges.

4. | Method

To gather data for the research a mixed methods design was selected, with a primary focus on the qualitative analysis. Since there is a lack of knowledge about investigating retention factors for foreign knowledge workers, this study is characterized by exploratory features. The research itself is carried out in two phases. In the first phase, the foreign knowledge workers and the decision-making units are interviewed to explore the factors that are of influence on 'coming to' and 'staying in' the Netherlands. The researchers expect to get the most valuable information out of these interviews. In the second phase, the foreign knowledge workers and the decision-making units are asked to fill in a short survey to classify factors. The results will be used in chapter eight to analyse the importance of factors on attraction and retention management and the influence of the personal background of the FKWs. When these two phases are combined, the validity of the study increases with the obtained qualitative and quantitative data.

Relevance of the literature

Chapter two has provided a literary framework on competitiveness, international labour migration and the importance of human capital in a global economy. Chapter three followed up on this by analysing the general policy background of human capital in both Europe and in the Netherlands. It also deals with the cultural characteristics of the Netherlands. At a national level, the researchers provide an explanation of the Dutch topsector policy and how this fosters competitiveness. In order to answer the four research questions of this research, chapter two and three mainly supply background information for the sub-questions.

The first research sub-question is:

"What are the most important factors to attract foreign knowledge workers in the Netherlands according to the literature, the decision-making units and the foreign knowledge workers?"

At a macro-economic level, the literary analysis of chapter two shows that factors on regional competitiveness influence the attractiveness of countries or regions as potential destination for labour migration. When taking a look at the pyramid of regional performance by Lengyel (2004), sources of competitiveness include R&D, infrastructure and human capital, but also institutions and social capital. At an organizational level, this means that potential clients and suppliers can be reached with sufficient physical and technological accessibility (European Commission, p. 2-23). But this also means that organizations can reach out to the foreign pool of knowledge workers more easily when they have the sufficient resources. The level of institutions in a country or region has proven to attract foreign knowledge as well. The reputation of the Dutch universities does not only increase levels of national competitiveness, but also matters greatly in attracting foreign students (EP Nuffic, 2016b). Collaboration between three main actors (organizations, knowledge institutions and the government) is typified as the triple helix approach. These collaborations are aimed at fostering innovation, as well as serving a general purpose: making the Netherlands more attractive as a country for foreign knowledge workers. Chapter two and three supply information on the sub-question on attracting FKWs, but some factors can also be interpreted as important in retention management. This contributes as an informational background for the second sub-question:

"What are the most important factors to retain foreign knowledge workers in the Netherlands according to the literature, the decision-making units and the foreign knowledge workers?"

Chapter 2.2 deals with human capital and forthcoming human capital investment by employers. This includes training and fostering education, knowledge and skills of the employee (Marimuthu, 2009, p. 268). According to figure 2.2, this increases both financial and non-financial firm performance. But as later on discussed in chapter six, this also matters in making employees feel valuable and able to develop. These are factors that matter in retention management of employers.

To increase the readability of the report, the researchers chose to include the specific literature about firm size, as stated in sub-question three, in chapter seven.

The literature on the flows of human capital helps the researchers in categorizing the motivations of FKWs to move to different countries for labour purposes. In the conducted interviews, questions were asked about their motivations to leave their country and come to the Netherlands. Accordingly, section 3.1 deals with the cultural characteristics of the Netherlands. There is a possibility that the perception of feeling at home in the Netherlands as a country is influenced by the cultural background of the FKWs and the extent to which this matches the cultural characteristics of the Netherlands. Not to forget that personal characteristics as age and family situation also play a role in their perception in feeling at home in the Netherlands. In order to further analyse these aspects in chapter eight, the researchers included sections 2.1 and 3.1 in the research. This helps in the understanding of the background of the FKWs and their match to the Dutch cultural values. This literature will also be used in sub-question four, which is analysed in chapter eight.

Chapter three is used as a general background of Europe as well as the Netherlands. Firstly, it defines why human capital has become an increasing topic of interest in Europe and in the Netherlands. It further explains which policy implications have been made on high-skilled labour migration at both European level and national level. It is furthermore emphasized that existing human capital presence is of influence on human capital attraction. To provide an in-depth analysis of what the Netherlands does to be as competitive as possible, the researchers included an elaborate explanation of the Dutch topsector policy. This policy focuses on fostering the competitiveness of the Netherlands and therefore matters for analysing attracting and retention management.

Chapter two has provided literary background information about human capital, global migration flows and competitiveness. Chapter 3 follows up on this by describing policy backgrounds in Europe as well as the Netherlands in specific. It furthermore describes the cultural characteristics of the Netherlands. The remaining chapters of this research give an in-depth analysis of the research questions. The research provides answers by analysing the conducted interviews with DMUs and FKWs and how this corresponds to the literature regarding attraction and retention management. All in all, the research gives answers to the main research question:

“What are the most important factors to attract and retain foreign knowledge workers with a beta background in the Netherlands according to decision-making units of international operating firms, compared to the factors mentioned by the knowledge workers themselves and to which extent do they correspond to the literature?”

Population

The research population consists of all foreign knowledge workers in the Netherlands that are actively working for three years or longer. This distinction of three years is chosen because many foreign knowledge workers travel across the world to do short term projects. In this case, the research is focussed on the foreign knowledge workers that are already embedded in the Dutch society. Therefore, only the knowledge workers that consider a longer stay in the Netherlands are involved in the study. This will lead to more accurate answers of the foreign knowledge workers, especially those workers that are staying for a longer period of time. In addition to the foreign knowledge workers, the research includes decision-making units. These decision-making units are the managers who decide whether an international is hired or not.

Sampling

To reach the population group, the researchers have contacted the human capital manager of each of the Dutch Economic Clusters. The human capital managers are in direct contact with the companies where the foreign knowledge workers are active. If the human capital manager contacts the decision-making unit of the company, the odds of cooperation in the research are higher when compared to the researches searching direct contact with the companies. Via the DMUs of the companies, the researchers aim to speak with the FKWs inside the organization.

Data-gathering

The interviews are conducted with DMUs as well as FKWs. The researchers have made this distinction to see if the factors that are regarded important by the professionals in this working field (the DMUs) have similarities or differences compared to the factors mentioned by the knowledge assets themselves (the FKWs). How this comparison is made, is by asking the similar semi-structured interview questions regarding important factors on attraction and retention management to both DMUs and FKWs. The factors that are regarded important in attraction and retention management arise from the established literature review in the first place. The first five interviews with both FKWs and DMUs serve an exploratory purpose as well as an informational purpose. When similar, new and consistent factors were found in these five interviews, these were added to the interviews that followed up on this.

The individual interviews, with both decision-making units and foreign knowledge workers, are conducted as semi-structured interviews. The interviews with the decision-making units can be defined as expert-interviews. According to Boeije (2009, p.267) semi-structured interviews are interviews that differ in one of the following factors:

1. The content of the questions
2. The way in which the questions are asked
3. The sequence in which the questions are asked
4. The possible answers that could be given to a particular question.

What makes the interviews semi-structured is that the sequence of the questions asked is random. The interview starts off with an introduction on the research and on the interviewed candidate. It furthermore continues with a random sequence of questions that includes the previously set topics, on the basis of what the interviewee has stated.

In the focus groups that are conducted with multiple foreign knowledge workers at the same time, the topics of the interview are set. The sequence in which the topics are discussed is not

set, but is dependent on the answers of the interviewees. The researchers make sure that all previously set topics are discussed.

In general, the researchers distinguish two stages in the interviews with the foreign knowledge workers. In the first stage, the researchers want to find out why the respondent came to the Netherlands. What are his or her reasons or motivations? In the second stage, questions will be asked about their actual experience in the Netherlands. What stands out in the Dutch working and living environment? Which of these aspects are rated as pleasant and which obstacles do they experience? In the second stage there will be also questions asked in terms of future plans. Hence, it is important to distinguish decisive factors that influence these workers in their decision to leave the Netherlands. Table 4.1 below will clarify the research design and key questions.

Table 4.1: Key questions for the two phases in interviews with FKWs

Phase	Key questions
Coming to	<p><i>How did you hear about working in the Netherlands?</i></p> <p><i>Which other countries did you consider moving to during this period?</i></p> <p><i>Which decision made you move to the Netherlands?</i></p> <p><i>Were you eager to work at a specific company in the Netherlands?</i></p> <p><i>Were you contacted by a company in the Netherlands?</i></p> <p><i>Did you already have family or friends in the Netherlands?</i></p>
Living in	<p><i>How is your current experience in the Netherlands with the Dutch people?</i></p> <p><i>What is so different from the Dutch working climate when you compare it to the mentality in your home country or other countries?</i></p> <p><i>Does your network, inside and outside of work territory, consist of Dutch people or mainly other Internationals?</i></p> <p><i>Do you feel you get supported in making you feel at home in the Netherlands?</i></p> <p><i>Did the company you work for try to make you settle in? What did they do? Does this make you feel more at home?</i></p> <p><i>In ten years, do you see yourself still living and working in the Netherlands? Why (not)?</i></p> <p><i>Which factors should be improved in making you feel at home?</i></p>

Response rates

In terms of the response rates, the initial goal was to conduct interviews with at least 10 DMU's from different organizations. The researchers expected to interview 5 FKWs of each organization that responded positively on the request to have an interview with their DMU. In total this would have added up to 10 DMUs and 50 FKWs (N=60).

In practice, the total amount of interviews with DMUs is higher than the expected rate. In total, the researchers interviewed 22 DMUs of 11 different organizations. In contrast with the DMUs, the total amount of interviewed FKWs resulted in a lesser amount than the estimated quantity. The interviews with FKWs resulted in a total amount of 33. This means that the actual amount of interviewed FKWs negatively differs from the expected amount. In total, this adds up to a total amount of interviews with 22 decision-making units and 33 foreign knowledge workers (N=55). Overall, the non-response of the FKWs is high (17 less than expected). On the contrary, this differs from the response the researchers got from the DMUs. The number of interviews came out higher than expected (10 expected interviews versus 22 conducted interviews). The division of conducted interviews is schematically visualized in table 4.2.

Table 4.2: Division of conducted interviews

Organization	Size of the organization	Interviewed DMUs	Interviewed FKWs	Total amount of interviewees
Bright Society	SME	2	7	9
Bosch Security Systems	MNE	1	0	1
Imec Belgium	MNE	1	0	1
ICP	SME	1	0	1
Holst Centre (Imec Netherlands)	SME	3	0	3
ISPT	SME	1	3	4
SKF	MNE	1	7	8
TenneT	MNE	1	2	3
Thales	MNE	1	8	9
Vito	MNE	1	0	1
Hogeschool van Arnhem en Nijmegen	MNE	0	1	1
Holland Innovation Network in Boston	-	1	0	1
Expert meeting Delft 28-06-2016	-	8	5	13
Total		22	33	55

Initially, every human capital manager was asked to approach at least three active organizations in the top sector. When approaching the human capital managers of each corresponding top sector, the researchers encountered problems in the willingness of organizations within some of the top sectors to participate in the research. The joint human capital agenda of the Dutch top sectors stresses the importance of attracting and retaining FKWs. Therefore it was a surprise that all of the organizations (12) in the logistics, creative industries, ICT, and life sciences and health industry were reluctant to participate in the research. Within the agriculture & food industry, four organizations gave notice of the fact that they do not employ high-skilled foreign workers. The other 11 did not respond to the request of participating in the research. A more positive result was obtained by asking the chemical and energy sector. At least one organization was willing to cooperate in the research. Within the high tech systems and materials (HTSM) sector, the researchers got a negative response from only two organizations. Two companies also promised interviews with their FKWs, but these eventually fell through. It was clearly visible that the organizations in the sector of HTSM were more willing to participate in the research than organizations active in the other top sectors. A reason for this could be that the other top sectors, besides from the chemicals, energy and HTSM, did not have interest in the research as it is moreover focussed on the beta-oriented industries.

The remainder of the established top sectors (horticulture and water) did not have human capital managers that were able to help the researchers in approaching organizations. These were therefore completely excluded from the research in the first place.

Mixed Methods

After the interviews, the researchers will ask the respondents (both DMUs and FKWs) to fill in a short survey. In this survey the respondent will be asked to fill in his/her background, country of origin, etc. and will be asked to rate a few experiences in the Netherlands on a Likert-scale (e.g. Dutch people are nice and open – from disagree – agree). The researchers have used an online survey website in order to track the results most efficiently. As said earlier, the survey

contributes to a measurement of importance on the factors that influence a long-term stay in the Netherlands. The full survey is included in attachment two.

Limitations

Limitations that may occur in the research is that both the DMUs and FKWs are restricted by their companies in expressing their opinion. Therefore, the researches have to be aware of any form of bias or socially desirable answers in the interviews and the survey. To counter socially desirable answers in the survey, the researches have stressed the anonymity of the survey. Anonymity of the survey causes people to be able to answer more freely as their background is unknown. In order to counter these problems in interviews, it is important to shape the context so that the workers can speak freely. It is therefore recommendable to create a setting without their manager or supervisor present. And of course to stress that the interviews are anonymous as well.

Saturation

Saturation occurs when the research analysis of interviews does not add new results to the questions asked in previous interviews. The aim of the research is to at least have a total of 50 interviews with decision-making units and foreign knowledge workers included. The interviews that are conducted after the researchers reach their desired number are used to see if they contribute new insights to the already existing results. If this is not the case, the process of data collection ends and the process of data analysis will follow up.

Validity

To measure validity of the research, it is necessary to take the following factors into account:

- Sufficient questions that follow up on answers given by respondents
- Triangulation: Different methods of research focussing on the same results
- Reciprocation: It must be possible to replicate the research
- Systematic processing: Interviews are conducted in a similar way every time
- Feedback: Results must be made available for the respondents

(Boeije e.a., p.274)

In terms of *sufficient follow-up questions*, the researchers assess the answers of the respondents and according to that, a critical response question is provided. Through these critical questions, in-depth answers are provided which can be read in the transcriptions in the attachment. *Triangulation* is present in the research by having 1-on-1 interviews with both DMUs and FKWs. Adding to the 1-on-1 interviews, the table discussions with FKWs are an additional method of acquiring data. *Reciprocation* of the research is possible, as the research methods are transparent and can be replicated in future researches. The questions asked in the interviews and survey questions can be found in the attachment. *Systematic processing* is also present when comparing the conducted interviews. All topics that were set in advance are discussed, with additional information depending on the interview. *Feedback* is provided to each of those respondents that expressed their interest in the research results.

Transcription

To be able to code and analyse the results of the interviews, the researchers record the complete interview to capture the words of the respondent. The researchers will later transcribe this record. In this transcription, the researchers write the down the complete sentence with the exact words of the respondent, but during this process the amount of data will be reduced by the

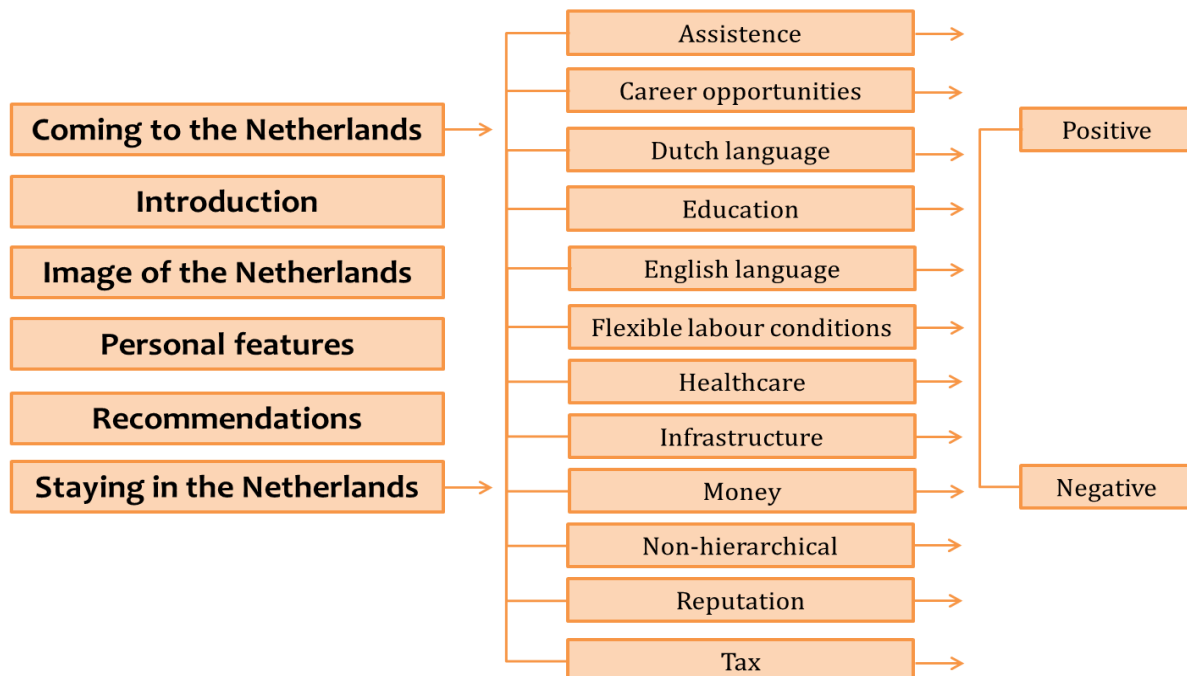
removal of 'ehh's and ahh's' and pauses. This will make the text clearer and more understandable. The researchers will benefit from this type of transcription in the coding process and also in the fact that this type of text will be easier to write down, hence the time needed for the transcription will be reduced.

Coding

During the coding process, the researchers will combine the data from all of the transcribed interviews by highlighting and marking similar categories, topics and themes. For this process, the researchers will make use of the computer program Nvivo. This way, the data about a certain topic can be easily retrieved by selecting the code that is used for highlighting and marking a passage of text. The program Nvivo enables the researchers to overview the selected data and make easier comparisons. The biggest advantage of using codes in Nvivo, is that all of the data is coded in the same way. This will make comparisons between the data straightforward.

The researchers will make use of both pre-set codes and emergent codes. The pre-set codes will contain the topics that the literature has confirmed, for example the level of English proficiency in the Netherlands. The emergent codes will be codes that are identified while the researchers are scanning the data and they remark that a new code is needed, for example the Dutch healthcare. The researchers will make use of a hierarchical code tree. In this code tree the subjects will be identified two big trunks 'coming to' and 'staying in' the Netherlands. Then the different topics will be analysed as branches. Finally, all the different branches will be separated in positive and negative reactions of the respondents. All of the codes combined will be written down in the code tree, which is visualized in figure 4.

Figure 4: Code tree



4.1 | Operationalization

This section deals with the variables that are analysed in this research. Each variable is carefully defined and analysed in detail. The first two variables deal with the industrial environment in the Netherlands and define the industries that are included in this research. Subsequently, this section defines the research population and distinguishes small- and medium enterprises and multinational enterprises. Thirdly, it will define characteristic factors that make up the living environment in the Netherlands. Fourthly, this section defines the labour environment characteristics involved in this research. Lastly, this section will also distinguish the personal factors of individuals that play a role in this research.

Dutch economic cluster policy

With growing internationalization, an increased performance may lead to a more attractive country. Therefore, the Dutch government has appointed nine top sectors on which the Netherlands is already strong and on which it should excel in the future. The industries that are involved in the Dutch economic cluster policy are the following:

- Agriculture & food
- Chemicals
- Creative industry
- Energy
- High tech systems & materials
- Logistics
- Life science & health
- Horticulture
- Water

Beta-industries

This research is focussed on the so-called 'beta-oriented' industries. The industries that are considered as 'beta' in this research are the following:

- Chemicals
- Energy
- High tech systems & materials

4.1.1 | Research population

This section will define the research population. In here the definitions of FKWs, DMUs, SMEs and MNEs will be explained.

Foreign knowledge worker (FKW)

A foreign knowledge worker is defined as a non-Dutch individual working in the Netherlands for three years or more. The level of education of these knowledge workers is taken into account as well. A knowledge worker is considered a knowledge worker when the level of education exceeds a bachelor degree at academic level. Having a master degree or beyond (PhD, Postdoc) is therefore necessary in order to belong to the research population.

Decision-making unit (DMU)

A decision-making unit is considered a human capital manager of one of the Dutch economic clusters or a human resource manager or a research and development director in an organization. These are the individuals with expertise on the topic of human capital and human resources. How to attract and retain foreign professionals is one of the core activities in their job

task. These expert interviews are necessary to extract their opinions on the factors mentioned previously in literature. The interviews are also needed to check if their opinion coincides with those of the foreign knowledge workers.

Small- and medium-sized enterprises (SMEs)

A SME is defined as an enterprise that employs less than 250 employees within their organization. The European Commission (2016) also states that a SME must have a turnover that does not exceed the threshold of 50 million euros. Because turnover is a topic that is not applicable in the questions of the conducted interviews, the researchers chose to solely ask the DMUs about the size of the organization in terms of employees. Accordingly, the only criterion that is chosen in determining a SME is the employee size.

Large companies/multinational enterprises (MNEs)

MNEs are defined as companies that exceed the threshold of 250 employees working within the organization. This research uses employee count as the only determinant in the definition of MNEs as turnover rates are subject of heavy fluctuation.

Companies involved in the research

According to the definitions above, the companies that have been involved in the research are divided between SME and MNE companies below in table 4.1.1.

Table 4.1.1: Companies who took part in the research

Small- and medium enterprises (SMEs)	Multinational enterprises (MNEs)
Bright Society	Bosch Security Systems
International Community Platform (ICP)	Imec Belgium
Holst Centre (Imec Netherlands)	SKF
Institute for Sustainable Process Technology (ISPT)	TenneT
Holland Innovation Network	Thales
	Vito
	Hogeschool van Arnhem and Nijmegen (HAN)

4.1.2 | Living environment characteristics

Dutch tax regime

The ‘tax regime’ of the Netherlands is defined by the tax standards as set by legislation. In the Netherlands this includes the following taxable incomes (until the age of 65):

- Up to €18,218: 2.3% tax
- Income between €18,219 and €32,738: 10.8% tax
- Income between €32,739 and €54,367: 42% tax
- All income over €54,367: 52% tax

There are exceptions in the Dutch tax regime for seniors. But, as all interviewed knowledge workers are younger than the age of 65, these exceptions will not be subject of further elaboration.

30%-ruling

This is a personal tax deduction for a select amount of foreign knowledge workers. The purpose of this tax ruling is to compensate for the costs these workers make for a temporary or longer

stay in the Netherlands. This makes the Netherlands a more competitive place in the international labour market, as the standard Dutch tax standards are high and this may cause foreign workers to be discouraged in seeking a job in the Netherlands. The length of the ruling has recently changed from 10 years to 8 years and is now also applicable for foreign students who are acquiring a PhD in the Netherlands.

There are terms and conditions associated with this 30% ruling. In order to apply for it, the knowledge worker must have lived 150 kilometres from the Dutch border for their last 2 years. If an international employee has previously resided in the Netherlands, the term of 8 years is reduced with the previous length of stay. In terms of the age of a skilled migrant, there are different salary requirements for migrants below 30 and those of 30 years and older. Migrants younger than 30 years must earn €3,108 gross per month without holiday allowance. Migrants of 30 years and older must earn €4,240 gross per month without holiday allowance.

There are also salary criteria that have to be met. These are the following:

- The annual taxable salary for an employee must exceed €36,889
- The taxable salary for an employee who is younger than 30 years and has a master's degree, must be more than €28,041
- The employee has to comply with the higher annual taxable salary from the month after the month he or she turns 30 to make use of the ruling

Housing

In order to create a sufficient living environment, FKWs must have the opportunity to have access to a minimum standard of housing. Housing is defined according to the Oxford dictionary (2016) as: *"the provision of an accommodation."*

Healthcare

At first, all internationals must register for a Dutch health insurance. This is necessary even if internationals already have existing insurance that covers them in the Netherlands. All healthcare issues in the Netherlands are primarily dealt with via the General Practitioner (GP). They provide referrals to specialists and even hospitals. So they are the first point of contact in terms of healthcare (I am Expat, 2016).

Social networks

Social networks outside the working environment is a key determinant in making an international feel at ease in a country. Incentives like InterNations try to connect fellow expats in the same region. "Wherever in the world life takes you, our InterNations Communities help you feel at home" is their key motto. According to de Vos & Meganck (2008, p.8), the social atmosphere is the key factor in decisions of FKWs to stay in an organization. Or on a broader scale: a nation. The Oxford dictionary (2016) defines a social network as: *"a network of social interactions and personal relationships."* Social networks can occur at work but also outside work.

Fluency in English

A high fluency in English causes a more attractive climate for foreign knowledge workers as they can express themselves more easily in both formal and informal context. According to the EF English Proficiency Index (2011), the proficiency of English in the Netherlands is very high. When looking at the ranking of countries, the Netherlands is second in English fluency, after

Norway. The Oxford Dictionary (2016) defines being fluent as: *“being able to speak or write a particular foreign language easily and accurately.”*

Entertainment

Having enough options to spend time after work is reflected in the amount of bars, restaurant and activities that can be performed nearby. This influences the quality of life of the space and place and stimulates the sense of belonging of internationals. Having enough ‘entertainment’ available is defined by the Oxford dictionary as follows: *“The action of providing or being provided with amusement or enjoyment.”*

Cultural values

For a multicultural society it is essential to make a knowledge worker feel at home. It is important for internationals to feel accepted in society. According to van Haelst & Emans (2014, p.23), adapting to the Dutch culture is among the top 5 hurdles of internationals in the Netherlands. Values are related to the norms of a culture. Values identify what is good or bad, whilst norms set the standard of behaviour in specific situations. The Business Dictionary (2016) defines cultural values as: *“The commonly held standards of what is acceptable or unacceptable, important or unimportant, right or wrong, workable or unworkable, etc., in a community or society.”*

4.1.3 | Labour environment characteristics

How employees rate their labour environment is depending on multiple factors. According to de Vos & Meganck (2008, p.8), financial rewards are by far the most important factor in leaving an organization. Using de Vos & Meganck (2008, p.8) as starting point, the factors mentioned in existing literature describing a sufficient labour environment are defined and explained below.

Wages

In this research, wages are seen as the same construct as financial rewards as mentioned by de Vos & Meganck (2008, p.8) According to the Oxford dictionary (2016), a wage is defined as: *“a fixed regular payment earned for work or services, typically paid on a daily or weekly basis.”*

Career opportunities

First of all it is important to define the definition of a ‘career’. The Oxford Dictionary (2016) defines a career as the following: *“an occupation undertaken for a significant period of a person’s life and with opportunities for progress.”* That opportunity to grow is what is meant with career opportunities. This is defined by WorldAtWork (2016) as *“a plan for the employee to advance in their own career goals which may include advancement into a more responsible position in an organization.”*

Reputation of Dutch companies

Especially in the HTSM industry in the Netherlands, there are companies present that have established worldwide brand awareness over the years. Names as Philips and ASML are not only organizational names, but also names that appeal to foreign workers as brand names. Having these companies listed strengthens ones curriculum vitae and are therefore companies where FKWs are eager to be part of.

Reputation of Dutch knowledge institutions

Dutch knowledge institutions on academic level have gained worldwide acknowledgement in terms of teaching levels. Students, and especially master and PhD students, have gained interest in studying at these institutions because of these acknowledgements. Also, the Triple Helix approach has caused a more smooth transition from education to labour market. The Triple

Helix approach in combination with the increased recognition on Dutch knowledge institutions creates an attractive labour environment.

Non-hierarchical working environment

According to Holland Alumni (2016) & van Erp (2016B, p.34) the Dutch organizational environment is typified as non-hierarchical or flat. It is common for higher level staff and the management to deal with lower level workers on a daily basis. It is normal for an employee to approach higher ranked staff with his or hers first name. The meaning behind this is to foster the productivity and transparency as decisions are made by multiple staff members. This also means that new employees are given responsibilities in a short period of time.

Open innovation climate

Another aspect of the Dutch working environment is its open innovation climate. The Triple Helix policy is a perfect example of this so called 'open innovation'. Multiple actors together account for an increased performance of the Netherlands in the global economy. A forthcoming result of this open innovation climate is the establishment of the Dutch economic cluster policies. Each economic cluster, as named above, has a roadmap that includes future goals and perspectives.

High level of innovation

According to the WEF NL (2016), the Dutch economy is ranked as number 8th in the most innovative economies in the world. A technological cluster as the Eindhoven Brainport region is an example of an innovative region in the Netherlands, in particular the High Tech Campus. The idea of establishing such a campus in Eindhoven was that each company located there must contribute to the regional performance (van Erp, 2016B, p. 79). This is reflected in the costs that companies, especially companies in the HTSM industry, invest in research and development. Technicians are essentially the core asset in conducting research and development.

4.1.4 | Personal characteristics

Age

The age of a person is a determinant in the life stage of an individual. A person of 35 years or older may have children already and this influences his choices what factors are important in attraction and retention management.

Family composition

Having a spouse or children influences the way of life of an individual. Having children limits the allocation of free time. Also, having a wife or husband means that he or she also has to settle in a foreign country. If this is not the case, someone may choose to relocate. Family composition therefore is of great importance in the factors on attraction and retention management.

Country of origin

An individual coming from India has to make adaptations in their way of life when he or chooses to live and work in the Netherlands. These adaptations differ from the changes that someone from Belgium has to make when he or she enters the Netherlands. Therefore, the country of origin matters greatly when talking about difficulties in adapting to cultural values in the Netherlands. Accordingly, the country of origin also influences the factors on retention management.

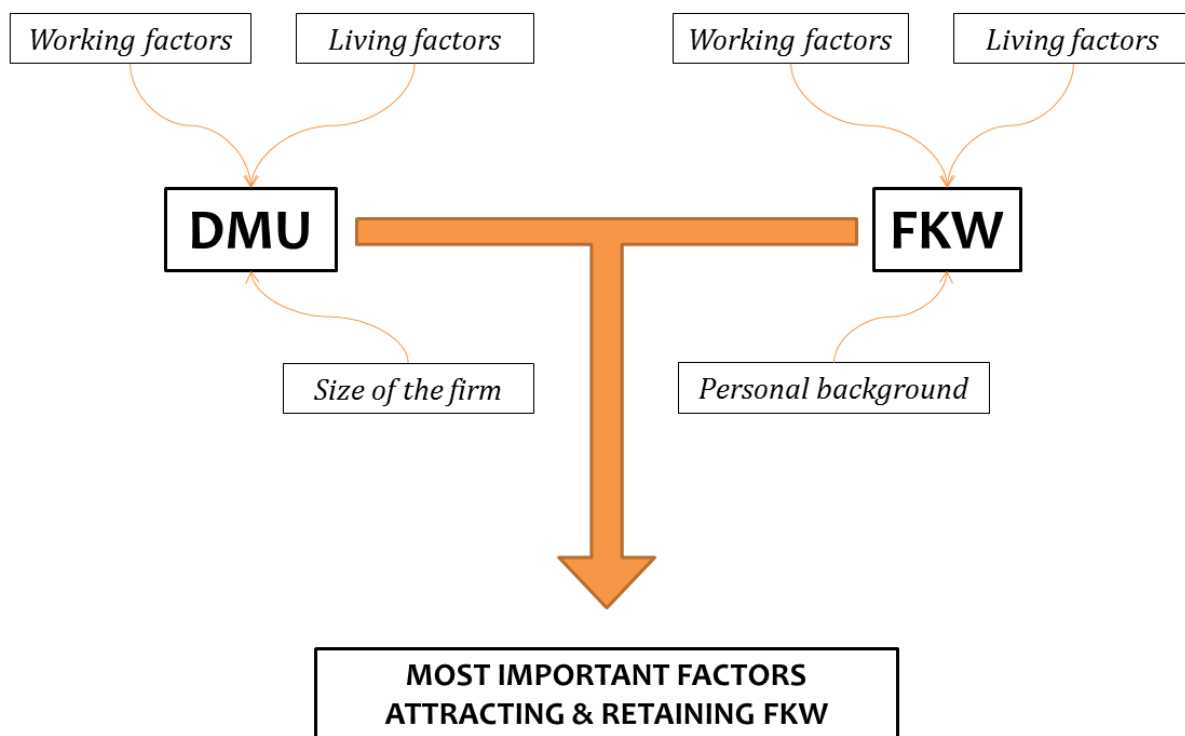
Working experience in country of origin, other countries or other organizations

When analysing the labour environment of the Netherlands or inside organizations, it is important to compare it to other countries or organizations. Asking about an individual's

previous working experience therefore helps the researchers in giving answers to what makes the labour environment in the Netherlands (or specific organizations) attractive or which factors can be improved.

4.2 | Conceptual framework

The conceptual framework is based on the described linkages in 'the current situation of the Netherlands' and the theoretic framework. The model gives an overview of the factors and motives that are of influence in the decision of foreign knowledge workers with a beta education to come and stay in the Netherlands. First, the work- and living factors, as mentioned in section 4.1, are identified according both DMUs and FKWs. These factors will be compared to each other to further specify the most important factors in attracting and retaining foreign knowledge workers. In this comparison the size of the firm and the cultural background of the foreign knowledge worker will be taken into account. Second, the factors that are identified as most important for foreign knowledge workers in the Netherlands are identified. In addition, these factors are also compared to competitors and 'best case scenarios'. This will lead to feedback to the decision-making unit and the foreign knowledge workers to further enhance the factors that are of influence in the decision to come to and stay in the Netherlands. This enhancement will be useful for policymakers and firms who try to attract and retain foreign knowledge workers in the Netherlands, as it shows which buttons can be pushed to increase the conditions for foreign knowledge workers in the Netherlands.



5. | Attraction of foreign knowledge workers

This chapter will answer the first sub-question. The question is separated in three different sections; the first section will examine the existing literature with regard to the attraction of foreign knowledge workers. The second section will voice the decision-making units of firms who have foreign knowledge workers employed. The third section will focus on the foreign knowledge workers themselves and focus on the relevant factors according to them. To conclude, the differences and similarities between the three sections will be discussed and the sub-question below will be answered.

“What are the most important factors to attract foreign knowledge workers in the Netherlands according to the literature, the decision making units and the foreign knowledge workers?”

5.1 | Attraction factors according to the literature

The two previous chapters have examined the existing literature about competitiveness, human capital, cultural backgrounds and the current trends in the EU. In this section, the relevant literature in terms of the attraction of foreign knowledge workers will be briefly analysed.

Wage

According to the neoclassical theory international, labour flows are mainly caused by workers who migrate from lower income countries to countries with higher wage levels (Jennissen, 2012). Thus, the financial compensation of the knowledge worker should have the biggest influence on the attraction of knowledge workers. According to Horwitz e.a. (2003), offering a very competitive pay package is indeed the most effective strategy. This corresponds with de Vos & Meganck (2008, p.8), who state that the financial rewards are by far the most important factor in leaving an organization. So, the organizations that offer the highest financial reward for knowledge workers will be most attractive employers for them to work at.

To accommodate foreign knowledge workers in the Netherlands, the Dutch government offers foreign knowledge workers the 30% ruling. The purpose of this tax ruling is to compensate for the costs these workers make for a temporary or longer stay in the Netherlands. As the cost of living in the Netherlands and the Dutch tax standards are high, this may cause foreign workers to be discouraged in seeking a job in the Netherlands. Due to this tax ruling, the Netherlands becomes a more competitive place in the international labour market.

Reputation

To attract foreign knowledge workers, Marimuthu (2009) says that both nations and organizations have to stand out from their competitors. Horwitz e.a. (2003) explain that having a good reputation as employer will benefit the organization in the process of attraction. Hence, many companies strive to be an ‘employer of choice’. This reputation can be achieved by advertisement, proactive recruitment or visits at universities or recruitment fairs. The attraction of foreign knowledge workers on a national level can be stimulated by establishing favourable working conditions and proactive recruitment (Marimuthu, 2009).

Career development

Knowledge workers consider opportunities to achieve further progress in their career the third important factor, according to Horwitz e.a. (2003). These knowledge workers want to be challenged in their work environment and want the prospect that they can grow in their position

and get more responsibilities (Capelli, 2001). Based on this information, one is able to attract knowledge workers by having a transparent organisation in which the career planning of the employer is clear (Horwitz e.a., 2003).

Due to the non-hierarchical working environment in the Netherlands, cooperation between different levels of staff occur often and it is considered normal for an employee to approach the higher ranked staff directly and by the use of their first name. In the non-hierarchical working environment multiple staff members make decisions. As a result, the operations of the organization become more transparent. This also means that new employees are given responsibilities in a short period of time, which could be very attractive for foreign knowledge workers (van Erp, 2016).

Social aspect

Social networks are considered key determinant in making an international feel at home in a country. This is shown in the social network theory, in which it is deemed necessary for migrants to have or establish a social network in the country of destination. By doing so, the costs and risks of the international in the county of destination are reduced and it also ensures a longer stay in the country of destination (Jennissen, 2012). Hence, the foreign knowledge workers should have time to set up and maintain their social network outside the working environment. Therefore, Capelli (2001) states that work-lifestyle benefits are an important factor in the process of the attraction of knowledge workers. In conclusion, foreign knowledge workers consider a flexible working environment as an positive attraction factor.

Level of English

The extent to which one is able to speak English in a country, has an effect on the attraction of foreign knowledge workers. A high fluency in English causes a more attractive climate for foreign knowledge workers as they can express themselves more easily in both formal and informal context. Hence, it becomes easier for them to establish and maintain social networks. According to the EF English Proficiency Index (2011), the proficiency of English in the Netherlands is very high. The Netherlands scores very well on this index when compared to neighbouring countries like France (moderate proficiency) and Germany (high proficiency).

5.2 | Attraction factors according to decision making units

According to the decision-making units, the primary reason to attract foreign knowledge workers to their firms in the Netherlands is the shortage of well-educated technical people. A DMU at Holst Centre states: *“When one looks at the technical field, the world is much bigger than the Netherlands; many jobs we offer cannot be filled with Dutch technicians. There are simply not enough.”* This shortage of well-educated technical people is enhanced by the fact that the technical knowledge is very specialized. A DMU at TenneT explains: *“The pool of people who start electrical engineering is already very small. After they finished their Bachelor, they have to choose their Masters. Out of that small group only a few choose to continue with the ‘power’-trajectory, while there is a huge demand for people with this background. If there are 10 people each year who finish this master, it is a lot. Then there is the other challenge: a huge competition. We have to compete with many other companies who are fishing in the same waters.”* This indicates that there is a big difference between the supply and demand of well-educated technicians in the Netherlands. As a result, the DMU of SKF explains: *“When looking for the best of the best, you will inevitably end up recruiting abroad.”* But having a shortage on technicians is not the only interest companies have. Firms that are internationally oriented, like Holst Centre, have other interests as well: *“We have a lot of foreign partners. Therefore it is necessary for us to be culturally differentiated.”*

Based on the findings above, it is clear that there is a big demand for foreign knowledge workers in the Netherlands. Not only to address the labour shortage, but also express an international character. This section addresses the factors that are most relevant in the process of the attraction of foreign knowledge workers to the Netherlands, according to the decision-making units. There will be a distinction made between working- and living factors.

5.2.1 | Working factors

Career opportunities

The latter of the DMUs that were interviewed say that foreign knowledge workers mainly come to the Netherlands for a challenging function and the development of their own career. According to the DMU at Bosch Security the most important factor for FKW to come to Bosch Security in the Netherlands is *“the possibility to further develop themselves and their career.”* One of the DMUs at Holst Centre confirms this and adds: *“If a job cannot satisfy the needs of a FKW, they will not come or they will leave the firm and look out for another firm nearby or far away in another county that meets their requirements. Distance does not matter to them, since they have already left their home country.”* A DMU of SKF questions the above findings by saying that the matter of importance is depending on the individual FKW. She gives an example of a Russian employee who was not satisfied with the course of his career, so he left and headed to Denmark. But this may differ per individual. Regarding the technical challenges, the DMU of Thales mentions that: *“Dutch companies put a lot of effort and spend a lot of money in R&D, so in that respect it is scientifically very challenging and offers a lot of possibilities for higher educated people.”* The effort companies put into their employees and their career opportunities is confirmed by a DMU who is active in the USA for the Holland Innovation Network: *“The companies in the Netherlands offer good career prospects and there are ample opportunities within companies to grow, and to move up within the company ranks quicker than in the USA.”*

Once the most important factor is fulfilled, the other important work factors to attract FKWs to the Netherlands come more versatile, according to the DMUs. The DMU of SKF puts this into perspective by saying that the importance of career development highly depends on the individual. But in her example, the Russian employee left because he was not satisfied with his career path in the Netherlands. As this still has to do with the ability to develop, career development is regarded essential for FKWs according to DMUs. But in contrast, some employees may rate other factors, such as financial compensation, more important.

Pecuniary compensation

Another major factor, but not decisive according to some DMUs, is the pecuniary compensation of the FKWs. One of the DMUs at Bright Society explains: *"We frequently ask FKWs about the major factors for them to come to the Netherlands. Some of them consider the wage as most important factor in their decision to come to the Netherlands, while others do not rate the wage as most important."* As the DMU of SKF mentioned earlier in career development, the weight someone puts on the importance of a factor differs per individual. The DMU of TenneT adds that offering a noteworthy higher salary than a competitor can be of influence in attracting FKWs to their organization. According to the DMU at Thales the wages in the Netherlands are at *"fairly high level,"* but the *"drastic tax burden"* has to be taken into account by the FKWs. For the people who consider their income as an important factor, the government will accommodate them with tax regulations. The DMU of Bosch Security mentions: *"The government helps a lot with the tax regulations, the 30% ruling is definitely appealing to FKWs."* In addition, the DMUs of Holst centre note that: *"Without the 30% ruling we should increase our salary a lot to be able to compete with other firms abroad."* The two Belgian DMUs who the researchers have interviewed acknowledge that the 30% ruling is very beneficial for firms in the Netherlands. The DMU of VITO even argues that the 30% ruling has made the Netherlands the biggest competitor of firms in Belgium regarding attracting FKW. Though, it can be questioned if the FKWs justify their choice for the Netherlands with regard to their income. The DMU of the Holland Innovation Network in Boston compares the Netherlands with the USA in this aspect: *"The Netherlands cannot compete with the USA in terms of salary and tax regime."*

This means that the importance of pecuniary compensation as an attraction factor differs per individual. When comparing it to competitive organizations in the same region or area, it does become a factor of increasing importance, according to the DMU of TenneT. What becomes clear from the analysis is that the 30%-ruling is a major advantage over foreign competitors. This is definitely appealing to the FKWs.

Reputation

Most of the interviews DMUs believe that the reputation of their own firm, or even other firms which originate from the Netherlands like Philips and Unilever, have a very positive influence on the attraction of FKWs. For instance, the DMU of SKF tells the researchers that FKWs come to work at SKF *"for the name and reputation of SKF."* The DMU of ISPT continues: *"They want to work at big, internationally well-known firms to build on their resume, otherwise it does not interest them."* The DMU of Thales acknowledges that the reputation of the firm is very important, as Thales in the Netherlands was formerly known as *"Hollandse Signaal Apparaten,"* she mentions that: *"Since the acquisition we have lost some reputation because people have never heard about Thales, but once people get to know us, we become very attractive employer."* A DMU of Bright Society counters this stereotypical idea of FKWs wanting to join a generally known

employer. He explains: *“FKWs tend to search towards job security. Getting a contract at a big firm mostly goes hand in hand with getting a residence permit. FKWs are searching for these social securities.”* Bright Society is in direct and consistent contact with multiple FKWs working in the region of Eindhoven. Therefore, they get these insights directly via the FKWs. Searching for social securities is therefore definitely noteworthy.

The reputation of the firm could also cause nuisance in the process of attraction, as some firms have a wider range of products than most people know. This is the case at Bosch Security Systems, where the DMU explains: *“Most people know Bosch of the washing machines and the drills, in which is little high tech present. Yet, Bosch has a much wider range of products in which is much more high tech present – like Security Systems. Most people don’t know that.”* Due to this discrepancy, firms with a broader range of products could experience more difficulties with the attraction of FKWs.

Apart from the companies, the Netherlands as a country is relatively unknown according to the DMUs of Bright Society: *“During a skype meeting with FKW you have to explain everything what companies do in the Netherlands, explain that the Netherlands is a technological hotspot, explain that there is a demand for high skilled workers and explain about the culture. We invest a lot in this type of engagement to make people comfortable to move to the Netherlands, along with their family.”*

At a national level, the reputation of the Netherlands is not known as a knowledge hotspot. This means that FKWs do not see reputation as a driving factor for moving to the Netherlands. At an organizational level, FKWs moreover pay attention to what reputation the companies have. Yet, FKWs search for social securities (e.g. a residence permit or housing) as much as natives do. FKWs take that into account when deciding to move to the Netherlands.

Assistance

When a FKW is considering moving to the Netherlands, there are many gaps to bridge before they are able to actually start working. For instance, the FKW has to request a citizen service number (BSN), open a bank account, has to arrange insurance and has to get a house. The researchers have asked the DMUs to what extent they offer assistance in these processes and if this is deemed necessary. According to the DMU of TenneT it is *“impossible”* for the FKW to overcome all these mentioned ‘challenges’ themselves, therefore they contracted a third party who takes care of the integration of FKW and unburden them in their integration process. The hurdle that foreigners encounter in searching for a house, for example, is that they have to search Dutch sites. Also, all DMUs agree that the FKW is in need of assistance to arrange the basic level of integration. However, some DMUs explain that their company extends this threshold by also taking care of the personal situation of the FKW, for example providing a job for the spouse. The DMU of Thales explains: *“you want to reduce the amount of dissatisfiers as much as possible.”*

It differs per organization to which extent they offer assistance in integration to newly employed FKWs. However, all DMUs that were interviewed agreed that FKWs require assistance in the integration process. This is due to that some websites that provide essential information are only available in Dutch. But an organization as Bright Society focuses on going beyond the basic threshold of just providing their employee with basic needs. They supply the FKWs with social network meetings, having drinks at Friday and also making sure the partners and children of FKWs feel at home.

Non-hierarchical working environment

The non-hierarchical working environment of the Netherlands is considered a major attraction point according to the latter of DMUs. The DMU of TenneT mentions that: *“The non-hierarchical working environment is really a big thing, even for our German colleagues.”* According to one of the DMUs at Holst Centre the non-hierarchical working environment is regarded as *“an advantage.”* She explains: *“As you don’t have to work here for 10 years after you graduated before you are allowed to share your opinion.”* This corresponds to the experiences of the DMU of SKF, who notices that the non-hierarchical working environment is *“appreciated.”*

On the other hand, the DMUs of Bright Society reflect that they *“never heard the non-hierarchical work environment in the Netherlands as reason to come to the Netherlands.”* However, they observe that FKWs perceive the non-hierarchical work environment as pleasant once they got used to it.

The perception of the interviewed DMUs reveals that the non-hierarchical working environment is not known before FKWs make the decision to move to the Netherlands. Though, it can be considered more a retention factor, according to the DMUs of Bright Society.

Language at work

The language that is spoken at work is the last factor being covered in this part on working factors. The communicative language at work partly indicates to which extent firms are internationally oriented. Neighbouring countries of the Netherlands demand that FKWs from abroad adapt and speak the local language, whereas in big organizations (mostly MNEs) in the Netherlands the common language is English. The more interesting question is which language is spoken during the informal moments at the coffee machine. According to the DMU of SKF this is generally in English, but *“once two people with the same background meet, they talk in their own language.”* So this is highly depending on who are standing there, and the people adapt to the situation. But not only the MNEs recognize that English is the more common language. During the expert meeting at the 28th of June, mr. Vitters from the Interlect Group told that SMEs recognize the need of implementing English in their businesses as well. Smaller organizations also have the ambition to grow internationally. This means that the usage of English is of primary importance. But this transition is very slow and some SMEs are still reluctant to attract FKWs because of this problem.

The use of English at work becomes increasingly important. This does not only count for SMEs, but for MNEs as well. The globalizing economy causes Dutch organizations stimulates access to new markets. The DMU of Imec Belgium stresses that this still remains a problem in some organizations, especially in Belgium. She explains that *“the amount of jobs where you only have to speak English is very low.”* Hence, the high fluency of the English language in the Netherlands can be seen as a strong asset, but organizations have to make this transition to the English language in order to take advantage of this asset.

5.2.2 | Living factors

Language

The literature stated that the people in the Netherlands are very proficient in the English language in general. This is recognized by all of the DMUs the researchers have interviewed. The DMU of TenneT explains: *“I think it helps that in the Netherlands many people are capable of speaking the English language, whereas this isn’t the case in neighbouring countries like Germany*

or France. This makes the Netherlands very accessible.” The DMUs at Bright Society elaborate: *“The FKW find these facts about the level of English on the internet. This high level could be seen as a rather unique selling point of the Netherlands.”* While the proficiency of English is considered as a big advantage, the DMU of ISPT explains that it also has a disadvantage, namely that *“there is no urge among FKWs to learn Dutch.”* This creates difficulties for the FKW and may influence their intrinsic motivation to learn Dutch. The ISPT deals with post-graduates. These FKWs already got international connections in their life during university. As everybody in their environment is able to speak English, they even feel less urge to learn Dutch. When asking her about the level of English being a factor of attraction on FKWs, she responds by saying: *“I do not think this is the case.”* But this can be explained by the fact that the FKWs the ISPT deals with, are mainly driven by study-related development opportunities rather than making the choice to settle in on the long-term in the first place.

According to the previously mentioned DMU of TenneT, the Netherlands certainly has an advantage when compared to its neighbouring countries. This boosts the competitive advantage of the Netherlands. Although the DMU of the ISPT claims otherwise, the researchers found that this is due to the background of the FKWs the ISPT deals with.

Work-life balance

The Netherlands is commonly known for having a very flexible work-life balance. This appears in *“the unique fact that we have a 40 hour workweek and in addition we also have vacation days,”* according to the DMU of Bosch Security. *“We encourage this balance, because when people work too much they will get issues.”* One of the DMU from Holst Centre adds: *“You are not expected to be available 24 hours a day for your company, like in Korea or Japan. Samsung etc. offer many jobs as well, but the conditions there are not as good as here in the Netherlands. In those countries you don’t need to buy a house, because you can always work.”*

This does not need to be a factor of attraction, according to the DMU of the Holland Innovation Network in Boston. Graduates do not feel the need to go somewhere where the balance between work is rated sufficient. *“They rather go to places where they have career growth opportunities. It is therefore more recommended that to advertise with stressing the working ethics in the Netherlands. That is of a high level as well.”*

In terms of factors influencing the attraction of FKWs, the work-life balance can be considered an advantage but should not be used as a unique selling point. FKWs are rather driven by career growth and opportunities to do so.

Cultural values

“The cultural values do not differ very much between the other western countries,” according to a DMU from Holst Centre. *“There is, however, a huge difference between the cultural values between people from Asia, or any other place than the West for that matter, and the people here. Here in the Netherlands is everything well organized, while being very open and direct about it. This could cause a culture shock to people who are more used to only obey their boss.”* Being open and being used to say what is on your mind can be considered rude in many cultures. The non-hierarchical working environment is considered as the most striking cultural value of the Netherlands. But as stated earlier, this can be considered moreover as a retention factor rather than a factor of attraction.

5.3 | Attraction factors according to foreign knowledge workers

This section addresses the factors that are most relevant in the process of the attraction of foreign knowledge workers to the Netherlands, according to the foreign knowledge workers themselves. There will be a distinction between working- and living factors.

According to the foreign knowledge workers, the primary reason to move to the Netherlands is the development of their career. This could either be at a company or having the opportunity to fulfil a PhD in the Netherlands. After the FKW finish their PhD in the Netherlands, the FKWs noticed that organizations in the Netherlands, like Unilever, ASML and Shell for example, were eager to recruit them. *“That happened because I got recommended by my supervisor from the TU,”* says an FKW from the ISPT (Spain, 31). Some of the FKWs have visited the Netherlands as tourist before they decided to move to the Netherlands. But, as a FKW from the HAN (Ghana, 36) tells: *“When you are here as a visitor, you look at things with a different vision. You don’t see the real working or educational environment.”* For others, the first time they came to the Netherlands was for their job interview. A FKW from SKF (Egypt, 40) tells: *“I have never been here before, landed in Schiphol and went straight to SKF for the job interview.”*

The FKW’s did have a very varied image of the Netherlands before they actually came here. A man from India (29) tells that he was confused about the Netherlands and Holland: *“I thought that there were two countries, like the United Kingdom and Wales, turned out to be just the same.”* A FKW (Colombia, 39) did only know about Amsterdam. An Indian employee at Bright Society (34) adds: *“Amsterdam as a city was known, but I did not know that it was in the Netherlands..”* A man (France, 29) tries to explain how it is possible that Amsterdam is more known than the Netherlands: *“The image I had of the Netherlands, or rather Amsterdam, was based on movies like Eurotrip. So it was very stereotypical, with drugs legislation and the red light district.”* Most of the other images of the Netherlands of the FKWs were also stereotypical about tulips, Dutch painters, wooden shoes and windmills. Three other FKW also mentioned that the Netherlands was known for their open-minded culture, like the gay marriage, and the international environment. But in the end, the image of the Netherlands did not matter much to the FKW, as a Italian man (34) explains: *“It was not about the country when I came, it was all about the job.”*

5.3.1 | Working factors

Career opportunities

When the FKW’s were asked for the most important factors to come to the Netherlands, the common answer is to advance in their own career and to develop them both professionally and individually. Comparing this to neighbouring countries, the non-hierarchical working environment in the Netherlands provides creative freedom that is utilized by the FKWs. This way, they have the feeling that they are able to develop more easily, both professionally and as a person. In this respect, the experiences of the FKWs are very positive in the Netherlands. A woman who is working at Thales (France, 32) tells: *“If you want to grow, they will always allow it and facilitate it.”* The fact that career opportunities are regarded as the most important factor according to the FKW’s, is evident from the contemplation of an employee of SKF (India, 35): *“We compromise a lot to come here, and the company is the most important reason. Hence, I think that career growth is very important and I think it is quite reasonable here. If you cannot advance in your career, the first question you are going to ask yourself is why am I here?”*

Career opportunities are an essential part in attracting FKWs to the Netherlands. The opportunities to develop are fostered by the non-hierarchical environment that the Netherlands possesses. Still it is individually determined if some FKWs rate this non-hierarchical environment as something positive or not.

Pecuniary compensation

The latter of FKWs agree that companies in the Netherlands do not offer the highest wages when compared to other countries in the world. But they do believe that the wages in the Netherlands are at a fair level. It can be inferred that money is not the driving factor in the decision to move abroad, but that it plays a role. An Indian man from Bright Society (31) explains: *"If money is the only criteria, the Netherlands is not the country to be. You won't end up rich here, while in the USA for example it is more like, the more you work – the more you earn."*

Yet, the some of FKW's rate the 30% ruling as a very important attraction factor, as a Serbian woman (35) explains: *"I don't like the taxes in the Netherlands. They are a 'little bit' high."* An Italian woman from SFK adds: *"I was quite interested in the 30% ruling. I think it is quite a nice incentive to come and also stay in the Netherlands."* For a few knowledge workers it even turned out to be a decisive factor: *"Without this 30% ruling I would have gone to Germany, because I could earn much more there,"* says a FKW from TenneT (Romania, 31). While other FKW's think that it is a nice incentive, but do not rate the 30% ruling as a decisive factor, like this man from Thales (Italy, 32): *"It is not really decisive, I see it really more as a benefit or small factor. I think that personal factors and reasons are more important than the 30% ruling, if it was only about the money I would have accepted other jobs, for example in the United Arab Emirates – where you have crazy salaries. But then you have to put every factor on a scale of what you find important. Do I want to live in a culture that is relatively similar to my own or do I want to live in a kind of Las Vegas in the middle of the Middle East. That is your decision."* The foreign knowledge workers that have been interviewed felt that they are happy with their pecuniary compensation for their work in the Netherlands as long as they were able to pay the rent and food and live comfortably. With regard to the cost of living in the Netherlands there are mixed opinions. For example, a FKW of the ISPT thinks the cost of living compared to her wage levels is balanced: *"I can buy everything I need and want to. You do not really have to save much."* On the contrary, the two employees of TenneT agreed on that the cost of living in the Netherlands is expensive. One of them stresses that in the situation of having a family *"both partners have to have a job and find the means to finance everything."*

It depends on the things an individual rates important in living a happy life. Some FKWs rate the financial compensation more important than others, whilst others may find the work-life balance more important. This also depends on the background that people have before coming to work in the Netherlands and on what expenditure pattern makes them happy. A Romanian FKW of TenneT explains her perception of happiness as the following: *"I am not rich, but happy with my life. I eat well, have the chance to go on holiday once in a while. That is actually what life is about."*

Non-hierarchical working environment

The non-hierarchical working environment is a *"very Dutch feature,"* which could take some time to get used to. A Serbian FKW (35) at ISPT tells that she likes it a lot: *"It really is a nice working atmosphere. I really like that feature here, that there is no hierarchy. When you want to go and talk with your boss, just do it and when you do it – you can call him by his first name. That really is a big*

difference compared to Belgrade.” An Indian man from Bright Society (32) explains: “It is good to know that you really don’t have to be scared of your boss. It is also good to be able to say that you don’t know, while in India if you say that you don’t know you are looked down upon..” “Yet, it can’t be seen as an attraction factor,” reflects a Colombian man (39), “because you don’t know if you can get used to it and how it will affect you.” It took him over two years to get used to the Dutch non-hierarchical working environment.

This is a situation that the researchers recognize from multiple foreign knowledge workers. However, once the foreign knowledge workers are used to this non-hierarchical working environment, they do not want to go back to their previous hierarchical working environment. Hence, it can be seen as a unique factor from the Netherlands, which potentially could attract foreign knowledge workers. This unique feature is only experienced when working in the Netherlands, but not known before. Dutch branding should therefore focus more on making this known to the outside world as this also fosters the development of individuals.

Fluency in English language

When asking the FKWs about why they came to the Netherlands instead of neighbouring countries, such as France or Germany, the default response was the English language. According to many FKWs, the people in other neighbouring countries not able to fluently speak English at work. An Indian man from Bright Society explains that he also had a job offer in Germany, but if he was going to work there, he had to learn German. *“Here, in the Netherlands, everyone speaks English very well. It was the most important reason to sign up here.”* A FKW from Surinam shares his opinion: *“When I was moving away from Suriname, the most important factor was an interesting project. The English language was the second most important factor in my decision to come here in the Netherlands.”* This means that this is one of the first things that comes to mind for FKWs when deciding to move to the Netherlands. It makes the country more accessible in the first place. But there are some FKWs who did not consider this factor when moving to the country. An Italian man of Thales says that: *“I got an interesting job offer while I was working for a competitor of Thales back in Italy. I first applied in different countries, but was called by Thales Netherlands and decided to accept the offer.”* In this case, the FKW chose for the job offer instead of looking at living environment factors.

It can be concluded that fluency in the English language in the working environment is regarded very important. To put this in perspective with other attraction factors, it differs in the way of how FKWs made the step to the Netherlands. For people that speak native English in their home countries, like the Indian FKW from Bright Society, this factor is regarded more important for him than for the Italian FKW from Thales.

Assistance

From the first moment that the FKW’s got in contact with their first organization in the Netherlands, they highly valued the assistance that is offered by the organizations. An Italian woman from Thales (39) explains the process: *“For me it was a really smooth path. After I finished my PhD I applied to Thales and got offered a contract to work here. They stood by with the insurance, VISA and so on and offered me an apartment to rent. It went very smooth and they assisted me very well.”* A FKW from Serbia (35) indicates that the assistance is very important, as she can imagine that people *“may get frustrated with this amount of paperwork if they have to figure out everything by themselves, without understanding the language or the principles in the*

Netherlands. Luckily, this frustration was prevented in my case, and that is really good." An Indian from SKF (35) explains that SKF assisted him very well when he first came to the Netherlands. The conclusion can be drawn that if you are new in a country it is almost impossible to do it without assistance of an organization. Hence, the foreign knowledge workers regard the assistance necessary.

Reputation

The general reputation of Dutch organizations or universities did not play a crucial role in the attraction of foreign knowledge workers, as the FKW explain that there has to be a match between their specific technical expertise and an organization or professor at an university who are also active in that same technical expertise. If this is the case, the company or university becomes very attractive, rather than the country. A polish FKW from Thales explains: *"I think Thales has the kind of picture that really attracts people. People who are interested in technique, they already know about Thales. The activities attract people. It are those steps that you have to take extra that give you the feeling you want more. It makes you eager to take those next steps."* An Italian woman shares his opinion about the reputation of organizations and adds *"that the presence of international organizations in the Netherlands also played a role."* This makes assures that the foreign knowledge workers are not the only people from abroad, and this makes the step to actually move to the Netherlands easier.

5.3.2 | Living factors

English language

An Indian man at Bright Society tells the researchers that: *"It is definitely helpful that almost everyone speaks two languages in the Netherlands and is not arrogant not to speak only Dutch. So when, for example, you are going to the market you can ask for something in English and it really helps to get around."* The fact that most people in the Netherlands speak multiple languages is also recognized by a FKW from the University of Applied Sciences: *"Especially the among the younger generation, everyone speaks English, German, Spanish, French or all of them."* An Indian man from SKF tells about his first experiences in daily life: *"When I ask whether they speak English, they always say just a little bit... but they all spoke it better than I did! Their definition of 'a little' is different from mine."* The very high proficiency of the English language among Dutch people is regarded as one of the most important living factors by the FKW's. This is apparent from a woman who works at ISPT: *"I wanted to come here because of the language – because when you go to Germany you have to learn the German language. But in here, there is no push for you to learn the language as everybody is able to speak English."*

Cultural values

The answer the researchers got from the FKW's when asked about the cultural values in the Netherlands was that the country is very progressive and that the people are very open and honest. About the Netherlands being progressive, a Spanish man from ISPT explains: *"I have this image of the Netherlands being a very progressive country, liberal thinking. If something big is developing, like the gay marriage for example, it happened first here."* Dutch people are generally well known to speak to other people. About the people in the Netherlands being honest and open, a Polish man from Thales explains: *"I was impressed by the way Dutch people communicate. They are incredibly open. You get direct feedback on anything what you say. It is a very honest way of communication and it makes it really easy to learn from it. Therefore I experience it as very*

nice.” A Scottish FKW of Thales actually that at first, he understood this form of communication as being rude at the start. He explains: *“In Scotland the mentality is completely different. Until you live here, you don’t have a proper idea of the difference in mentality.”* Due to these cultural characteristics in the Netherlands and the fact that the Dutch are open to different cultures, the FKWs can quickly adapt to the Dutch culture.

As said earlier, the Dutch cultural values are not necessarily an important factor in attraction management. The Dutch cultural values mostly come down to the openness of the society and the non-hierarchical working environment. It still depends on the cultural background of FKWs on how they interpret and assess this difference in culture. In the research, there were only a few FKWs who pointed out this aspect of the Dutch society as a disadvantage.

Social aspect

The first impressions about the social aspect in the Netherlands were not very satisfying according to the FKWs. The knowledge workers expected that Dutch people, open as they are, were more likely to invite them over for dinner or drinks after work. But a French woman from Thales tells: *“I just came to the Netherlands and did not know the team, so I invited them for a drink on a Friday. However, they said to me ‘we are your colleagues and not your friends’, so nothing happened that day. Since then I have trouble bonding with Dutch people, as it seems like they have no need to integrate foreigners into their own group of friends.”* This opinion is shared by many more FKW’s, a man from Scotland says: *“I found it extremely difficult to socially integrate. You don’t speak the language and you are not used to the Dutch culture. It takes a long time to integrate on that aspect. When you do integrate and speak the language, it becomes more easy.”* About integration and settling in in the Netherlands, an Indian from Bright Society adds: *“Settling in has nothing to do with your work life. Social life and work life are completely different, especially in the Netherlands. Once you go out of the office, you don’t meet. Hence it is very difficult for expats to penetrate into the Dutch society.”* A Serbian employee of the ISPT reflects the negative attitude towards the social aspect in the Netherlands. She states: *“Making friends is the same as looking for a new boy- or girlfriend. It has to happen naturally. Why would you force it... if you don’t have a good time together, just keep it professional and meet other people.”* Her Indonesian colleague of the ISPT nuances this by saying that she has Dutch friends in Eindhoven. She also compares the region of Eindhoven to the Twente region: *“The Eindhoven region has more open people. But Dutch people in general are more reserved, but I have some Dutch friends. I can also practice my Dutch with them.”* So there are exceptions to the general feeling of FKWs of Dutch people being reserved outside work. But also the Indonesian FKW of the ISPT recognizes that Dutch people have closed communities. As she has worked in the Twente region as well, she notices that the people in the Eastern part of the Netherlands have this tendency even more.

Whilst the image of the Netherlands exists as a very open country, this image is mostly reflected in the usage of English and the acceptance of foreigners in the working environment. When it comes down to the social environment, the Dutch are more closed. There are some FKWs in the interviews that have Dutch friends, but most internationals have international friends. They have the same interests and seek companionship.

Work life balance

About the work ethics in the Netherlands an Egyptian man from SKF tells the researchers that: *“Dutch people tend to live as comfortable as possible, while doing as less as possible. You guys like*

to live 'gezellig'. While people in the USA or UK try to work as hard as possible to achieve the best, here in the Netherlands you guys don't like to stand out of the cornfield." An Italian man from Thales and a FKW from the HAN share this opinion: *"Dutch people don't live for work, they work for living."* This feature gives the Netherlands a competitive advantage over its neighbouring countries.

The flexibility that comes with this attitude is regarded as pleasant feature of organizations in the Netherlands, as people don't stress themselves to get rich. The life people have next to work is at least evenly important in the Netherlands as the work itself. There was not a single FKW in the interviews that rated this aspect as a disadvantage or as an obstacle in his personal development. It should therefore be noted that this aspect of the Dutch living- and working environment could be stressed more in attraction management. Though, this should be done with caution as the DMU of Holland Innovation Network in Boston stated that the FKWs have the intrinsic motivation of developing themselves rather than enjoying time off.

5.4 | Overview of findings

This chapter will give an overview of the similarities and the differences between the factors that the DMUs and the FKWs regard as most important in their decision to come to the Netherlands. Based on these outcomes, this chapter will give an answer to the first sub-question below.

“What are the most important factors to attract foreign knowledge workers in the Netherlands according to the literature, the decision making units and the foreign knowledge workers?”

While the literature mentions the career development of knowledge workers as third important factor in attraction management (de Vos & Meganck, 2008, p.48), the foreign knowledge workers themselves see their career development as a crucial factor in their decision to migrate. If they cannot challenge themselves within an organization any longer, the first question they ask is ‘what am I doing here?’ The DMUs in the Netherlands are aware of this attitude of FKWs towards their career development and according to them there are technical challenges and options to personal development in the Netherlands to fulfil the desire of the FKWs. The Netherlands offers the resources and means (think of technological readiness and ICT infrastructure) to further develop an individual.

The wage of the knowledge worker is the most important attraction factor according to the literature. The DMUs agree with the statement that the wage level is fairly important, but they do not see it as a decisive factor to the FKWs in terms of their decision to migrate. The opinion of the FKWs corresponds to the opinion of the DMUs, as they also state that wages are not the main factor of leaving their home country. The FKWs rate a flexible work-life balance as more important than having a higher wage level. As a result, the FKWs rather see the wage as a condition that must be satisfied: The wage has to be sufficient enough to be able to live comfortably. The flexible work-life balance is not a factor that necessarily attracts more FKWs to the Netherlands, but is regarded as a pleasant factor when a FKW actually remains in the Netherlands.

The DMUs claim that the reputation of organizations and knowledge institutions in the Netherlands has a large effect on the attraction of FKWs, whilst FKWs themselves claim that this effect is negligible. The FKWs however admit that the reputation of organizations and universities that are active in their own specific technical field, are indeed an important attraction factor. Hence, it are not the big Dutch multinationals such as Shell or Philips that attract knowledge workers to the Netherlands, but rather the very specific technical institutions. Imec Netherlands is a good example, as this combines the field of research with practice at the highest level.

Another major attraction factor when compared to neighbouring countries is the level of English that is spoken in both working and living environment. The FKWs do not have to learn a new language in order to voice their opinion. This relates to both local people, but also the workplace. This can be seen as a major attraction factor of the Netherlands.

In the process of migration both DMUs and FKWs consider proper assistance essential when the FKW is settling in. Both actors involved agree that it is impossible for a migrant to come in a new

country and a strange environment and at the same time take care of relocation, embassy registration, opening of a bank account and the health insurance. Assistance that is offered by organizations in these fields is therefore highly valued by FKWs.

Regarding the social aspect, the FKWs share that they had a hard time to get in touch with the Dutch people in the beginning. This slows down the integration process. They claim it is hard to build up a social life after work, whilst the literature states that the social aspects, apart from the working environment, play an important role while settling in. The process of settling in is therefore subject of improvement.

The non-hierarchical working environment has no heavy weight factor in literature, whereas the DMUs and the FKWs foresee this factor as typically Dutch. Due to this unique feature one is able to advance faster within the organization and this can therefore be seen as attraction factor of the Netherlands. The FKWs note that the non-hierarchical working environment has a positive influence, but one has to get used to this system, as it could be quite different when compared to the hierarchical system the workers were previously used to.

In conclusion, the most important factors regarding the attraction of FKWs according to the knowledge workers themselves correspond with the factors mentioned by the DMUs. This can be explained by the fact that HR managers are increasingly interested in the satisfaction of their employees. Companies as Bosch and Imec Belgium even have surveys that reflect the opinions of their employees. The literature studied beforehand has put alternative weighting factors in the attraction management of FKWs. An explanation for the difference in weighting factors can be sought in the difference in research population. This research specifically aims at FKWs in the Netherlands who work here for at least three years. The research of De Vos & Meganck (2008, p. 48) is a random sample of high-skilled workers in Belgium.

6. | Retention of foreign knowledge workers

This chapter will answer the first sub-question. The chapter is divided into three different sections. The first section examines the existing literature with regard to the retention of foreign knowledge workers. The second section will voice the decision-making units of firms who have foreign knowledge workers employed. The third section will focus on the foreign knowledge workers themselves and focus on the most relevant factors according to them. To conclude this chapter, the differences and similarities between the three sections will be discussed and the sub-question below will be answered.

“What are the most important factors to retain foreign knowledge workers in the Netherlands according to the literature, the decision making units and the foreign knowledge workers?”

6.1 | Literature

A known problem of skilled labour migrants is that they are very mobile. This concerns the organizations as a loss of skilled workers means a loss of competitiveness and tangible and intangible knowledge (Sutherland & Jordaan, 2004, p.56, Kinnear & Sutherland, 2000). The importance of retaining skilled talent in organizations is therefore being stressed in contemporary literature about competitiveness. Hiring a suitable and qualified candidate is one thing, but keeping that one qualified worker within the organization is more important as a huge amount of time is spent on training the new employee (Irshaad, 2011, p. 85). Retention management is described as *“the ability to hold onto those employees you want to keep, for longer than your competitors”* (Johnson, 2000). It is however difficult to retain employees as they value their own career path as more important than organizational loyalty. This increases rates of voluntary turnover (Cappelli, 2001). The objectives of retention policies must therefore be aimed at long-term commitment of employees, which benefits both the organization and the employee itself. Sutherland & Jordaan (2004, p. 57) state that change is needed in human resource management led by organizations.

In order to understand the most effective retention policies, it is valuable to distinguish different types of knowledge workers. Taking into account the length of stay of knowledge migrants, three different types can be distinguished:

- *Permanent knowledge workers:* Settle in their host country forever
- *Temporary knowledge workers:* Return to their countries of origin or settle in another country in a period of time.
- *Circular knowledge workers:* Circular immigration trajectories and moving back and forth between two or more countries following career opportunities and employment.

This distinction helps the research in categorizing the foreign knowledge workers during the interviews (Kahanec & Zimmermann, 2010, p. 4).

It is also recommended to distinguish differences in the factors that are rated as important retention factors for both HR managers and employees. According to HR managers, important retention factors include financial rewards and employee benefits, job enrichment initiatives, career perspective, training and development opportunities, a supportive work environment and initiatives to improve work-life balance (de Vos & Meganck, 2008, p.48). But, retention factors not always lead to the desired outcomes. The employee’s decision to stay depends on the

impact of the so-called “motivational force.” These forces drive the decision to stay or leave and are shaped by “*events, recalled memories and other cognitions that trigger conscious deliberations about organizational membership*” (Maertz & Griffeth, 2004, p. 669).

Psychological contract

De Vos & Meganck (2008, p.47) link the motivational forces with the ‘psychological contract’ of employees. This refers to the employees’ perspective of what they owe the organization as a worker and in return, what the organization owes them. These perspectives emerge when an employee believes that their organization promised them a certain reward in return for their contributions. When the employee evaluates their rewards compared to their efforts, it can lead to a fulfilment or breach of their psychological contract (Turnley & Feldman, p.32-33). When the employee feels their contract is breached, they tend to lose commitment towards their employer and this increases their intent to leave.

Regarding the establishment of retention policies, it should be noted that each employee has subjective interpretations of the deal that they made with their employer. It is noted that employees moreover have a pessimistic view on the extent to which the organization lives up to its promises. Contract breach or violation is a familiar phenomenon in the psychological contract. Frequently factors as promotion, career perspective and compensation are mentioned as cause for the violation of promises (de Vos e.a., 2003 & Robinson e.a., 1994). In turn these violations lead to voluntary turnover.

Most important factors affecting retention

There are more factors that can influence employees to stay in an organization. According to de Vos & Meganck (2008, p.48), employees listed the following factors as most important:

- A good relationship with their colleagues
- The content of their job
- Financial rewards
- Career opportunities

These factors can be summarized in the visualization in figure 6.1 where job satisfaction includes the content of their job, but also the social atmosphere in their working environment.

Figure 6.1: The most important retention factors as mentioned by employees



Source: Borysenko (2015)

The full results of the research done by de Vos & Meganck (2008) can be found in table 6.1 on the next page. These do not only include the most important results on retention management, but also the factors that are regarded less important by knowledge workers.

Table 6.1: Factors of influence on leaving, staying and retention for knowledge workers

Reasons for leaving	%	Reasons for staying	%	Retention practices	%
Financial rewards	64	Social atmosphere	51	Training	59
Career opportunities	47	Job content	43	Career management	48
Work pressure/stress	19	Financial rewards	41	High potential management	41
Job content	19	Career opportunities	41	Internal mobility	38
Mobility	19	Job security	22	Financial rewards	27
Headhunting	17	Training	17	Benchmarking promotions	24
The management	16	Company image	16	Bonus system	18
Work-life balance	14	Company culture	14	Performance management	18
Labor shortage	11	International opportunities	9	Benefits	14
Opportunities elsewhere	9	The management	8	Communication	11

Source: de Vos & Meganck (2008, p. 48)

As shown in table 6.1, there is a difference between reasons for employee turnover (reasons for leaving) and employee retention (reasons for staying). Both theoretical definitions are not the same construct. “Reasons why a person stays at a job are not the reverse of the reasons why that same person might leave” (George, 2015, p.103; Reitz & Anderson, 2011, p.323). Factors that are valued by employees in staying at an organization may therefore differ from the factors that drive them in leaving the organization.

In terms of retention management of HR departments, employees value the importance of a ‘good boss’. According to contemporary literature, two aspects of ‘good’ management appear to be valuable in the retention of knowledge workers, namely:

1. *Appropriate style of leadership*: A participatory style of management. This means breaking down traditional barriers, to create a kind of shared leadership that make employees feel valuable in their involvement in decisions made in professional practice (Tremblay e.a., 2006, p. 209).
2. *Perceived management support*: The presence of a supportive and quality supervision. Knowledge workers need to be supervised in a supportive way. Feeling supported by a manager or supervisor often is more important to a knowledge worker than the support of the organisation (Paillé, 2013, p. 772).

Moreover, Osteraker (1999) adds that there are three dimensions that are of primary importance in successful employee retention. These dimensions are split up as *social*, *mental* and *physical* dimensions. Retention factors that have to do with the *social* dimension are the amount of contacts the employee has with other people, both internal and external. The *mental* dimension is made up by factors that influence work characteristics. For example when employees have the opportunity to efficiently use their knowledge and track results of their efforts. The *physical dimensions* consists of the level of wages and the physical working conditions in which the employee is active. If the employee rates these three dimensions as sufficient, he or she is able to work most efficiently. Investing in these dimensions to make them sufficient will decrease potential employee turnover.

With regard to the *social dimension* as mentioned by Osteraker (1999) and the top reason for staying according to de Vos & Meganck (2008, p.48), Van Knippenberg (2000) adds that employees become more loyal and stay in organizations when they identify with the group inside the organization and when they contribute to performances made as a group. The essential part is the team performance of which the individual is part. Employees nowadays value their working environment as a place of belonging.

The second most important factor mentioned by de Vos & Meganck (2008, p. 48) in staying in an organization is the job content, also related to the *mental dimension* of Osteraker (1999). Employees value the fact that their skills, knowledge and opinions obtained through educational purposes match with the content of the job and their job environment. In terms of their job content, Irshaad (2008) states that managers have to put increased effort in searching for employees with applicable knowledge in business processes and who are motivated to use it in benefit of the organization. The employment selection process should therefore also consider a match between employee values and corporate culture (Cable & Judge, 1997, p. 550). And if the match causes discrepancies, HR managers have to respect these differences in employee value and corporate culture and help those employees that have difficulties in adapting to a different cultural working environment (Irshaad, 2008, p.87).

Third on the list of de Vos & Meganck (2008, p. 48) are financial rewards for doing the job, also known as 'compensation' and part of the *physical dimension* of Osteraker (1999). This asset is valuable especially for the employees in an organization who have unique skills and an outstanding performance. Not only does compensation relate to the amount of wages an employee earns, but also to the amount of effort and money an organization has to invest in the training and orientation of an employee. Smith (2001) emphasizes that wage levels bring employees to an organization, but they are not decisive in the employees' decision to stay. Contemporary literature reaches consensus on more important retention factors as the working environment and behavior of colleagues. Nonetheless, a fair wage is also part of the psychological contract as mentioned by de Vos & Meganck (2008, p. 47). When wages are higher, the principle of the psychological contract issues the employee to return the favor. Adding up to this, 'rewards' are stressed as an important retention factor by Irshaad (2008, p. 88) as well. This refers to an offer by the organization in response to the contribution or performance by an employee. A reward can be intrinsic or extrinsic. The difference between those two is that an intrinsic reward is expressed in funds and an extrinsic reward is a certificate or recognition given to the employee. Recognitions can also be given in terms of giving an employee more participation in process of decision making and increasing their responsibilities (Davies, 2001, p. 54). Davies (2001) & Silbert (2005) state that rewards to the phenomena of a reward system by saying that they have a lasting impression on the employees and this again gives them the feeling that they are valued.

Ranked fourth on the list of de Vos & Meganck (2008, p. 48) is the career opportunities of an employee. Advancing in one's career is fostered by the amount of knowledge obtained. This process starts at the organizations themselves. A key aspect in knowledge creation is the investment in training and development of an employee from which the organization expects a given output as return. Training increases the particular skills of an employee. This will not only benefit the individual, but the organization as well. Knowledge obtained by the employee will spill over to other employees, as they work together and take part in ongoing business processes. But, before organizations start giving out training programs, they must first assess the match of the employees' personal values and the organizational culture. If there is a mismatch, the employee is likely to leave the organization on a short term and the investment in

training is lost (Irshaad, 2008, p. 89). Referring back to the psychological contract, training is a way to show organizational commitment towards the employees. It also illustrates the organizational strategy as value adding instead of a cost lowering approach. This decreases the intention to leave among employees. Irshaad (2008, p. 90) confirms this by stating that there is an inverse relationship concerning employee turnover rates and the volume of training offered by an organization.

An overlooked factor on retention management is the relationship between an employee and its supervisor. Supervisors are the face of the organization towards its employees. The key aspect in a good relationship between supervisors and employees is open communication. This involves talks on the progression of an employee outside pre-set evaluation conversations and assisting them in finding the right place inside the organization. This process fosters the extent to which an employee understands what is valued by the organization and what not (Freyermuth, 2007 & Ontario, 2004) When an employee feels like a valuable asset to an organization, he or she will take an active part in organizational goals with increased productivity and this decreases potential turnover rates.

A factor which is also overlooked in the analysis of de Vos & Meganck (2008) is the social atmosphere in a non-organizational environment. This includes the familiar situation and satisfaction of the partner if an employee has any. Former research has recognized that organizations that support the employee in family integration reduces the turnover rate on the long-term (Allen, 2001 & Thompson & Prottas, 2005). Yanadoria & Katob (2010) added to these research results by investigating the relationship of family support by the organization and employee turnover rates. Their result ended up in a statistical significant correlation between both factors.

Van Haelst & Emans (2014) agree on these previously carried out researches. Families migrating to other countries for work purposes are mostly based on a dual career. This means that the spouse of the ones (man or woman) migrating is also highly educated and seeking for a job in their new host country. 88,5% of the highly skilled migrants with a two-person household or a family had a spouse who was highly educated as well. As the Dutch labor market seemingly offers enough job opportunities, the reality proves otherwise. A discrepancy can be found in the expectancy of finding a paid job in the Netherlands and actually finding a paid job upon arrival. Whilst 64,4% expects to find a job upon arrival, only 52,7% of the spouses actually obtained a job.

As 88,5% of the high skilled migrants researched by Van Haelst & Emans (2014) have a highly educated spouse, it is of great importance to also foresee them in finding a job. Having a dissatisfying situation at home causes stress for the employee at work and this affects them in their job performance (Ahmad, 2008, p. 3).

6.2 | Retention factors according to decision making units

6.2.1 | Working factors

Role of the DMU

The decision-making unit is a key player in attracting foreign knowledge workers. But also in retention management the decision-making units are the face of the organization according to Freyermuth (2007) & Ontario (2004). An interesting finding in the conducted research is that retention management is not bonded to a set time period. In contemporary literature this is also referred to as the 'return on investment'. A decision-making unit at SKF explains that the total amount of costs that they make for getting a foreign knowledge worker to the Netherlands and paying an institution to offer guidance in settlement amounts to about 15.000 euros. But even though organizations know that the sum of costs in attracting foreign knowledge workers is high, the return on investment is not an issue. The DMU of SKF confirmed this by that *"if he or she leaves within 2 year time because it is impossible for him or her to settle, then we can not do anything about that."* Also the DMU of Thales agrees on that. She adds: *"Internally we do discuss those things. But every individual differs in the time they need to feel at home and be productive. In our company we focus more on having a diverse labor environment in terms of nationalities etcetera. As Thales is an international company, we have an increasing need to intensify flows of employees between the Thales subsidiaries."* The DMU of Bosch explains the reason for not implementing the return on investment by saying: *"As employer you have to deal with making your employee happy, not taking into account these return on investments."* This means that employers rather invest in making their employees happy than taking into account the return on investments in advance. The increasing need of Thales to have an international environment is more of an issue of multinational enterprises than of small- and medium enterprises. Chapter 7 will discuss these differences in depth.

De Vos & Meganck (2008, p. 48) stressed that the formal social atmosphere is the factor with the most influence of stay rates of knowledge workers. What decision-making units can do to make foreign knowledge feel at home is making sure that the working environment is rated as high as possible for workers to do their job most efficiently. On the contrary, it should be taken into account that the working environment of FKW's is not solely determined by the actions of the decision-making unit themselves. A part of their job is to gauge the opinions of the workers on how they rate their working environment. In relation to the return on investments, the DMU of Bosch states the following: *"There is one thing that makes good retention practices. That is to be an employer of which the employee says they enjoy working here and making sure they are happy. It is important for them to feel at ease and being supported in their actions by the organization."*

In order to rate the experiences of the employees, organizations such as Thales and Imec Belgium set out surveys. Imec Belgium has tested the opinions on their working environment and which things the organization can do to make the labor environment more comfortable for the foreign knowledge worker. Imec Belgium is now already implementing the survey results in their current business plans. In addition, Thales has also conducted several surveys to test satisfaction in the working environment. But their DMU states that *"people are getting tired of those surveys about satisfaction. So we now tend to go more in the direction of coaching management and the communication of what we can expect of each other."* This relates to the theory of the psychological contract in what an employee can expect from its employer and vice versa (de Vos & Meganck, 2008, p. 47).

Career development

Part of being supported in one's actions is *"the opportunity to develop in your career"* says the decision-making unit of Bosch Security. This complies with the 'appropriate style of leadership' as mentioned by Tremblay e.a. (2006, p. 209) in which employees must feel valuable and involved in important decisions made in professional practice. A good example can be found in the organization of Bosch Security Systems. They offer three trajectories of development, namely the: *"management path, a technical specialized path and a project management path."* Their DMU adds that they *"offer this to every one of our employees and can be done in our online Bosch training center. It is web-based so everybody has the option to do it."* Accordingly, the DMU of the Holland Innovation Network in Boston states that potential foreign knowledge workers have the intention to seek the challenge abroad. He adds to this that *"the Netherlands is a country that provides sufficient career perspectives, both inside and outside the organization if an employee is active."* Career opportunities are respectively listed as fourth in the most important reasons of staying in an organization by De Vos & Meganck (2008, p. 48). As the DMU of the Holland Innovation Network in Boston recognizes these opportunities in the Netherlands, the DMU of Imec Belgium proves that these career opportunities differ per organization, as some organizations can offer a faster career development than others. She states: *"If they have worked in our organization for 5 years, then that can be a valuable addition to their Curriculum Vitae."* It therefore also depends on the individual. Valuing a long-term commitment to the organization can therefore, in some cases, be seen as a boost for the CV and future development.

Though, when one compares the extent to which people have the opportunity to develop professionally, the DMU of the Holland Innovation network claims that organizations in the USA often lack these opportunities. He explains: *"If you compare the two countries (the USA and the Netherlands), it is easier to make steps in the Netherlands in terms of professional development. This is fostered by the creative freedom that people have within the organization."* This means that the Netherlands should emphasize not only the aspects of the working environment (non-hierarchical), but also how this is beneficial for the FKWs. It eventually means they have more opportunities to develop.

According to the interviewed DMUs, offering the opportunity to professionally develop ones career is an important factor in retention management. An organization as Bosch even offers the opportunity to choose between different development trajectories. Regarding the list of important retention factors in table 6.1, one can question development opportunities as being as important as financial rewards. This will be discussed later on in this chapter as well.

Creative freedom

The conducted interviews with the decision-making units revealed that career development is one of the pillars of retention management. Typical for the Netherlands as a country and the opportunity for personal and career development is the amount of creative freedom that employees have on the job. According to the DMU of Bosch, the foreign knowledge workers know that they have a supervisor that coordinates the projects. But he adds to this *"that everyone within the project team is responsible for his or her own development. This gives each individual the amount of creative freedom that they need."* Being responsible for your own development requires taking own initiatives and convincing people of your ideas. A DMU of

Bright Society expresses this by stating why creative freedom is so important for innovation in the knowledge economy: *"In these collaborative project groups most people are experts in what they do. This means that every individual can develop himself or herself. They have the possibility to achieve the goals they set both individually and in group form because they take action in the things they truly believe in."* Comparing this to lower educated workers, a DMU of Bright Society states that their actions are driven by what their management tells them. To distinguish a main difference between low-educated and high-educated work, he adds to this that he *"truly believes that this creative freedom in an environment of high-educated people causes an increased amount of innovation."* An aspect that can explain differences in how FKWs rate the importance of creative freedom, is the cultural background. This factor will also be considered in the analysis of chapter 8.

In table 6.1 by de Vos & Meganck (2008, p.48) financial rewards and career opportunities are listed as equally important in terms of factors that influence the stay rate of employees. When a DMU of Imec Netherlands compares the two factors mentioned above, she states that their organization is known for offering creative freedom to their employees and this drives the innovation rate. She adds to this statement by saying that *"creative freedom is often regarded as more important than the financial rewards they could get at other companies."* Following up on this, another DMU of Imec Netherlands agrees on this when comparing the Dutch labour environment to Silicon Valley. She emphasizes that this creative freedom in the Dutch labour environment gives responsibilities to an individual that makes them feel valued. *"The people that work in Imec Netherlands value this aspect more than earning more money and only carrying out actions that are issued by a supervisor or manager."* Yet, another DMU of Imec Netherlands notes that *"however we offer plenty of creative freedom to develop oneself, this is not a university or playground where one can 'fool around', we also have to run a business."* This comment indicates that employers offer possibilities for their employees to develop, but that these possibilities are often limited in order to make profit as an organization.

Revising the list of retention factors in table 6.1, the majority of the results of the interviews suggest that career perspective is rated more important. Moreover, the greater part of the decision-making units that were interviewed agreed that the Netherlands is a place where creative freedom and sufficient career perspectives go hand in hand. This is therefore a unique selling point that can strengthen the Netherlands and its organizations in retention management practices.

Non-hierarchical working environment

As stated in the analysis on attraction factors, the DMU's are aware that the Dutch labour environment can be considered non-hierarchical. This correlates with the responsibility that is given to an employee in the organization and the extent to which his or her opinion is valued in professional practices.

In the interviews conducted, there is no clear answer to be found whether this type of working environment is beneficial for retention practices. A DMU from the ISPT says that *"some people may like it, but some do not. It all depends on their own personality and cultural background."* The DMU of Thales confirms this and adds further by saying that the *"working environment in the Netherlands can be considered democratic. The Dutch are more used to a more coaching style of leadership and to give a lot of freedom for personal opinions and actions. Some people may not like*

that and prefer a supervisor who tells them what to do. But that individual freedom is something the Netherlands definitely stands for."

The working culture in the Netherlands is different from other countries, even when compared to Belgium. During the interview with the Belgian DMU of Imec, she agreed that the labour environment in the Netherlands is more open. She also affirms *"even Belgian people will see the Dutch labour environment as direct and harsh. The Belgians are used to be very polite and of course, we are the country of compromises. In general, Belgian companies are more hierarchical than the ones in the Netherlands."*

Based on the interviews with the DMUs, there is no clear influence identified regarding the non-hierarchical working environment. The findings that are found are well described by the DMU of the Holland Innovation network: *"a non-hierarchical working climate only fosters retention management if it stimulates personal and career development."* This means that the non-hierarchical aspect is of subordinate importance and that the primary focus in retention management still relates to career and personal development. Development on these two aspects can therefore be considered top priority in the package of what an organization can offer.

Open innovation climate

Although the open innovation climate is not ranked in table 6.1 (de Vos & Meganck, 2008, p.48), it is seen as a unique selling point of the Netherlands. In terms of innovation rates the Netherlands is ranked 5th of the world on the international competitiveness index by the Economic Forum (2015).

A DMU of Thales gives an example of how the open innovation climate currently works. She compares the contemporary innovation climate with the rise of Spotify. *"In the past I used to go to a CD store to buy my CD's. That CD then belonged to me. Now I have subscribed to Spotify and I have access to everything, but it will never be all mine. That is how I see innovation as well: as organizations we have to share and combine our knowledge."* Intensifying the triple helix approach, as mentioned in the literature in chapter 2, can help in fostering an open innovation climate, says the DMU of the Holland Innovation network. *"This creates common goals and purposes among organization that fosters innovation,"* he adds to it.

In potential, the open innovation climate is very valuable working environment. Yet, remarks have been placed by the DMU of Bright Society as he questions if this transparent innovation climate will ever get off the ground. Not only in the Netherlands, but also worldwide he sees open innovation as something questionable. He thinks that *"open innovation does not work as solid as people expect. Organizations show off their so-called 'open innovation climate' and transparency, but the outcomes are often disappointing. Eventually every organization is keen on keeping the knowledge internal. It is more a populist term than an actual phenomenon."* The global economy has made people and knowledge incredibly mobile, which is an essential part of the principle of open innovation. Another DMU of Bright Society adds to his colleague by saying that *"open innovation strongly correlates with the flexibility of labour. If workers migrate between companies, that is what causes open innovation. They obtain knowledge at one company and transfer that to the next one. Organizations can try to keep this knowledge internal, but with the increasing mobility that is impossible."* Hence, the open innovation climate in the Netherlands is not as unique as one expected and can therefore be considered a global phenomenon, which is not only bonded to the geographical boundaries of the Netherlands.

Although an open innovation climate is deemed to build bridges between organizations and foster innovation rates, in practice organizations will always put their own agenda in first place. An intensification of the triple helix approach should foster a more open innovation climate. But at the time being, DMUs did not experience the triple helix approach as a stimulating innovation processes when asked about it directly. Additionally, the phenomenon of open innovation is not at all of influence on retention management as none of the questioned DMUs established a link between more collaborative innovation and an increase in the intention of FKWs to stay for a longer period in the Netherlands.

Wages and the 30% ruling

This brings us to the next factor of influence on retention management, the financial rewards. In the field of the beta industries, it is noted by the DMUs that wages are of secondary importance in the retention rate of foreign knowledge workers. Especially in the section of research and development, says the DMU of SKF. She emphasizes that *“the most important motivations for foreign knowledge workers can be found in their career perspective, personal challenges and recognitions they get for doing well on the job. The ability of being creative and doing something challenging is more important than a high wage level.”* Also, the DMU of Imec Netherlands already confirmed that creative freedom is often regarded as more important than financial rewards.

The side effect that comes with working in the Netherlands is the amount of taxes you need to pay on your income. As explained in the methodology, the taxes increase a lot when you go up in wage levels. In order to accommodate FKWs regarding the tax rate, the government formed the 30% ruling as an incentive that not only helps attracting foreign knowledge workers, but also matters in retention management. In total the time in which foreign knowledge workers are eligible for the 30% ruling lasts eight years. Before the year 2012, the ruling lasted for a period of ten years. First of all, the ruling boosts the disposable income of the knowledge workers and this is reflected in their pattern of expenditure. The DMU of SKF even recognizes a slight trend in the exit rates and the expiration of the 30%-ruling. She tells that *“SKF in general has little exits. But I see a slight increase in the past one and a half year. I have colleagues in the organization that intend to leave after their eligibility to the ruling expires.”* She also discusses the problems that come with the terms and conditions of applying for the 30%-ruling. The organization cannot always give the employee a hundred per cent guarantee that he or she is eligible for the ruling. The DMU of SKF gave an example of *“two Flemish women who lived no further than 150 kilometres from the Dutch border. Then the tax authorities think these people move here because they are tax evaders. This makes a big difference in their wages. Eventually they were not eligible for the 30%-ruling.”*

It appears that the ruling is only beneficial for the foreign knowledge workers themselves, but also the organization profits from the ruling. The DMU of Imec Netherlands even states *“the 30%-ruling is essential for our organization. Without this ruling the wages we have to pay to foreign knowledge workers would rise through the roof. It therefore helps us in having the opportunity to attract and retain foreign knowledge workers.”* Besides, it causes trouble for the organizations if the eight years have expired. The DMU of SKF explains that companies in general do not compensate for the decrease in disposable income when the 30-% ruling ends. Hence, the turnover rates are more likely to increase during the end of the eight-year term.

The DMUs that were interviewed are also aware that there is uncertainty among foreign knowledge workers about who is eligible for the ruling and who is not. The DMU of SKF recognized this as she approached a PhD at the university who did not already make use of the ruling, whilst her colleague at the same university did make use of it. The situation was unclear for both of the PhD students. Later on in this chapter the opinion of the foreign knowledge workers on this ruling is also explained. Regarding this aspect, the conclusion can be drawn that there is a lack regarding the information about the 30% ruling. Hence the information should be better provided for all foreign workers who are (potentially) eligible for the ruling.

6.2.2 | Living factors

Informal social environment

As stated in the literature, the informal social environment is an often-overlooked principle where organizations still can achieve progress. What organizations can do is to not only care about the situation of their employee, but also expand their scope and offer subtle guidance in the personal situation of an employee. This factor in retention management was stressed in the interview with the DMU of the ICP. The principle of dual careers, in which both partners are working, is becoming a very common phenomenon with 88,5% of the knowledge workers having a highly educated spouse. This means that both individuals are ambitious. The ICP emphasizes that the situation of spouses matters greatly in the performance of employees. *“It is not an ideal situation if you return from work and you end up in a stressed environment. And of course, if one of the two is not happy, then they leave both.”* Also Imec Netherlands recognizes the problem of exits of foreign knowledge workers because their partner could not find a job. Most exits in their company actually occurred due to this reason.

Moreover, the ICP emphasizes that there are multiple additional reasons that explain the need of foreign knowledge workers. They do not only serve our purpose of labour shortage, but they also offer *“cross-cultural skills, transfer of knowledge, access to new markets and their innovative power.”* Bright Society is also an organization that shifts their focus on facilitating factors for the partners of foreign knowledge workers. *“We offer trainings and programs that include social activities. This eventually results in a certain rhythm that they will follow every day. As Bright Society we are progressive in this approach. Therefore, as I see it, we have an advantage over companies that do not do this. They are more likely to have an unhappy spouse at home.”* Guidance and help for the spouses of knowledge migrants does not only include offering job trajectories, but also integration in the social environment. A DMU of Bright Society adds to this *“this is often overlooked when attracting foreign knowledge workers. It is important for people to be understood. As Dutch people we always say that we are open-minded. But sometimes we also forget that we live in a closed environment. Most people immediately go home after work, whilst the foreign knowledge workers have to feel accepted and rewarded outside work as well. As Dutch people we can still work on that. We always say we are open, but actually we are not.”* Cultural differences are the basis of these integration problems. Also the role of the DMUs in organizations can be questioned according to the ICP. *“They are generally more reactive types of people. This means they only act when they see a problem. According to them, eventually everyone in the organization should speak sufficient Dutch. But we live in an international environment nowadays.”* The ICP agrees that the Dutch should take that extra step in order to make foreign knowledge workers feel at home. *“We are dependent on their knowledge, not vice versa. We*

should therefore implement a more customer service based approach.” The DMU of Thales recognizes that organizations should shift towards a more employee-based approach. She states: *“As a company we are affected by the employees’ situation at home. It definitely affects their productivity.”*

Not all DMUs have put the informal support and guidance of the personal aspect of foreign knowledge workers at the top of their priority list. For example, Bosch is aware that the performance of employees is affected by their situation at home. But the organization presents itself as one that eventually has to make profit. The DMU therefore explains: *“When an employee of ours has a wife and she is yet to be employed, then we bring her in touch with our network but the rest is up to her. We are no social institution.”* But, the problem of taking effort in taking that extra step towards the employees’ can also be overcome externally. For example, Imec Netherlands recognizes the problems regarding the personal situation of these foreign knowledge migrants. What they try as an organization is to outsource these support projects to companies that are specialized in this field. The difficulty that Imec Netherlands has is that they cannot find an organization that perfectly deals with these personal problems. Therefore they have a program within the organization that aims at retaining the most valuable employees. As a consequence, this costs the organization a lot of money. This is due to the fact they have to invest in an employee on an individual basis, rather than paying a fee to an external organization to solve these issues.

The latter of the interviewed DMUs of organizations confirmed that the personal situation of employees’ greatly affects the performance they have at work. De Vos & Meganck (2008, p. 48) did not include this factor in the most important factors on retention management. The interviews with the DMUs pointed out that support and guidance on the personal situation of employees does become increasingly important, but that not all of the organizations have the funds available to offer this support and guidance.

Language

Cultural differences have influence on the way foreign knowledge workers can settle in the social environment. Part of these cultural differences is the most general and tangible asset of people: the language they speak. As analysed earlier, HR managers in the Netherlands still expect a sufficient level of Dutch to be spoken by their foreign employees. The underlying reason for this is that they assume a sufficient amount of Dutch is needed in order to settle both in the working and informal social environment, although most of the Dutch high-educated workers speak sufficient English. But how important does HRM rate the level of Dutch, do organizations facilitate education and what does speaking Dutch mean in a society that is increasingly globalized?

According to the DMU of TenneT, the level of language also has to do in which organizational environment the employee is active. If the FKWs are working in a more international environment, they require a more sufficient level of English than Dutch. She explains that *“at TenneT we communicate in English at meetings. This makes it easier for the foreign knowledge workers than in regional organizations where the language barrier is much higher.”* Though, even in an international environment Dutch organizations stress the need for foreign knowledge workers to at least take lessons in Dutch. The DMU of TenneT adds that *“you cannot force people to learn Dutch, but we do stress the need of it. It matters mostly for the social talk around the*

formal activities. And if you want to live and settle in the Netherlands it is important to learn the language.” Also within Bosch the communicating language is English. Facilitating lessons in learning Dutch is something they offer, but on a non-committal basis. Although the lessons are not obliged, most of the foreign knowledge workers inside Bosch Security Systems still take them. *“The knowledge workers realize that it is needed to make yourself understandable.”*

At the same time as DMU’s stress the importance for to learn Dutch, they also recognize that the need to learn or speak it is minimal. This is due to the fact that Dutch people are used to respond in English when they hear somebody who is not fluent in Dutch. A DMU of Imec Netherlands sees this as problem because *“the foreign knowledge workers do not get the chance to learn the Dutch language if everybody responds in English. This does not stimulate them in learning the language.”* When comparing this to the Belgian counterpart of Imec, there is a clear difference. Their legislation considering formal language use does not allow setting up documents in English. Everything has to be in Dutch or if you live in Wallonia, it has to be in French. *“Also when going to the supermarket foreign knowledge workers are more or less obliged to learn Dutch. In general, Belgians have a minimal level of English. In Brussels it is not too bad though, due to the amount of international institutions.”* This makes that their employees are pushed in learning Dutch or French, as their formal working environment requires them to.

The main problem concerning the language that the Netherlands has to deal with is the social environment. As most people are able to speak English, both in formal and informal settings, the motivation to learn the Dutch language decreases. The DMU of the ICP does not agree with the statement that Dutch people are very fluent in the English language. She explains that: *“Dutch people tend to stay inside their comfort zone. Also when I look at prominent people inside an organization. They lose negotiation power and charisma if they have to talk in English. Therefore they prefer to talk in Dutch. We have to get out of that zone and accept that knowledge is becoming more international. This will result in the Dutch having to be more proficient in English, rather than vice versa.”* So the solution to overcome differences in language lies in accepting that the Dutch language is too much regionally and nationally bounded and thus, that the Dutch have to be more proficient in English.

The interviewed DMUs of organizations rate that learning Dutch is mainly important for informal communication. Therefore they offer language courses on a non-committal basis. But the need to really learn the Dutch language is limited, as most Dutch are capable of speaking sufficient English. The DMU of the ICP therefore explains that Dutch people have to accept that in a globalizing knowledge economy English will be of more use on the long-term.

The balance between life and work

Table 6.1 also deals with the most important factors in leaving an organization and one of them is the dissatisfaction in the balance between life and work. Regarding this topic, the DMU’s agreed that the balance between life and work is good in the Netherlands, especially when you compare it to other countries such as the USA.

The DMU of Bosch stresses that in general there is a difference in work-life balance between the Netherlands and the home countries of foreign knowledge workers: *“Over here they have a work week of 40 hours with vacation days in between. That is already a unique thing for them. In our organization we stimulate the importance of a good balance between work and leisure time. Too*

much work only leads to issues as stress. On the contrary, foreign knowledge workers are more likely to work an extra hour to finish the job that same day." In addition, a DMU of Imec Netherlands rates the work-life balance in the Netherlands as an advantage over that same balance in other countries. *"In the Netherlands you do not have to be available every 24 hours, like in Korea. There you do not even to have a house, because you can sleep at work. The people that I speak to are glad to have time for their family when they get home."* The question remains if this aspect really is a unique selling point of the Netherlands. According to the DMU of the Holland Innovation Network it most certainly is. He says, *"the quality of life in the Netherlands is good. But you have to be careful about emphasizing that the Netherlands is suitable for spending your free time so well. Most people are seeking jobs in order to develop themselves at the professional level."* This implies that the Netherlands should not advertise with being a well-balanced country. But seeing this as a USP, it certainly is an important factor in retention practices.

But, when the researchers compare the situation to Belgium, the balance between work and life is not uniquely Dutch. A DMU from VITO Belgium stated that Europe in general is a region that offers more balance between work and leisure time when compared to the USA. It is clear that people in similar positions earn more in the USA than in Europe. But they have to sacrifice their free time to and spend more time on the job.

The research proves that DMU's do experience that when foreign knowledge workers have to rate their work-life balance in the Netherlands, they rate it sufficient. It is therefore most certainly a factor to take into account in the decision of FKWs to stay in an organization or country. Surprisingly this factor was not included in the most important retention factors in figure 9 (de Vos & Meganck, 2008, p.48).

Schooling system

Part of the living environment of a country is the way the schooling system works. In attraction factors the reputation of an institution may influence the choice of a potential knowledge worker to study in a particular country. Or as the DMU of SKF puts it: *"There are loads of factors that influence the choice of a foreign knowledge worker to stay inside an organization or country. One of them of which they make the choice about where to put the children into school. It has to do with their future perspective."* The ICP distinguishes the people in this research as 'global citizens', people who stay at one place for four years or longer. According to their DMU, these global citizens are indeed concerned about where to put the children into school. In retention factors, the satisfaction of already settled knowledge migrants with children could influence their perception of how well the country is organized. In terms of the schooling system in the Netherlands, there is a wide array of choices. Knowledge migrants have the choice to put their children in international primary schools or choose for a local Dutch school. But do they see their children going to school in the Netherlands in a later stage of their lives as well? This question can be answered in chapter 6.3, when the opinions of foreign knowledge workers are analysed. First it is interesting to see what the DMU's have to say about the influence of this factor on retention management.

According to the DMU of Thales, the choice of having an international school to go to, can foster an easier process of settlement for the children of a foreign knowledge migrant. She takes a newly built international school in Hengelo as example: *"The presence of an international school*

makes it more interesting for families to settle within the region.” Also the DMU of Bosch makes clear that it is important to have a choice in schooling systems: *“It is all about the choices they have. It makes it easy that there are schools that offer courses in all common languages.”*

The ICP furthermore continues to say that the Netherlands should promote the factors they excel in. So in terms of schooling, organizations should provide information on schooling nearby their home and the possibilities they have to choose from.

Most of the DMUs do not recognize the factor of schooling as an important factor in the retention management of FKWs. When questions regarding this topic were asked, they gave short answers. Or they thought this factor was something they could not influence as DMU, or even as organization. Only the ICP gave new insights regarding the factor of schooling and that was to improve information supply on schools, both international and local.

Healthcare

It is generally known that the healthcare system in the Netherlands is one of the top healthcare systems of the world. But in every country the healthcare system works differently. This can cause confusion among foreign knowledge migrants in who to approach first when health problems occur. The DMU of Bosch confirms this confusion by saying *“the healthcare system in the Netherlands is fairly basic. But for someone from Italy or India may experience it as something weird. They do not know about health insurances or they are unaware of first going to the general practitioner. And when they finally make an appointment they have problems with explaining their health problems because of the language barrier. What we experienced is that foreigners are keen on being helped when they feel sick. In our country the doctor takes the time to see if you heal within a couple of days by prescribing you some medicine.”* The DMU of the ICP got into detail about how the living factors of a country were of influence on the decision of foreign knowledge workers to move. According to her, 40% of the FKWs already decide upon how they rate the facilities in a country, including the healthcare.

The DMU of Bosch was the only DMU experiencing issues about healthcare and gave an extensive explanation of what the organization could do to solve that problem, like the dedicated general practitioner who is installed just for FKWs in the Eindhoven region. All other DMUs did not provide any information on providing their employees with information of the Dutch healthcare system. Concluding from this, healthcare and information about healthcare is not seen as a necessary issue in retention practices through the eyes of DMUs.

6.3 | Retention factors according to foreign knowledge workers

6.3.1 | Working factors

Career and personal development

As the DMU of the Holland Innovation network said in the interview that knowledge migrants are increasingly seeking to challenge themselves to boost their career and develop as a person. It is therefore necessary to have the opportunity to develop yourself even further as you are working in the organization. The DMU of the Holland Innovation Network further added that the Netherlands is the perfect place in order to develop. Discussed earlier was the creative freedom and non-hierarchical working environment. The good quality of the infrastructure also causes workers to be mobile enough to make an easy switch between employers if they want to. To see if this is the case, the results of the interviews with the knowledge worker will follow accordingly.

When talking about the opportunity to grow in the career, a Serbian FKW from the ISPT pointed out that she felt very supported by the management positions in the organization. She told that for her it is *“really good to have the wind in your back. It speeds up the whole procedure. From the start I have had strong personalities as managers. The people pushed me in the good direction. They would advise me in my presenting or writing skills. I really like that.”* In the case of this knowledge migrant, the Dutch managerial form has supported her in improving her personal skills. This is a great example of the perceived management support that Paillé (2013, p. 772) discussed about being supervised in a supportive way. Following up on this, an Italian employee of Thales experiences that the Netherlands is a great place to develop your career. Especially when comparing these opportunities to his home country. He distinguished two paths in the Netherlands: *“The career path or the management path. In Italy, there is no career possible in the technical field. You are a technician. If you want to have a career, you should do that in management. Over here it is completely different.”* So as stated earlier in the organization of Bosch, also the employees in Thales feel they have development opportunities. A French colleague responded and agreed on having the opportunity to grow both personally and professionally. *“They will always allow and facilitate it,”* she explains. Development therefore is highly appreciated by the foreign knowledge workers at Thales. An Italian woman even adds that *“the company has to allow you to develop in the direction as you wish and to help you with this. When the work supports my wishes to develop and stimulate me intellectually, that is great.”* But these opportunities are not only limited to only Thales or Bosch. Also a Columbian employee of Bright Society experiences the same: *“I feel that you don’t have to be really experienced to move up. I see people who just want to be a designer, they like I, so they do it.”*

There is a difference between having the opportunity to develop yourself both professionally and personally and getting the desired challenges out of your work. For an Indian employee of SKF, it is these challenges he faces in his work that keep the growth in his career. But when referring to the possibilities to grow inside the company, he says that *“it is not easy to grow within a company, but it makes it even harder since no one really explained me that at first.”* He believes that most people in SKF move to different companies because they can make bigger steps in their earnings and in their development. His Egyptian colleague agrees with this by saying that *“it is very difficult to move up the scale. You have to perform at top level for a longer period of time.”*

Concluding from the interviews the career perspective you have is both dependent on two factors. One is the intrinsic interest of an employee. The second is that your development needs to be supported by the organization. The opportunities you have to develop both professionally and individually are therefore partly determined by the organization you work in. The latter of the high-educated FKWs that were interviewed agreed that these development opportunities are important to stay in an organization.

Creative freedom

A unique selling point of the Netherlands is the amount of creative freedom that employees have. Doubts still exist about if this freedom can be considered as a positive or negative aspect. According to the DMU's, this can be most certainly seen as a unique selling point in retention management. Going into depth about this aspect of retention management includes the most important factor: the experiences of the foreign knowledge workers.

When starting off the questions regarding the subject of creative freedom, the researchers noticed that the knowledge workers were merely positive about this factor in the Netherlands. Discussing this with a Serbian employee of the ISPT, she said the following: *"I am the one who is bringing in new things. Then my boss comes to me and says: Let's do it! You have my support. They are very open to my ideas."* Considering this as a retention factor, an Italian employee of Thales has to say the following: *"This creative reason is a very big reason to stay here. The environment, the initiative you can take and the openness. It also affects the relationship with your colleagues and with your bosses."* This shows that the factor of creative freedom is useful not only in feeling appreciated in the organization, but it also of influence on the relationship with your colleagues and boss. The Italian employee adds to her view on creative freedom in the Netherlands that *"it stimulates your productivity. You are not in a box with a stamp on top. You are just doing your thing. It can be transversal. If you have a broad interest, you do not need to specialize. You can contribute at different levels, even if it is more technical or more organizational."* Creative freedom contributes to career development and career development is the main reason for employees to stay in an organization. An Indonesian employee of the ISPT confirms this by saying that the freedom to express her ideas was already present in her PhD trajectory in the Netherlands. She stresses that this is *"one of the reasons to stay here,"* just like the Italian employee of Thales.

If this factor is something uniquely Dutch can be questioned according to FKWs. When this question was proposed, the Italian employee of Thales responded that she did not think this creativity is only present in the Netherlands. She experienced the same creativity in Italy. But in combination with other factors like a good level of English and a non-hierarchical working environment, it creates a unique environment.

There was one interviewee out of the 30 knowledge workers who thought that the creative freedom could have downsides as well. According to a Scotsman this freedom *"can go too far."* Therefrom it can be inferred that some FKWs prefer to have clear boundaries and demands regarding their work, as having the option to further develop as an individual can be of harm to the common objective of a project.

Considering the analysis of the interviews with all knowledge workers, almost all of them agreed that creative freedom helps them in their development as a person, but also professionally. As an employee you feel valued when you have the option to think for your own and take own responsibilities. Also, organizations should take into account a certain threshold of creative

freedom. Too much creativity causes disturbance in common processes. Through a geographical perspective, creative freedom is not something that can be considered as a unique characteristic of the Netherlands. It rather is the combination of factors (creative freedom, proficiency in English and a non-hierarchical working environment) that makes up a unique environment.

Non-hierarchical working environment

The interviewed DMUs agreed that the Dutch working environment is characterized as non-hierarchical, but doubted whether that is a positive or negative aspect of retention management. If it contributes to development opportunities of the employees, then it may be considered as a positive aspect. It appears that this non-hierarchical environment fosters the creative freedom as earlier mentioned. Consequently, this research analyses the opinion of foreign knowledge workers regarding this topic.

When asking an open question about typifying the Dutch working climate, multiple employees responded with an answer about the non-hierarchical working environment. An Indian employee at Bright Society explains that it stimulates you when you are not scared of your boss. He elaborates on this by saying *"it is good to be able to say that you don't know things. While in India if you say that you are looked down upon. Now I think how stupid can you be to judge me for that."* In fact, managers or supervisors appreciate the fact that employees ask for an explanation of something they are not familiar with. A French employee of SKF adds to this by saying that he *"really likes that you can say what you want. In France, we prevaricate around subjects when we do not agree."* It is appreciated that as an employee you know what to do. Also two foreign knowledge workers of TenneT are pleased with their experience of a non-hierarchical working environment. The Surinam employee explains: *"Because you are able to speak to everyone, everyone becomes more accessible. Especially when you try to communicate with someone in a higher rank. When you have to approach them with 'sir' you create more distance."* Her Romanian colleague agreed on this and affirms this climate stimulates communication and transparency. She explains: *"It makes it more easy to approach people. More equality creates a better working environment. I think that flex working helps, everyone is at the same level."* Equality is one of the key aspects in a non-hierarchical environment. Also according to an Indian employee at Bright Society: *"It is very comfortable that I have the feeling that I am heard. When I talk to my boss, I can even complain about him."* Besides that, an employee of the University of Applied Sciences in Arnhem stresses that the Dutch working climate is characterized by having more responsibilities as well. This is something the researches came across when asking about creative freedom as well. But when further analysing this increase in responsibilities, the employee of the university said: *"In the beginning it is difficult, it is a matter of responsibility. Which responsibilities do I have and which does my supervisor have. Sometimes that is a grey area."* But when this becomes clear and employees have the feeling they have increased responsibilities, this is valued.

This brings us to the adjustment time of the knowledge workers. How long did it take before they were used to working in such an environment? An Indonesian employee of at the ISPT says that it was difficult in the beginning. *"It took me about one year to get used to. I think it was hard in the first year of my PhD. That was also because I had to make the switch from individual assignments to group assignments."* A Spanish colleague, who is also assigned to the ISPT can relate to this. *"It takes time to get used to it, about one year. But eventually I really like it."* The discussion went more into detail with an Indian employee of SKF. He explains that *"in the*

beginning in meetings the feeling was really strange. You do not expect these kind of things at first. When you get used to it, it is easier to share different opinions. You have to accept that you cannot change that person.” Out of the interviews it was clear that the process of getting used to a new kind of working environment is hard, especially in the beginning. The cultural background of people and their previous experiences in organizations can mainly explain this. A Surinam employee of TenneT gave an example of this observation: *“My cultural background has taught me to always approach very formal. I really had to get out of that habit. Here it was almost seen as an insult instead of a formal way of approach someone.”*

In conclusion the interviews have pointed out that a non-hierarchical working environment can definitely be rated as an important factor in retention management. It only takes time to get used to. The employees experience this as a pleasant aspect of their current working environment, especially when they compare it to their previous employers in a different country. The DMUs doubted if a non-hierarchical working environment is experienced as something positive by FKWs. In turn, the FKWs confirmed that it is difficult to cope with at first. But, when getting used to it, FKWs stated that they appreciate the directness of what one should or should not do. This non-hierarchical environment fosters equality on the work floor and this makes people easier to approach.

Open innovation climate

During the interviews with the DMU's, the results pointed out that there was an open innovation climate, but this was not a unique selling point for the Netherlands. The question is if the knowledge workers experience the same? Is there even an open innovation climate and how is this noticeable?

When conducting the interviews, the researchers noticed that most of the employees were not aware of what an open innovation climate is and how they experience it. After an explanation of the concept of open innovation, not many employees responded. The ones that did respond were aware of it.

For example, an employee of the University of Applied Sciences in Arnhem notices a strong presence of open innovation in the Netherlands. He explains: *“One of the strong points of the Netherlands is the link between academic institutions and companies. It is very efficient. I also organize some courses for the industry. This connection between industry and academia is a strong suit of the Dutch economy.”* Also a Polish employee working at Thales suggested that the ties between the Dutch industry and academic institutions are strong. He deals with the knowledge transfer between these two actors every day. *“I think these collaborations are good. We know the purpose of the universities and vice versa. We try to create a network. I think it pays back on the long term. We invest some time and we get a lot input regarding innovation sciences.”*

When comparing the results of the interviews of the DMUs with those of the FKWs, one can conclude slight discrepancies. In general, DMUs have more knowledge about what an open innovation climate is. Even though the knowledge workers were provided with an explanation of the concept, they did not experience it directly in their activities. An open innovation climate can therefore be considered as no factor of influence on the FKW's intent to stay.

Wages and the 30% ruling

Financial compensation is ranked as third in the list of factors concerning retention management (de Vos & Meganck, 2008, p. 48 & Borysenko, 2015). The analysis of the interviews with DMUs revealed that wages are regarded as a less important factor in contemporary retention management. The general conclusion was that career development and creative freedom were rated as factors with more influence on the decision of FKWs to stay in an organization.

With regard to the experiences of foreign knowledge workers themselves, one of the employees of the ISPT states that the wage levels in the Netherlands are *"quite okay."* *I can buy anything that you would like to have. You do not really need to save for anything."* A Serbian colleague of the ISPT also rates the wage levels in the Netherlands sufficient. *"I cannot complain. Even as a PhD student I already had a decent salary."* Her Spanish colleague of the ISPT adds to this that he is able to live *"comfortably if I can pay rent and food."* He furthermore explains that the personal and environmental characteristics are the most important factors in making him stay in the Netherlands. *"My boyfriend lives here and this open society play a more important role."* Comparing this with the results of the DMUs, the foreign knowledge workers place their personal situation and open environment in the Netherlands over wage levels. An employee of the University of Applied Sciences in Arnhem remarks that in the Netherlands is not about getting rich. *"It is about being satisfied with what you have and being happy."* What makes the typical Dutch labor environment in terms of wages, the latter emphasized that that level of satisfaction is what makes it unique. *"It fosters a small gap between rich and poor. Then you see there is harmony in society. That is what the Dutch system is built on. To ensure that everybody has this social security to be able to live nicely. That, for me, is very good."*

All in all, this does not mean that wages are not important at all. Not all employees rate retention factors the same. This differs by age, cultural background, family composition and more. This will be discussed further in chapter eight. Concerning a long-term stay in the Netherlands, the 30%-ruling is seen as a substantial advantage in keeping a foreign knowledge worker inside the organization or even inside the country. An Indian employee of SKF explains that according him, that if the 30% ruling was extended, it would certainly make a longer stay in the Netherlands more interesting. He adds to that if he is no more eligible for the 30%-ruling, another compensation is required. *"Or at least a huge raise to keep the same expenditure level. I should not be affected that I miss over 1000 euros."* An Italian colleague adds to this that *"the 30%-ruling makes a huge difference. Of course, money plays a role and the cost of living in the Netherlands is very high."* Also the Serbian employee of the ISPT confirms that the regular taxes in the Netherlands are high. Adding this up to the high cost of living, this can be a decisive factor for some foreign knowledge workers to leave the organization.

In general, the 30% ruling can be considered an advantage over other countries tax rulings. Not being eligible for the ruling requires an adjustment in expenditure pattern. As this is not appreciated, employees emphasize they need to be compensated for their loss in wages. Though, the vast majority of interviewees agreed that their earnings were not of primary importance. An Indian employee at Bright Society explains that it depends on the preferences of an individual: *"some people are more interested in earning money and others are more interested in the quality of life."* These results coincide with the results of the interviews with DMU's. Relating to table 6.1, it can be questioned if career opportunities are really rated on the same level of importance in retention as wages.

6.3.2 | Living factors

Informal social environment

In the analysis of results of DMUs, the research concluded that organizations can put more emphasis on guidance and support of their employees in their informal social environment. This mainly includes providing a job for the spouse of an employee. The DMU of Thales explained that the organization takes care of these issues, whilst other companies said this is the main responsibility of the individual. SMEs as the ICP and Bright Society are aimed at offering this support to foreign knowledge workers. The importance of this factor can only be confirmed by testing the opinions regarding this topic with foreign knowledge workers.

An Indian FKW of Bright Society confirms that the topic of spouses becomes a leading factor in retention management. He explains that *“spouses are mostly also high educated. That becomes an important factor if the partner can find a job and friends.”* A French employee at SKF agrees with this statement. He explains: *“For me, the personal life is very important. I am now engaged with my girlfriend and we are trying to find solutions for the future.”* Another Indian employee at Bright Society replied: *“My girlfriend had some trouble, that has influence of course. But I can only help her and motivate her until a certain extent and put more responsibility in her head.”*

This brings us to the role of their employers. When asking them about to which extent their employer has to support them personally, an Indian at Bright Society stated that *“it is logical that my employer does not assist me in that. If both parties, Bright Society and my employer, offer the same one becomes redundant. Bright Society fills up the gaps.”* Companies as Bright Society and expat centres in different knowledge regions in the Netherlands try to bridge the gap of aspects where employers lack responsibilities.

The employees do not feel like their employer needs to deal with their personal issues, as they have a company as Bright Society to rely on. A French employee of SKF does not have an organization like Bright Society that deals with support trajectories for his partner and family. He explains: *The company should support the integration. Support for the family in my opinion is the best the company can offer.* This raises the conclusion that the need to have guidance and support in personal matters is present. And if companies do not offer this support, other organizations as Bright Society, the ICP and expat centres are there to bridge this gap.

Language

The proficiency of English in the Netherlands is widely regarded as sufficient. Not surprising, according to the EF English Proficiency Index. But it primarily serves as a factor of attraction, rather than a factor of retention. A suggestion done by the DMU of ICP was that we have to accept that this globalizing economy requires Dutch people to speak English more than foreigners need to learn Dutch. Though, the language issue can be a difficult experience in informal settings.

According to an Indian employee at Bright Society, it is indeed difficult to learn Dutch when the latter of Dutch people speak sufficient English. He adds: *“In Groningen it happened a lot to me that even when I wanted to speak in Dutch – the people responded to me in English. And I wanted to learn the Dutch language. You have to learn it by speaking it, but after 2 or 3 years I thought: never mind.”* He furthermore explains that therefore there is no use for him to learn Dutch. An

Indonesian employee of the ISPT agrees with that. *"The climate in the Netherlands is not encouraging for you to learn,"* she explains.

Though, an Indian colleague of Bright Society stresses that learning the Dutch language is an essential part of integration. As an argument he uses that people are more understandable when they talk in their native language. *"That makes it easier to integrate and you will not feel left out when Dutch people are discussing."* An Indonesian employee of the ISPT thinks the importance of speaking English or Dutch depends on the organization you work in. *"Usually in an international company everything is in English. Also the connotations, so you do not need to go to a high Dutch level of speech."* Also according to her, learning Dutch is important in the process of integration. As a foreigner *"you do not want to be considered an expat forever."* As the interviewed FKWs are all active in the Netherlands for three years or longer, feeling at home in the Dutch society is an integral part of their long-term stay.

As mentioned earlier, some organizations require their employees to at least speak a basic level of Dutch. Some organizations offer language courses, but these are non-committable. On the contrary, not speaking Dutch causes difficulties when foreigners have to apply for jobs in the Netherlands. An Indonesian employee of the ISPT elaborates: *"It is interesting when you switch to another job. Then it is necessary that you and to speak both Dutch and English fluently. When I ask them why it is so important to learn Dutch, they say it is easier to mingle with people."*

It is clear is that organizations stress the need of learning Dutch mainly to make sure their employees are able to get along with colleagues outside work purposes. The proficiency of English in the Netherlands is mainly seen as an attraction factor. It makes it easy for foreign knowledge workers to settle, as they are able to speak English at first. The latter of foreign knowledge workers agree that they still need to learn Dutch to some extend in order to really integrate into society. But this mainly applies to the informal environment, as organizations also become more internationally oriented. What makes it hard to learn the language is that the foreign knowledge workers do not see the urge to learn Dutch. As most Dutch people speak English, they will reply in English when they see a foreigner struggle with speaking Dutch. This results in a paradox, in which employers see the need to speak Dutch, but the employees are not supported in practicing the language.

The balance between life and work

According to the DMUs, foreign knowledge workers are generally satisfied with their balance between work and free time. This factor was not included in the top retention factors as mentioned by de Vos & Meganck (2008, p. 48). How foreign knowledge workers rate this balance as a factor of retention is analysed below.

An employee of the University of Applied Sciences in Arnhem is satisfied about his work-life balance. He explains: *"After work I go back to my kids and have time with friends and family. The balance is very flexible. The Dutch offer a lot of flexibility which makes it very comfortable for people with families."* According to him, this balance affects the situation at home as well. He adds: *"If you have a family, you can always arrange something in the Netherlands. In the USA, for example, you have to work a lot of hours and that causes stress on the family."* When asked about the main differences between the Netherlands and other countries, an Indian employee even stressed the work-life balance. He also refers to the USA as comparison. *"If you want to earn money, the Netherlands is not the place to be. In the US my friends make more money, but they also*

work a lot more. The quality of life is better here." As stated, the balance between life and work is definitely rated sufficient in the Netherlands and even makes it unique when you compare it to the USA. Subsequently, questions were asked about the importance of this factor in staying inside an organization or country. The employees of Thales contributed to this topic as well. An Italian male employee explained that people really put emphasis on this life-work balance. It is important to have a sufficient amount of free time outside work. His French colleague adds: *"I find people very flexible, especially here in Thales. If you have an appointment and you want to switch your free day, that is not a problem. Then you make an agreement with your boss and you ask him to change your free day. He will always tell you it is no problem."* She goes into detail by telling that in France that kind of flexibility does not exist and this is a really good advantage over other countries.

The employees that were questioned were merely positive about their work-life balance. Considering this as a retention factor, they pointed out that this balance is really appreciated, especially when they compare the situation to other countries. It gives the employees the flexibility they desire and positively affects the situation at home as well. The Italian employee of Thales puts this into words as *"Dutch don't live for work, they work for living."*

Schooling

A highly rated schooling system is important for attracting the skilled students in doing their PhD's or promotion. But for foreign knowledge workers with families, the entire schooling system in the Netherlands is of influence on the future education of their children. Hence, the DMU of SKF says that this factor also has to be considered in the choices of migrants to stay in a country.

It is therefore interesting to see how the foreign knowledge workers rate the schooling system in the Netherlands. *"In order to stay in a country, a condition that has to be sufficient is the schooling system,"* says a French employee of Thales. She explains that this schooling system also takes part in the work-life balance of the employees' themselves. To give an example, she elaborates: *"Take day care for example. When I go to work, I find it really good that there is a day care available."* Her Greek colleague adds that they *"are very happy with the schooling assistance. Also the atmosphere in primary school is relaxed, compared with the Athenian way of Education."*

Besides, most employees that are interviewed desire a long-term stay in the Netherlands. While their intent to stay is high, they also want their children to integrate in Dutch society. That is why the Dutch schooling system is preferred over international schools. An Italian employee of SKF is still in doubt whether to put her child in an international school or a Dutch school. She regrets not learning Dutch, because now she feels that integration is hard. She adds: *"But now I am thinking to let him to go the Dutch school, because I want him to be integrated into Dutch society."* It can be questioned if it is easy for a foreign kid to feel at home in a Dutch educational environment. An employee of the University of Applied Sciences in Arnhem tackles these doubts. He says that his children do not have problems in integrating at a Dutch school. The Surinam employee of TenneT adds to this: *"We are planning to stay longer. Therefore I would most certainly choose a Dutch school."*

The schooling system most definitely plays a role for decisions made in the future regarding the stay rate of employees. Overall, the schooling system in the Netherlands is of a high level and rated sufficient. The decision whether to put their children in a Dutch or international school

correlates with the intent to stay of employees. When employees intend to stay longer, they moreover decide to put their kids in a Dutch school. An Indian employee of SKF literally stated: *"If we do not stay here for a longer period, I rather have them at the international school."*

Healthcare

The DMU of Bosch has pointed out that their foreign employees have problems with dealing with the healthcare system in the Netherlands. For that reason it is interesting to see if this is indeed the case.

When asked about the healthcare system in the Netherlands, the employees indicated they were unaware of how the protocol for visiting a doctor works. An Indian employee of Bright Society says it is completely different from the healthcare system in India. *"It is inefficient and very rigid."* *"It could be more flexible,"* his Indian colleague adds by referring to the process of seeking medical care. The main problem that foreigners have to deal with, is the fact that they always have to visit the general practitioner (GP) first. A Bright Society employee thinks that *"does not make me feel safe. You have to make many appointments. I felt like we were both wasting our time."* So besides having trouble with understanding the process, also the diagnosis or prescription of medication is question. An employee of the University of Applied Sciences in Arnhem explained: *"When you call the GP first and he says drink water and take paracetamol, you think like: Is that all? I could have figured that out by myself. You have to get the comfort and the feeling that you are checked. That psychological part is missing here. Then you see it as friction."* The problem is that the foreigners do not get the feeling they get taken seriously. Because of the current protocol in healthcare issues, they question how it will go down when they have life threatening issues. A Serbian employee of the ISPT describes what her friends said about the healthcare system in the Netherlands. *"If you visit the GP and they tell you to just take a paracetamol, that is unusual. They are not used to that approach. If you are in pain you would like to get help."* Her Indonesian colleague agrees with this. She also thinks the contemporary healthcare protocols can be questioned: *"You always have to follow the procedure. You always first have to go to your GP. When I was really sick I called in with an emergency and they told me to first make an appointment."*

It even goes beyond complaints on the Dutch healthcare system. Some FKWs even go back to their home countries to seek medical care. An example is an Italian employee of SKF. When she gave birth to a baby, she was not comfortable that it was accepted in the Netherlands to give birth without the presence of a doctor. She adds: *"Where I come from, they base medical help on the little things that can go wrong, so that is what I am used to. Therefore I decided to deliver my baby in Italy. I went back home just for that. I was not comfortable with the Dutch system."* They feel that you first have to get past the first layer of the GP to actually get help. This does not appeal to the interviewed foreign knowledge workers. A Romanian employee of TenneT is worried about the healthcare procedure in the Netherlands as well. *"If I really need to visit a medical specialist, I go back to Romania. I know who is a good doctor over there. I feel that in the Netherlands they would like to see how it goes and how you deal with it yourself. But that does not make me feel safe."*

In conclusion, the healthcare system in the Netherlands is not rated as easy to deal with. Especially the protocol that is required to visit a medical specialist is regarded as an unpleasant experience. Foreigners do not get the feeling their issues are taken seriously. Overall, the

information supply regarding healthcare should be improved. Whether this is supplied from the organization or from an external institution, this information causes foreign employees to at least understand the protocol. A remarkable observation is that the DMU of Bosch only recognized this problem, out of all DMUs that were interviewed.

6.4 | Overview of findings

This chapter will give a short overview of the similarities and the differences between the factors that the DMU's and the FKW's regard as most important in their decision to stay in the Netherlands. Based on these outcomes, this chapter will give an answer to the second sub-question below.

“What are the most important factors to retain foreign knowledge workers in the Netherlands according to the literature, the decision making units and the foreign knowledge workers?”

What stands out from the conducted interviews with both DMUs and FKWs, is that the personal situation of FKWs is leading in the decision of staying or leaving a country. If the employees with families have a spouse that has trouble finding a job or trouble integrating into Dutch society overall, they are most likely to leave. When talking about retention management, DMU's stressed the importance of career development and the opportunity to grow as an individual inside the organization. What we see from the interviews with FKWs is that a factor as career development must always be present in an organization in order to attract and retain foreign knowledge workers. A non-hierarchical working environment fosters the opportunities to develop for FKWs, as this was questioned by DMUs beforehand. This research on retention has also shown that the rank of important factors in figure 6.1 of De Vos & Meganck (2008, p. 48) can be questioned. FKWs rated their career opportunities and feeling at home in- and outside the organization more important than their wages.

And of course, the Netherlands has unique aspects as the work-life balance that makes the country interesting. But it is that extra step that organizations have to take that makes employees feel valuable. These so-called 'soft factors' are becoming increasingly important. But there are indeed soft factors that are subject of improvement in the Netherlands. One of them is the support and guidance of partners of employees. An organization as Bright Society is built around these needs of employees where employers lack support in. Another very important soft factor is the information supply regarding healthcare. If our protocol-based healthcare system can be explained in detail to employees, they would feel more comfortable in the Dutch healthcare system. This can make them feel more at ease.

7. | Differences between SMEs and MNEs

This chapter deals with the differences in size of the organizations regarding the attraction and retention of FKWs. It will be split up in three parts. The first part will give a brief overview of existing literature on the size of firms and its influence on attracting and retaining foreign knowledge workers. The second part deals with the analysis of the conducted interviews in terms of attraction factors and the difference between SMEs and MNEs. The third part also deals with the analysis of the conducted interviews, but will focus on the difference between SMEs and MNEs in retention management. In total, this will give an answer to the third research question:

"To what extent does the size of the firm influence the attraction and retention of foreign knowledge workers?"

7.1 | Differences according to the literature

Attracting foreign knowledge workers (SMEs vs. MNEs)

The problem that arises when highly skilled labour migration flows are analysed at an organizational level, is that SME's do not have the resources to attract foreign knowledge workers (van Haelst & Emans, p. 7). Too bad, according to Audretsch & Fritsch (2002) & Lengyel (2000), as they see SME development as an essential part of regional competitiveness and innovation. It are the big companies such as Shell and Nuon Vattenfall that have the means to attract and retain the foreign knowledge workers for a longer period of time.

As knowledge becomes increasingly international, FKWs are turning more into 'economy-class passengers' (Mahroum, 2000). These are the migrants that have the knowledge and skills that can be used anywhere in the world. As this is the case, the preference of the foreign workers themselves is aimed at the previously mentioned MNEs. According to Groot e.a. (2013, p.192), foreign knowledge workers are more interested in working at an internationally oriented organization than any other type of employee. This helps them with getting recognition on their resume and moreover gives them the impression that they are able to integrate quicker into existing business processes. Harvey (2013, p. 38) typifies this as the 'Beckham' factor. He takes David Beckham as an example, with him having played in four different countries at four different big football clubs with exposure. Beckham (in this case the knowledge worker) benefits from the exposure to foreign markets. On its turn, this facilitates their career and personal brand-development. This brings the problem to the SMEs. They are less likely to attract foreign knowledge workers, as they do not have that international allure (Harvey, 2013, p. 38).

According to EP Nuffic (2016a), SMEs in the Netherlands do not only have a problem in attracting foreign knowledge workers due to a lack of international allure. What makes it even more difficult for them is the fee that applies by the IND. The fees that have to be paid are based on the income of the employees. These fees can be high to SMEs, as foreign knowledge workers have to exceed a certain threshold of income requirements. SMEs are therefore reluctant to pay these fees as they rather invest their funds in business processes such as sales organization and R&D. The problem is that SMEs are becoming increasingly international. Their desire is to export their goods and services outside of the Netherlands. This will expand their market scope and forthcoming future perspectives (Hessels, 2005, p. 3). One of the motives for internationalization that Hessels (2005, p. 6) distinguishes is the access to know-how and new technologies. This know-how can also be obtained by attracting foreign knowledge.

This creates a paradox, on one hand SMEs want to be more international, but on the other hand they act reluctant in attracting foreign knowledge workers because of the high costs that come along with operating internationally.

Retention of foreign knowledge workers

In order to distinguish differences in retention management practices of SMEs and MNEs, it is important to define factors that make working in one of both organizational forms unique. This is done by defining challenges as well as suggestions for improvement.

MNEs are more likely to attract foreign employees as they have more funds available, are internationally oriented and serve as a magnet for foreign talent. But to what extent do these organizations put effort in retaining their employees and which factors contribute to this?

What makes MNEs attractive for foreign talent is their reputation, or the so-called Beckham-factor of employees as Harvey (2013, p.38) stated. They are internationally oriented and probably less focussed on the Dutch language and business culture. As analysed earlier in the part of DMUs' vision on retention management, employees have to feel valued in an organization. They must have the opportunity to develop in their career as well as an individual and to have challenges in the job they are doing (de Vos & Meganck, 2008, p.48). MNEs have the opportunity to meet these needs of their employees. Carleton (2011, p. 465) explains that fostering learning and engagement is key in retaining employees. Employees seek learning and development opportunities. Some employers are reluctant to sponsor employee learning, rationalizing that 'it will only end up as an advantage for other companies'. But the fact is that these investments usually drive employee retention. The turnover mostly begins when an employer lacks these investments (Carleton, 2011, p. 465).

When talking about retention management in the interviews conducted with foreign knowledge workers, the ones with a partner and children stressed that a leading factor is whether their partners and children are able to integrate into the society as well. Van Haelst & Emans (2014) have stressed the need of support and guidance of the employees' families. This means that MNEs have to have a proactive retention strategy. As they employ loads of individuals, retention plan strategies should differ for different levels of employees. Reciprocity is the key, according to Ragupathi (2013, p. 23). What this means is that employees invest time and dedication in the organization and they expect a return of some kind. This is the same concept as the 'psychological contract' of De Vos & Meganck (2008, p.47). The danger with MNEs is that due to their size, they tend to forget an individual approach in increasing an employees' authority or responsibility. The employees should have access to sufficient development opportunities. What makes a successful MNE is having retention and engagement deeply rooted in their organizational structure (Ragupathi, 2013, p. 23-24).

In terms of SMEs, there are a lot of challenges that need to be overcome in order to carry out successful retention management. SMEs seemingly have more interest in carrying out individual approaches towards their employees as their workforce consists of a significant smaller amount of employees. This means that they have a more familiar labor environment as well (Ragupathi, 2013, p. 20). Though, there are challenges for SMEs in their retention management. Husys Consulting (2013) has distinguished the most important challenges.

Table 7.1: Most important challenges regarding retention management in SMEs

<i>Communicating a clear vision</i>	Having an unclear vision on organizational growth makes it difficult to tell which ambitions the organization has. This makes it hard for employees to see the purpose of working in that organization in the future
<i>Lack of availability to nurture talent</i>	The organization is often focussed on serving one purpose, making the SME a success. This can negatively affect the development of talent in the organization
<i>Lack clarity of responsibility</i>	In SMEs the role of an individual differs within the organization. It may be the case that people may be operating processes one or two tiers below their level
<i>Lack of engagement</i>	Employees may experience a lack of opportunities to develop in SMEs.

Source: Husys Consulting (2013)

In order to overcome these problems, Husys Consulting (2013) proposes solutions. These result in the following:

Table 7.2: Solutions in order to overcome challenge in SME retention management

<i>Building a clear vision</i>	This is the first step in talent engagement. The translation of this vision to every employee makes them feel involved in the business processes
<i>Outsourcing the HR function</i>	Cost pressures in SMEs are high. This makes the ability to attract and retain the best talent a challenge. To overcome this challenge, SMEs can require assistance from organizations, such as expat centres, that help them with these trajectories
<i>Social branding and technology</i>	Employees like to work in organizations known by their social environment. SMEs therefore have to focus on efficiently using the internet space for branding in all forms of social media.
<i>Enhance network connectivity within the organization</i>	This creates the opportunity for internal bonding through employee engagement that leads to retention. The choice of leaving or staying in an organization often depends on the emotional connection with colleagues

Source: Husys Consulting (2013)

The different organizations involved are scaled as SME or MNE in the methodology. To make the analysis of interviews easier to follow, this distinction can be found in table 7.3 as well.

Table 7.3: Distinction of organizations concerned in this research

Small- and medium enterprises (SMEs)	Multinational enterprises (MNEs)
Bright Society	Bosch Security Systems
International Community Platform (ICP)	Imec Belgium
Imec Netherlands	SKF
Institute for Sustainable Process Technology (ISPT)	TenneT
	Thales
	Vito
	University of Applied Sciences Arnhem and Nijmegen (HAN)

Source: Own research

7.2 | Differences in attracting FKWs

MNEs have the opportunity and means to attract FKWs whilst they are still searching for jobs in their home country. They have access to networks of existing employees or have a broad network of branding on social media like LinkedIn, Facebook and Twitter. The DMU of Bosch even explained that their company has an external recruiter that specializes in searching for potential employees through LinkedIn and Facebook. Also the DMU of Imec Belgium states that during the last 5 to 6 years, LinkedIn has become their main channel of recruitment. She adds: *"This is also the part where we work on the branding of our organization. We establish contacts and network via LinkedIn. We also use existing networks of our own employees."* They also have a recruitment seat within the organization that is actively looking for potential employees online. Online recruitment therefore becomes an increasing channel of recruitment. The DMU of Thales recognizes this and states that their organization still has to catch up on name branding, especially online. *"Our share of recruitment via LinkedIn is growing rapidly. Social media plays an important role nowadays. We still have to work on that."* In the interviews conducted, all DMUs of MNEs confirmed they were using LinkedIn as one of their main channels of recruitment. This is not only visible in the Netherlands, but also in Belgium as stated by the DMUs of Imec Flanders and Vito.

Comparing this to SMEs, the first problem that arises for these organizations is the money they have to put aside in order to attract a foreign knowledge worker. They often cannot pay the extra fees that are required when attracting an FKW to your company, says Michelle Ekkelkamp of Expat Centre Twente. The second problem they encounter according to the DMU of the ISPT is that SMEs do not have access or do not know how to access talent pools of foreign knowledge workers. This is mainly because of the desire of FKWs to work in organizations known by themselves and their social environment. Husys Consulting (2013) has put up a solution for this problem by stating that SMEs have to improve branding on social networks. The ICP also recognizes difficulties that SMEs have to approach foreign knowledge workers. The solution that the DMU of the ICP promotes is creating so-called 'matching stations' that can match employees to organizations that are in need of them. The ISPT is a good example a matching station. One of their tasks is to establish contacts with the organization and the foreign knowledge worker that indicates he or she is looking for a job. Because the FKW's have never heard of these companies, they do not know they exist, let alone approach them.

Another result that came to mind in the expert meeting on the 28th of June, was that when SMEs finally get the chance to hire a foreign knowledge worker, the SME is reluctant to take that necessary step. The main reason for holding back is the fact that the foreign knowledge worker does not master the Dutch language. Therefore, the SMEs are unsure on how to implement the FKW in their current business processes. But at the same time, the internationalisation of SMEs takes place (Hessels, 2005). Entering new markets and gaining know-how is one of their main drivers nowadays. This paradox makes it hard to actually get FKWs to join SMEs. And to make a change in the mind-set of these SMEs takes time and requires effort to exceed a certain threshold of DMUs of SMEs to take the necessary steps.

The size of the firm does matter a lot in the process of the attraction of foreign knowledge workers to these workers themselves. They want to work in organizations known by themselves and by their social environment. The problem that arises with SMEs is the fact that these organisations are not as appealing as MNEs as they do not come to mind when FKWs decide to

work in the Netherlands. Consequently, also SMEs have to take more initiative in social branding and be more open to FKW's to join their firm. And when they do open up, SMEs have to make sure to approach the right 'matching station' that can establish contact with the FKWs, such as the ISPT.

7.3 | Differences in retaining FKWs

Retention management can differ in size of organizations as stated in the literary background earlier on in this chapter. MNEs are known to offer development or training programs to their employees, whilst SMEs have a more select and familiar labour environment. It is therefore interesting to see if these differences are present in the organizations interviewed in this research.

Concerning retention management, MNEs are capable to offer higher wages than SMEs. Imec Netherlands (SME) sees this as a difficult factor to cope with. The 30%-ruling makes that Imec Netherlands can still compete with these MNEs. But as soon the eligibility for the ruling ends, the DMUs of Holst do not know what will happen in the future. But that concern is not only of importance to SMEs, also MNEs have issues when their employees are no longer eligible for the 30%-ruling. The DMU of Bosch explains: *"We try to prepare them for this transition, but there are always employees that demand that we are accountable for the difference in their disposable income. But we are not going to do that."* It depends on the individual on what he or she finds more important. Wage levels, the opportunity to further develop professionally and personally or maybe the creative freedom that is being offered. But in terms of wage levels, MNEs can simply offer more.

Another thing that marks a difference between SMEs and MNEs is the international working environment. MNEs moreover offer the possibility for a FKW to work in a more international environment. What this means is that they can speak English all the time, produce documents in English and have the possibility to interact with other foreign colleagues as well as Dutch knowledge workers. The DMU of Thales (MNE) emphasizes that the organization is really focussed on promoting an international labour environment. She explains: *"Having an international character is essential. In the past years, this internationalization really has become a core activity for us."* Having this international environment makes it easier for foreign knowledge workers to integrate in business processes. In SMEs, the need of speaking Dutch is higher. The vast majority of colleagues in their working environment will be of the Dutch nationality. This makes it not necessary, but preferred that a newly acquired FKW puts the effort to learn Dutch. An Indian employee of Bright Society confirms this by saying: *"It is not necessary for a Dutch person to be able to speak English very well to be able to communicate. He or she will be much more comfortable while speaking his own language."*

The research has also found a difference in the support of employees regarding their situation at home. MNEs often lack the necessary support and guidance of their employees on personal level, according to Bright Society. This is confirmed by statement of the DMU of Bosch: *"We do not offer support for professional integration of partners of our employees, but we do offer language courses."* The DMU of Thales is aware that the integration of partners can play a role in retention management. She explains that there are external organizations that deal with these problems, such as Twente Branding. But the organization itself does not take the initiative to overcome integration problems in the personal environment. SMEs like Bright Society and the ISPT do recognize these shortcomings and are there to help foreign knowledge workers in overcoming those problems. A DMU of Bright Society explains: *"It sometimes happens that while the husband has a job at a company here, the partner stays at home without a clear rhythm on what to do. We therefore offer those partners training and programs. These programs support them in joining social activities. We even organize events in which those partners are involved. I think we have a*

progressive approach related to this, especially when you compare this with other companies." This means that MNEs have to invest more in personal support of their employees. It makes them also feel valued as an employee of that particular organization.

7.4 | Overview of findings

In terms of attraction factors, the main differences between SMEs and MNEs can be found in the use of social networks regarding brand awareness. MNEs such as Bosch even have an external recruitment agency that is active on platforms as LinkedIn, Facebook and Twitter. DMUs of both MNEs and SMEs recognized the increasing importance of online recruitment. Although SMEs have fewer funds available to outsource recruitment, they can still put their name out there by branding through LinkedIn or other social platforms.

The second problem that SMEs encounter is that they have more difficulty to establish contacts with foreign knowledge workers. One of the solutions to this problem is establishing networks via the social platforms mentioned above. But another solution can be found in approaching 'matching stations' in the Netherlands, such as the ISPT, that are aimed at establishing networks between knowledge workers and SMEs.

Also, SMEs have to change their mind-set on being more international in this globalizing economy. The interviews and the expert meeting on the 28th of June revealed that most SMEs are still unsure on how to implement foreign knowledge workers into their existing business processes. But as knowledge becomes more open, SMEs have to embrace this trend. This means SMEs have to open up more in hiring international talent.

In terms of retention factors, one of the most important differences between SMEs and MNEs can be found in wage levels. MNEs in general are able to offer higher wage levels than SMEs. This may influence potential employee turnover from SMEs to MNEs. Besides, MNEs offer a more international labour environment that makes international knowledge workers feel more at ease. Having more international colleagues makes English the most common language of communication.

Last but not least, the personal support and guidance of employees is becoming more important. As SMEs in general have smaller team, they are very capable of a personal approach whereas MNEs still have a hard time recognizing problems that employees may encounter at a personal level. Investing time and support in guiding their employees through these problems makes an employee feel a valuable asset of an organization. SMEs as Bright Society and the ICP have recognized these problems already and have established a more progressive approach than the MNEs involved in this research.

8. | Personal background of foreign knowledge workers

This chapter deals with the effects of the personal background of foreign knowledge workers in the Netherlands. The factors that will be dealt with are the country of origin, the age and the relationship status of the knowledge workers. Based on the differences and similarities that are found within these factors, this chapter will answer the fourth and last sub-question:

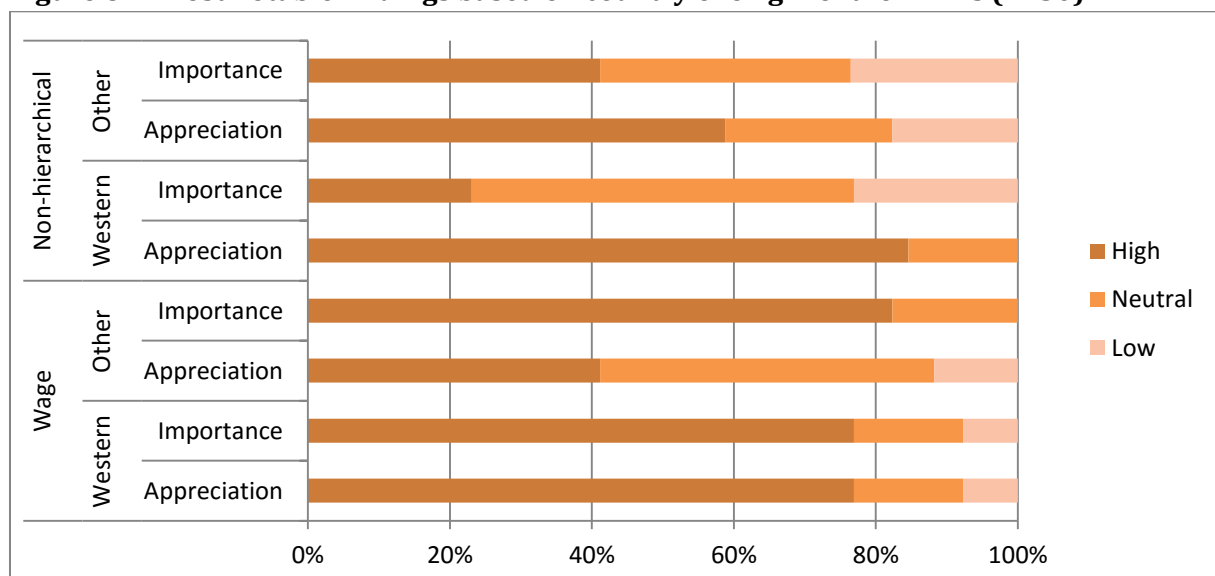
“To what extent does the personal background of the foreign knowledge worker influence its retention in the Netherlands?”

8.1 | Differences based on country of origin

The first background that will be examined is the country of origin of the knowledge worker. As mentioned earlier in the literature by Hofstede (2011), cultural differences between countries greatly influence one's attitude. Due to these cultural differences, people have to adapt their way of life when they choose to migrate to the Netherlands. The time it takes for them to adapt to the Dutch culture and the things they are struggling with while adapting is very important to distinguish, in order to increase mutual understanding and smoother integration of the FKWs. Therefore it is relevant to research whether the cultural background of the FKW plays a role in the importance of certain factors to remain in the Netherlands.

In order to achieve exploratory findings, the researchers have made use of the survey that was held among the FKWs. Due to the fact that the researchers have spoken with 30 FKWs from many different countries, it was hard to discover similarities and differences based on each cultural background. This was caused by the low response rate per individual country. Therefore, the FKWs from the Western countries are combined in one group and the remainder countries in the other group. As a result, the researchers ended up with 13 FKWs from Western countries and 17 from other countries. Due to the fact that the requirements of the survey are not met, as the sample is not random, the statements are only applicable to the sample group. The findings from the survey are subsequently checked with the interviews. The most notable findings based on the country of origin of the FKWs is visualized in figure 8.1. This graph shows the distribution of the answers by the FKWs.

Figure 8.1: Most notable findings based on country of origin of the FKW's (n=30)



Based on the survey and the interviews, the researchers found that respondents from the Western countries are relatively more satisfied with the wages in the Netherlands. This can be sought in the fact they are more used to Western expenditure patterns. As a Spanish man says: *"If I would get a similar job in Spain, I wouldn't earn as much as here. It's good here."* *"I cannot really complain,"* adds an Italian FKW (35). This means that although the cost of living is higher, this is compensated by the relatively higher wages compared to Spain or Italy. A FKW from France agrees: *"The salary is acceptable in the Netherlands."* On the other hand, FKWs from the Non-Western countries think that wage levels are rather low in the Netherlands. A man from India: *"If money is the only criteria, Holland is not the country to be. It is a very peaceful country, but not for money."* A Chinese FKW explains why he chose the Netherlands over other countries: *"Considering the comfortableness of my life, my life is much more comfortable than that of my friends. However, when looking at salary – they are earning much more."* This difference is also shown in figure 8.1, where the appreciation of the wage in the Netherlands is lower among non-Western FKW's. Based on these findings, one can say that the non-Western FKW's consider other factors more important than wage in their decision to migrate to the Netherlands or when they think of a long-term stay in the Netherlands.

Regarding the non-hierarchical working environment in the Netherlands, the survey shows that Western FKWs appreciate this type of working environment more than the non-Western FKWs. An explanation can be sought in the fact that non-Western FKWs have a big cultural gap to bridge. This is mainly visible in the working culture. The Dutch working culture is reflected as being non-hierarchical. The interviews support this finding, as a Frenchman says: *"I like this kind of non-hierarchical.... This straight forward..., you can say what you want to say. I really like it."* A Serbian woman adds: *"When you want to go and talk with your boss, just do it. I really like that here,"* whereas the FKWs from the non-Western countries mostly talked about the adaptation time to this type of working environment. The time it takes them to adjust greatly differs. A FKW from Ghana explains: *"It took some time to adjust. In the beginning it is very difficult, it is a matter of responsibility. Which responsibilities do I have, which does my supervisor have? To which extent do I need to communicate with my boss? It is very unclear in the beginning."* A FKW from Colombia continues: *"I am used to it and now I am considered rude in Colombia, but my girlfriend is still adapting after five years. She struggles with it."* But, as figure 8.1 shows, once the Non-Western FKW's are adjusted to the system they rate the non-hierarchical working environment as more important than the Western FKWs, as an Indian man explains: *"The directness I think is a good thing, but for newcomers it could be a culture shock. That part I went through."* But there are many exceptions, as for example not all the Western FKWs appreciate this type of environment. A Spanish employee of the ISPT said that he found the non-hierarchical environment odd at first. So, even though there are some general differences found between the two groups, the evaluation and the adaption to the non-hierarchical working environment is primarily based on the personal characteristics, rather than the origin of the FKWs.

The last matter the researchers found during the interviews, was that FKWs from India, Indonesia and Spain had more difficulties with the closed attitude of Dutch persons than FKWs from other countries: *"People notice you on the street if you have trouble with something, for example if you are lost. The Dutch people will always stop and offer you to help out. So the people in general are really helpful and friendly, but when the matter is solved – they just leave. It makes it quite hard to have a deeper conversation with Dutch people."* Due to this closed attitude of the

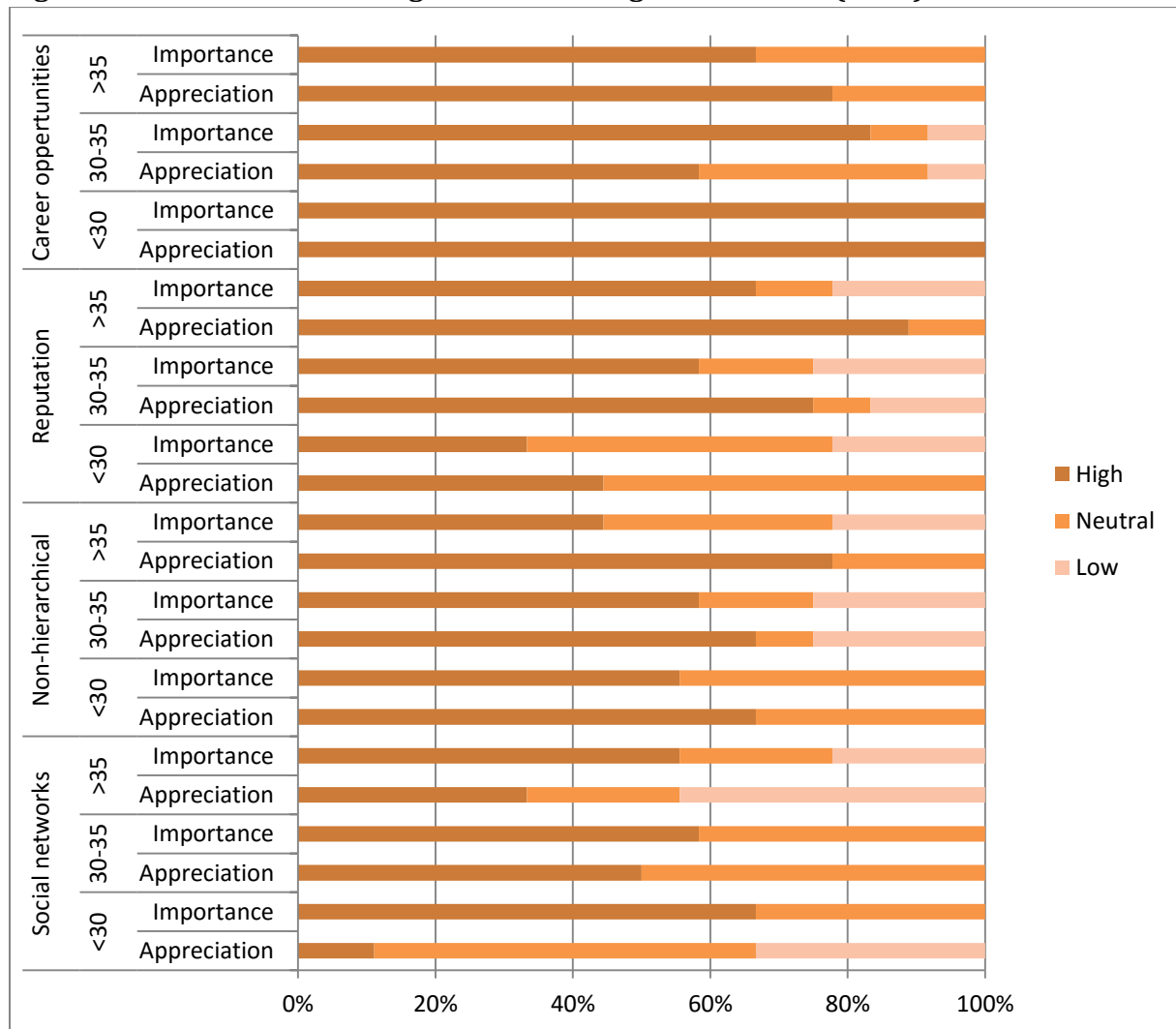
Dutch people, as they *“go straight home after work, close the curtains and open them the next day when they have to go to work again,”* the FKWs sometimes feel as an outsider in the Dutch society. An Italian woman (35) puts this closed attitude of the Dutch in perspective: *“You have to know how relationships between people work. I do not think that in the Netherlands that is different from other countries. From my experience, having common interest in sport, makes it easier to interact.”* The cultural background can also explain the difference in perception of the Dutch closed attitude.

Apart from the wage and the feeling that Dutch people have a closed attitude, the researchers could not find differences based on the origin of the FKWs, as the personal features of the FKWs have a far greater influence on their decisions. The differences that were found in wage and closed attitude can be mainly explained by the differences in cultural background.

8.2 | Differences based on age

The researchers try to determine whether the importance of retention factors of FKWs shifts as they age. To do so, the researchers have made use of the interviews and the survey. Due to the fact that the requirements of the survey are not met, as the sample is not random, the statements are only applicable to the sample. There are three groups composed, based on the age of the FKWs. The first group contains every FKW that is younger than 30, the second group contains the FKWs between 30 and 35 and the last group contains the FKWs who are older than 35. The researchers have based this distribution on the probability that the FKWs have children. People under the age of 30 are less like to have children, whereas people between 30 and 35 are more likely to have very young children and people who are older than 35 are more likely to have children in a further life stage. The researchers expect that having children will greatly influence the priorities of the retention factors. The most notable findings based on the age of the FKWs are visualized in figure 8.2. This graph shows the distribution of the importance and appreciation of certain factors according to the FKWs.

Figure 8.2: Most notable findings based on the age of the FKW's (n=30)



The interviews revealed that the FKWs from all ages rate career opportunities as essential. However, the results from the survey show that the importance of the career opportunities declines as the respondents age: Whereas all of the respondents under the age of 30 rate career

opportunities as highly important, only 64% of the respondents older than 35 share this opinion. A man from Colombia (39) explains that he sees people at the age of 50 who *"just want to do what they do best and they are happy within their current position."* This specialisation could be an explanation for this decline in importance as the FKWs age; once they feel like they are in the right position to express their qualities – the need to achieve a higher position further advance in their personal career declines. *"As long as I keep challenged, I am happy,"* explains a FKW from France (32). Therefore, the challenging aspect of the work the FKWs are doing is rated essential as the FKWs age, rather than career opportunities in itself.

During the interviews the researchers noticed that there are various attitudes towards the reputation of Dutch multinationals and universities. This is also apparent from the survey, which shows an increase in the importance and appreciation of the reputation as the FKWs get older. The tendency that exists among the younger FKWs is typically described by a Spaniard (31): *"I knew the companies, but I didn't know that they were Dutch."* But on the other hand, the reputation of Dutch universities has also made the difference for a woman from Suriname (31) *"as it is more appealing."* An Italian woman (35) and a man from Ghana (36) also acknowledge that the reputation was decisive in their decision: *"The presence of international organizations in the Netherlands and the fact that the reputation of the Dutch technical universities is really good."* In general, the researchers noticed that older FKWs value the reputation of Dutch institutes more than younger FKWs.

The youngest group of FKWs explained that they rate social networks in the Netherlands as highly important, but they also notice that they have a hard time setting up those networks here. An Indian man (27) states that *"it is really hard to make friends in the Netherlands as an expat."* Based on the other meetings with the FKWs, it is evident that they rate their social network as very important. An older Indian man (37) recognizes this situation and says that *"the first year is going to be really pathetic. You have a lot of time after work, because of the really good work-life balance. After the first year you slowly gather a social life and start meeting people with the same interest. It takes time."* Based on these findings, the younger FKWs state that they need more opportunities to create and maintain their social network.

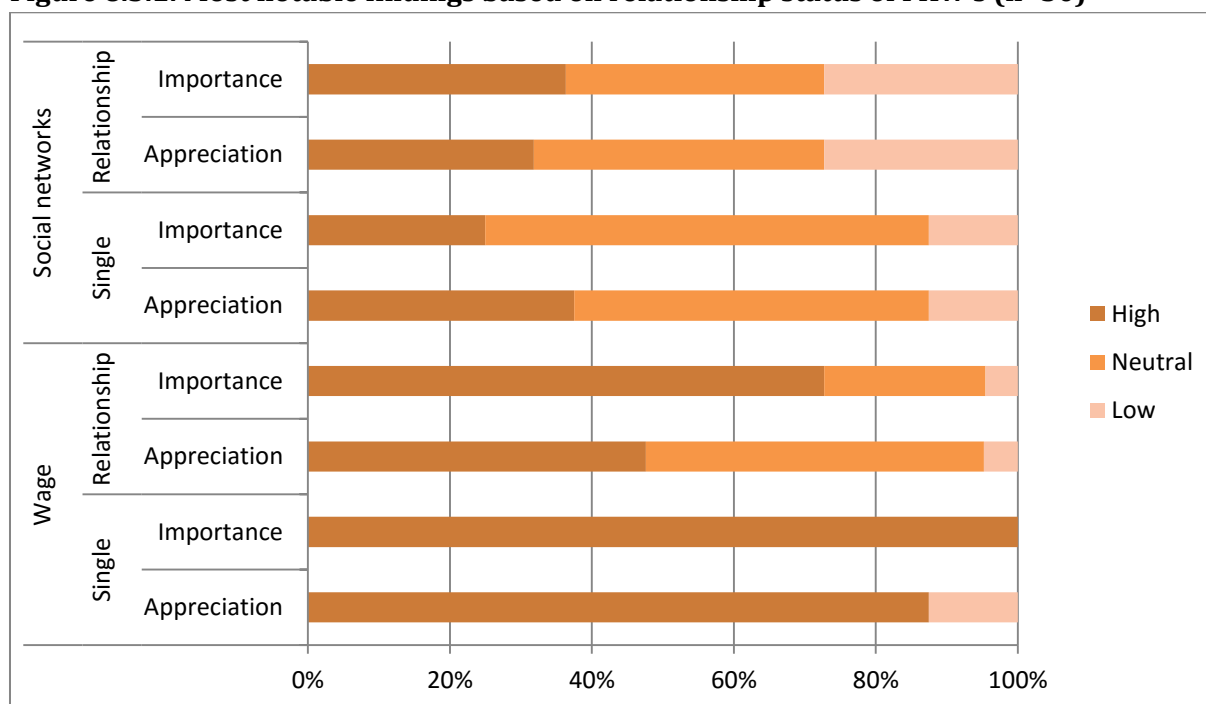
An additional factor is the children of the FKWs and their education. This was not included in the survey. Yet, it turned out to be of relevance, as the FKWs see sending their children to the Dutch primary school as the first step towards a permanent stay in the Netherlands. This will greatly influence their own life due to the fact that their kid will speak a language that they are often not able to speak fluently. An Italian woman (37) admits that she was too lazy at first to learn Dutch and could not be bothered as *"everyone in the Netherlands can speak English..."* But since her kid is attending the Dutch primary school, she regrets this decision as her kid is already speaking the Dutch language better than she is. Subsequently, the international schools in the Netherlands are seen as a positive attraction factor, according to a Greek man (43). *"It was one of the reasons in our decision to come here so quickly, but after that we've send the kids to the Dutch school as we want them to follow the things in the Dutch society and be able to integrate more. The international schools are more focused on the children of people who are staying here for a short period, if you want to stay here in the Netherlands and send your children to an international school they will never have the opportunity to make Dutch friends. As a result, the Dutch of my daughter is far better than mine and growing every day."* The researchers conclude that having children does greatly influence the retention factor of the FKWs in the Netherlands, as many of the older FKWs state that it is harder for the people with children to leave: *"If I want to leave, I*

can't just leave tomorrow." This however happened within subjects that the researchers did not expect prior to the research, such as the choice between a Dutch school and an international school for their children.

8.3 | Differences based on relationship status

As mentioned in the previous section, the domestic circumstances of the FKWs influence the way of life of an individual. This sector continues with these circumstances and will focus on the relationship status of the FKW. A distinction will be made between people who are currently single (n=8) and people who are currently in a relationship (n=22). Due to the fact that the requirements of the survey are not met, as the sample is not random, the statements are only applicable to the sample. The findings from the survey are controlled by the interviews. The most notable findings based on the relationship status of the FKW's is visualized in figure 8.3.1. This graph shows the distribution of the answers by the FKW's.

Figure 8.3.1: Most notable findings based on relationship status of FKW's (n=30)



While the researchers expected that the FKW's who are not in a relationship would show a greater need for social networks, the sample showed that the FKW's who are in a relationship rate a social network of more importance; whereas the majority of the singles shows a neutral importance. A FKW from Ghana explains the importance and appreciation of his social network in the Netherlands: *'After work I go back to my kids and have time with the family and friends and Sunday we go to church. We meet a lot with people and sometimes we also travel to visit people in other parts of the NL.'* This example perfectly shows the similarities between the single FKW and the FKW that has a relationship in their need to meet with other friends and people.

Regarding the wages of the FKWs, it is noteworthy that the FKWs with a single status rate the importance of their wage higher than FKWs who have a relationship. The single FKWs also appreciate their wage more than the FKWs in a relationship. The man from Ghana describes this discrepancy nicely: *"Of course there are certain criteria, but living in the Netherlands is not about making money, but about being happy."* In addition, the flexible working environment in the Netherlands gives them time to see their family more often. An Italian man concludes that people in the Netherlands *"work to live, rather than live to work."*

In addition to the scores from the survey, the FKWs who have a relationship explain the influence of their own relationship on their willingness to stay in the Netherlands. This could be divided into three different groups. The first group contains out of FKW's for whom their spouse was the most important reason to migrate to the Netherlands, as a Scot explains: *"I came to Holland for love. My girlfriend and now wife came from Holland."* While others met their spouse after they migrated to the Netherlands. The last group met their spouse back in their country of origin and are both migrating. This group states that if their spouse is not happy or cannot adjust within the Netherlands, they are going to look for alternatives. Hence, the relational status of the knowledge worker has a large share in the attraction and their willingness to stay in the Netherlands.

8.4 | Overview of findings

This chapter will give an overview of the similarities and the differences between the personal backgrounds that are discussed in the previous three sections. Based on these outcomes, this chapter will answer the fourth and last sub-question.

When looking at the origin of the FKWs, it is noteworthy that FKWs from non-Western countries rate their amount of wage more important than the FKWs from Western countries. In addition to the wage, it is also remarkable that FKWs from Western countries appreciate the non-hierarchical working environment more than the FKWs from non-Western countries. The researchers presume that this difference is based on the bigger cultural distance between the Netherlands and the people from non-Western countries.

Regarding the age of the respondents, the researchers have noticed that the younger FKWs (<30) rate their career opportunities more important than the older FKWs (>35). A reason for this discrepancy could be sought in the fact that the older FKWs are also satisfied with the challenging aspect of their work, and therefore rate further career development of lesser importance. Concerning the topic about the reputation of Dutch multinationals and Dutch educational institutes, the researchers noticed that in general the older FKWs value the reputation of Dutch institutes higher than younger FKWs. The subsequent topic was the evaluation of the social networks, which revealed that the younger FKW's need more opportunities to create and maintain their social network. Lastly, the children of the FKW's have a decisive impact in the retention decisions of the FKWs, as it is really important to them whether they send their child to a Dutch school where they are able to learn the Dutch language and integrate, or to an international school where they speak the English language and cannot build friendships.

The last section dealt with the differences between the FKWs in terms of their relational status. It showed that both the single FKWs and the FKWs who have a relationship have a need to meet with other friends and people, other than their spouse or children. It was also noteworthy that the FKWs with a single status deem the importance of their wage higher than FKWs who have a relationship. Whereas the mind-set of the people with a relation is more based on the flexibility that is offered in the Netherlands. In addition to the results from the survey, the FKWs who have a relationship explain the influence of their own relationship on their willingness to stay in the Netherlands. This could be divided into three different groups. The first group contains FKWs for whom their spouse was the most important reason to migrate to the Netherlands, the second group met their spouse after they migrated to the Netherlands, while the last group met their spouse back in their country of origin and are both migrating. Hence, the relational status of the knowledge worker has a large share in the attraction and their willingness to stay in the Netherlands.

“To what extent does the personal background of the foreign knowledge worker influence its retention in the Netherlands?”

To answer the fourth and last sub-question: Based on the above findings, it is evident that the researchers have found some results based on the personal background of the FKWs. However, the personal characteristics of the FKWs have far greater influence on their decision to migrate to and to stay in the Netherlands, than the backgrounds of the FKWs.

9. | Conclusion

With reference to the sub-questions that are analysed in the previous four chapters, this chapter describes the conclusion of the research. In the research the researchers have interviewed 55 people who are directly involved in the process of the attraction and retention of foreign knowledge workers. Based on these discussions, this chapter will give answer to the main question of the research below:

“What are the most important factors to attract and retain foreign knowledge workers with a beta background in the Netherlands according to decision making units of international operating firms, compared to the factors mentioned by the knowledge workers themselves?”

Regarding the attraction of foreign knowledge workers, the researchers found that the most important factors according to the knowledge workers were also mentioned by the DMUs. Both the DMUs and the FKWs do not see the wage levels in the Netherlands as a unique selling point, as organizations in neighbouring countries can offer the FKWs a much higher wage. Yet, the 30% ruling is still seen as a very important attraction factor by the FKWs and DMUs. Hence, the wage of the FKW is seen as standard criterion – once the criterion is met, the foreign knowledge workers will investigate the other attraction factors in the Netherlands. When looking at those other factors, it turned out that the career opportunities are regarded as the most important attraction factor. Subsequently, the non-hierarchical working environment is regarded as a unique Dutch factor, which attracts FKWs as it makes it possible to achieve quicker career opportunities in a lesser amount of time. In addition, the high proficiency of the English language is often regarded as a decisive factor to migrate to the Netherlands, instead of neighbouring countries. Lastly, when the FKW's are migrating to the Netherlands, they highly appreciate the assistance they get while settling in, such as help with their visa, tax and housing. They rate this assistance as necessary in their first steps of integration in the Netherlands. The DMUs of the interviewed organization recognize these integration problems at the start of an FKW's career at the organization. In terms of attraction management, the DMUs and FKWs operate at the same level. This means that there are no significant differences between FKWs and DMUs regarding important factors in attraction management.

Regarding the retention of foreign knowledge workers, the researchers noticed that the personal situation and its related factors are leading in the decision on staying or leaving a country. If the employee or his spouse has trouble integrating in the Dutch society or trouble finding a job, they are very likely to leave the Netherlands. Both the DMU's as the FKW's share this impression. Considering retention management, the DMU's stressed the importance of career development and the opportunity to grow as an individual inside the organization. When the FKW's were asked about the factor career development, they claimed that opportunities to develop yourself and your career must always be present in an organization in order retain foreign knowledge workers. The foreign knowledge workers told the researchers that they appreciate the unique aspects of the Netherlands, such as the flexible work-life balance. But in order for organizations to keep their foreign knowledge workers, they have to take an extra step to make employees feel valuable – therefore recognition in their work is rated as very important. These, and other so-called 'soft factors', are becoming increasingly important in the process of the retention of foreign knowledge workers in the Netherlands.

The differences between SMEs and MNEs must be sought in the ability that organizations have to attract foreign knowledge workers. Multinational organizations have more resources available to attract foreign knowledge workers and could easier offer them options, such as internships. Whereas the small- and medium enterprises less funds available and therefore less resources to invest in the process of attraction, Additionally, SMEs are more reluctant to take the necessary steps to hire the first knowledge worker from abroad. The main reason for holding back is the fact that the foreign knowledge workers are not capable of speaking the Dutch language, which makes it harder to integrate them into their current business processes. On the contrary, MNEs are more internationally oriented and have English as common language for communication.

The researchers have found some results based on the personal backgrounds of the foreign knowledge workers, but the personal characteristics have proven to have a bigger influence on the decision of the knowledge workers to migrate to the Netherlands or remain here for a longer period. However, the main differences that can be found within the retention factors are based on the family composition of foreign knowledge workers.

The researchers believe that mainly the soft factors are subject of improvement in the Netherlands. Hence, the first advice is to improve the provision of information regarding healthcare in the Netherlands as the foreign knowledge workers are not used to the protocol-based healthcare system in the Netherlands. In the current situation, they feel uncomfortable and do not have the feeling they get taken seriously. By providing detailed information on how the Dutch healthcare system works, the understanding of the foreign knowledge workers about the Dutch healthcare protocol will increase and will make them feel more at ease. The second advice is to support and guide the partners of the employees, as the situation at home influences the mood and performance of the employee. The assistance is greatly appreciated and this will increase the understanding between both parties. The third advice is to reduce the amount of bureaucracy. Both the DMUs and the FKWs experience delays because of the need of a visa, health insurance and eligibility of the 30% ruling. The researchers recommend speeding up these processes. The last advice is aimed at the organizations, as both the literature and the interviews show that the branding on social media is becoming increasingly important. By reaching out through social media, one is able to attract foreign knowledge workers more efficiently as a result of an increased awareness of their brand name.

Considering the analysis of FKW versus DMU, one can conclude that the factors of influence moreover correspond regarding attraction management. The difference can be found in the factors regarding retention management. SMEs as the ICP stress the importance of personal guidance of employees in order to make the partners and children of FKWs feel at home as well. The MNEs in this research are reluctant to get over the threshold of only making the FKW feel comfortable and guiding him in the first stages of arrival.

All in all, the researchers conclude that the hard factors, such as wage and challenging career conditions, have become essential factors to the foreign knowledge workers, whereas the softer factors, such as social networks and the integration of their family are becoming increasingly decisive to foreign knowledge workers in their decision for a long-term stay in the Netherlands.

10. | Recommendations

This chapter deals with the recommendations of the research. These recommendations derive from the most important research results. These will be applicable at a national level for governments and at an organizational level for MNEs as well as SMEs.

Governmental

- When recruiting FKWs to come and work in the Netherlands, the **career perspectives and flexibility should be emphasized**. These are unique features of the Dutch working environment that will make FKWs more willing to work in the Dutch society. Due to the non-hierarchical working environment, FKWs are able to develop themselves quicker at the professional level as well as the personal level.
- **Further strengthen the joint branding of the Netherlands** as a knowledge region. The Hannover Messe and the Boston MIT European Career fair give a good example of the cooperation of organizations under the same brand name (Holland High Tech). This stands out from the competitive knowledge regions and also allows SMEs and MNEs to present themselves under this brand name.
- To overcome the lack of understanding on the Dutch healthcare system, there should be **more supply of information to explain the healthcare procedures**. In this way, FKWs will gradually create more understanding on how the healthcare system works. Brainport Development in the region of Eindhoven is a good example regarding this information supply. They even have a general practitioner set up just for expats.
- To make it easier for both FKWs and organizations, the government should **optimize their processes to overcome bureaucratic hassle**. This can be achieved by shortening the time to get a working permit for the FKW, but also by making it easier for spouses and direct family to come to the Netherlands. In addition, it should be easier for organizations to attract temporary trainees and interns. In the current legislation, these trainees and interns have to have a working permit, although they only operate in the Netherlands on a temporary basis.
- The current Dutch policy on FKWs in-between jobs requires them to find a job within 3 months. As the tacit knowledge they possess is very specific, it is hard to find a similar job within the set term of 3 months. Therefore, the researchers suggest **extending the period to 6 months**. This increases the likelihood of the FKWs to remain in the Netherlands rather than losing their knowledge to other knowledge regions outside of the Netherlands.
- Income is no longer the main factor in attracting FKWs, but it is still of importance. Once a certain threshold is met, other factors become more important. To facilitate the employer, the **30%-ruling** should be used as an asset for attracting FKWs as well as retaining them. This is a unique feature of the Dutch working environment and should therefore be emphasized in the process of branding.
- **Lower the IND fee for SMEs** in order to foster the attraction of FKWs and foreign interns. The current fees are too high for some SMEs, which makes them reluctant to hire FKWs outside of Europe. As the costs are lowered, SMEs will open up more in the process of hiring these FKWs.
- Researchers suggest an **integration day** for when FKWs start working in the Netherlands. This includes supply of information on healthcare systems, tax, the non-hierarchical working environment and an introduction to the Dutch culture in general.

Dutch people have to be present as well. This can be fostered by a financial compensation. This way, the FKWs will feel more incorporated into the Dutch society.

MNEs

- In order to make employees feel valued in the organization, the **employers should implement a personal approach towards their personnel**. This means supporting and assisting the employees as well as their families in order to make them feel at home in the Dutch society. This may include a support trajectory for the partner in order to find a job and learn the Dutch language. The research shows that the personal situation affects the output at work.
- **Employers should invest in creating an international working climate**. This involves speaking English and providing official documents in both Dutch and English. This lowers the threshold for FKWs to integrate in the organizational culture.
- **Employers should further extend their connections with existing branding agencies** (e.g. Holland High Tech) **in the Netherlands**. These branding agencies act in a professional manner. Connecting with these branding agencies strengthens the brand name of both the Netherlands and the individual organization.
- To make sure knowledge does not spill over to other regions outside of the Netherlands, organizations should collaborate in **the referral of candidates**. For example, when a mismatch between employer and employee occurs in a job interview, refer the resume to other employers in the region. In this way, the region benefits from the tacit knowledge of the FKW and this makes sure the knowledge is not lost. The Talentbox of the Brainport Development of the region Eindhoven is a good example.
- The research has shown that **FKWs have the need to share experiences with each other**. Therefore, MNEs and SMEs should support informal meetings for their employees where they can discuss these topics. It is advised that also Dutch employees attend these meetings to create common understanding among colleagues and different cultures.

SMEs

- SMEs should **be less reluctant to hire FKWs**. As some SMEs have the urge to internationalize their goods and services, the company's attitude in recruitment should match their ambitions. Extending their recruitment scope to FKWs fosters the further development of SMEs.
- When SMEs start hiring FKWs for the first time, the researchers advise to **hire multiple FKWs**. This eases the step to integrate, as FKWs are able to share experiences. At the same time, multiple FKWs in the organization encourage an international climate. This lowers the threshold for FKWs to start working in a SME in the first place.
- In order to foster the recruitment process for **SMEs**, they **should improve the branding via social media** such as LinkedIn. Making your company known to the outside world is proven to be an effective way of recruitment.
- It is hard for SMEs to get access to FKWs. Therefore, **SMEs should connect with public-private partnerships**, such as the ISPT¹. SMEs should connect with organizations, such as the ISPT. These organizations are in direct contact with the FKWs and could bring the SMEs in contact with the FKWs. In this way, this gap of SMEs and FKWs can be bridged.

¹ ISPT connects stakeholders from different sectors and disciplines to process technologies whereby process innovation is strengthened and expedited.

- **SMEs should make use of expat centres** in their retention management. These expat centres are specialized in offering adequate support in guiding the FKW through the integration process.
- The researchers suggest **the usage of tools that are available for SMEs in supporting the FKWs in their adjustment to the Dutch way of living and working**. A good example of such a tool is the iHRD program established by Holland High Tech.

11. | Reflection

This chapter will describe the research process and the situations the researchers have encountered while gathering the data. Subsequently, the scientific and the societal relevance will be discussed and finally an advice will be given to further research this subject.

The research process

The researchers have started with collecting literature about the subject. Once they had gathered enough information to start their data collection, they reached out to the directors of the Human Capital Agendas of the Dutch topsector policy in order to request cooperation from organizations that are active within each topsector. While the Human Capital Agenda has the goal to cooperate closely in common projects, in practice only a few sectors (LSH, Creative, HTSM, Chemical and Energy) showed interest in providing their assistance in the research. Apparently, the subject of this research is not relevant among the other sectors. Yet, all of the established topsectors recognize the problem of labor shortages according to contemporary literature. The researchers therefore were surprised by the non-response of the consulted human capital directors. The expectation was that each of the human capital directors would positively respond to the relevance of the research. This was not the case, as only a few of the directors took to effort to react to our request.

Initially the researchers planned to compare the Dutch working and living environment to its main competitors in Western-Europe. Therefore the researcher sought for organizations that were active in the Netherlands as well as in other countries in Western-Europe. However, this research was mainly relevant for the Netherlands as a country therefore these organizations abroad did not recognize the need to participate in this research. Hence, the researchers decided to change the research design in cooperation with the supervision and this resulted in to a more focused research population as only the beta industries in the Netherlands remained part of the research. The researchers did have two interviews with DMU's in Belgium because they already responded to our request before the change in research design. It eventually turned out to be relevant in order to distinguish some differences between the Netherlands and Belgium. With the recommendation of our supervisor of High Tech NL, the researchers also conducted an interview with an expert of the Holland Innovation Network in the United States. The main reason for this interview was to determine which factors he regarded important in attracting and retaining foreign talent.

The researchers established contacts with DMU's of organizations via the human capital directors that reacted positively on the request to participate in this research. This was done via telephone calls or via e-mail. It turned out that the DMU's are very willing to take part in the research as the research subject is a relevant topic for their organization. However, it also turned out that the DMU's had difficulties to mobilize the FKW's in their organization to take part in the research. As the researchers asked for 10 FKW's per company this target was never met. Therefore the actual response is lower than expected. Besides this, even when actual dates for interviews were arranged, some DMU's postponed the interviews with the FKW's to a later date of which some interviews never happened. Apparently, organizations have different priorities. This was also reflected in the evasive responses from organizations that were addressed to participate in this research. Also, when the researchers requested the DMUs to fill in the survey after finishing the interview, some of them told us they would fill it in later. In

some cases, the DMU never filled in the survey. Therefore, the comparison between the surveys of FKWs and DMUs was suspended.

The reactions from the FKW's that took part in the table discussions were very positive. Some of them really enjoyed the opportunity of sharing their experience in the Netherlands. Therefore, we advise companies to create a group with internationals where they can debate and talk about the things other than work (social, culture, leisure, sports). Through these meetings, employees get to know each other better and give each other advice. The employees had lively discussions about the Dutch language and the schooling system. This resulted in some heated debates, which were very interesting to witness.

Overall, the researchers have learned a lot from the research process. It is again confirmed that the research process in practice is always different from the expected process. This requires flexibility and adaptability of the researchers. The research taught us different cultural values among individuals and how each individual is capable to adapt to the Dutch society over time. In addition, this research showed the researchers that there are always individual exceptions to common theories. Each individual has different values and those values have to be taken into account.

Scientific relevance

The scientific relevance of this study is that it contributes to the existing literature on attraction and retention management in the Netherlands. Existing literature mainly focuses on the attraction of foreign students and how to retain them for the Dutch industry. This research adds a new perspective by focusing on foreign knowledge workers that have worked in the Netherlands for a period of 3 years or longer. As these knowledge workers are 'rooted' into the Dutch society, they know what the Dutch working and living environment has to offer. This not only includes positive aspects, but will also reveal negative aspects of the Dutch working and living environment. This results in forthcoming challenges for organizations and which factors can be implemented in order to overcome these challenges.

The research goes into further detail by conducting interviews with the most important actors involved in attraction and retention management, namely the decision-making units of organizations and the foreign knowledge workers themselves. Subsequently, this research tries to distinguish differences in attraction and retention management of SMEs and MNEs and also takes the personal characteristics of the interviewed foreign knowledge workers into account. By adding these two dimensions, this research contributes to further understanding of what Dutch organizations can do in order to efficiently attract and retain foreign knowledge workers.

Societal relevance

As mentioned in the introduction, the societal relevance of the research is providing information about foreign knowledge workers to companies, knowledge institutes and governments in order to reduce the upcoming shortage of highly skilled knowledge workers in the Dutch top sectors. This report provides a contribution to the existing knowledge regarding the attraction and retention of foreign knowledge workers in the Netherlands by identifying the most important factors according to both the DMUs at organizational level and the FKWs at the employee level. Based on the results of the research, one is able to identify the importance of these factors and

enables organizations to act more efficiently in their process of attracting and retaining foreign knowledge workers in the Netherlands.

Advice for further research

The retention factors differ from the exit factors. As a result, future research should be aimed at the factor that drive the employees into leaving an organization. Additionally, we advise for further research to enlarge the research population while conducting the same research in a quantitative manner, this way it is possible to find significant correlations between personal characteristics and attraction and retention factors.

The researchers also noticed that there was little statistical information present about the foreign knowledge workers in the Netherlands. The researchers have even consulted internal sources of the Dutch Statistical Bureau, but they could not provide the necessary statistics. Therefore the researchers advise to keep track of inflow and outflow of foreign knowledge workers in the Netherlands and also gather more data about the 30% ruling.

12. | Literature

- Acemoglu, D.** & D. Autor (1999), Lecture Notes in Labor Economics, 14.661. Massachusetts Institute of Technology, Cambridge.
- Ahmad, Shakil** (2008). Impact of Stress on Employee Productivity, Performance and Turnover: An Important Managerial Issue. COMSATS Institute of Information Technology, pp. 1-9.
- Allen, T.D.** (2001). Family-supportive Work Environments: The Role of Organizational Perceptions. *Journal of Vocational Behavior*, 58(3), pp. 414-435.
- Atzema, Oedzge** (2015). Smart Urban Regions of the Future (SURF). Vooraanmelding 2015.
- Audretsch, David, B. & Michael Fritsch** (2002). Growth Regimes over Time and Space. *Regional Studies*, 36(2), pp. 113-124.
- Audretsch, David B., Marcel Hülsbeck & Erik E. Lehmann** (2012). Regional Competitiveness, University Spillovers and Entrepreneurial Activity. *Small Business Economics*, 39(1), pp. 587-601.
- Audretsch & Feldman** (2003). Knowledge spillovers and the Geography of Innovation.
- Beechler & Woodward** (2005), The global war for talent.
<http://www.un.org/esa/population/meetings/ittmigdev2005/P03-LLowell.pdf>
Date used: 20-06-2016.
- BBC.com** (2013). Gay marriage around the world. <http://www.bbc.com/news/world-21321731>.
Date used: 26-07-2016.
- van den Bergh, R. and Du Plessis, Y.** (2012) 'Highly skilled migrant women: a career development framework', *Journal of Management Development*, Vol. 31, No. 2, pp.3-3.
- Baum, Scott** (2007). Attracting and retaining knowledge workers in knowledge cities.
- Bartlett, David** (2007). The Global War for Talent.
<http://www.the-financedirector.com/features/feature879/>
Date used: 11-07-2016.
- Bertoli, Simone, Herbert Brücker, Giovanni Facchino, Anna Maria Mayda & Giovanni Peri** (2009). The Battle for Brains: How to Attract Talent.
<http://www.frd.org/upload/file/Bruckeretal.pdf>.
- Boeijs, Hennie, Harm 't Hart & Joop Hox** (2009). *Onderzoeksmethoden*. Boom Lemma Uitgevers (8e druk), The Hague.
- Boeri, T., H. Brücker, F. Docquier & H. Rapoport** (2012), Brain Drain And Brain Gain; the Global Competition To Attract High-skilled Migrants. Reports for the Fondazione Rodolfo DeBenedetti, Oxford: Oxford University Press.
- Borysenko, Karlyn** (2015). Why they stay or why they go: The keys to good employee retention.
- Boschma, Ron** (2004). Competitiveness of Regions from an Evolutionary Perspective. *Regional Studies*, 38(9), pp. 1001-1014.
- Boschma, Ron** (2005). Proximity and innovation: A critical assessment. *Regional Studies*, 39(1), pp. 61-74.
- Business Dictionary** (2016). <http://www.businessdictionary.com/>. Date used: 27-06-2016.
- Buckingham, Marcus & Curt Coffman** (1999). *First Break All The Rules*. Gallup Press, Washington DC.
- Cable, D.M. & T.A. Judge** (1997). Interviewers perception of person organization fit and organizational selection decisions. *Journal of Applied Psychology*, 82(1), pp. 546-561.

- Cappelli, P.** (2001). A market-driven approach to retaining talent. Harvard Business Review on Finding and Keeping the Best People, Harvard Business School Press, Boston, MA, pp. 27-50.
- Carleton, Karen** (2011). How to motivate and retain knowledge workers in organizations: A review of literature. International Journal of Management, 28(2), pp. 459-468.
- Chesbrough, Henry & Marcel Bogers** (2014). Explicating Open Innovation: Clarifying an emerging Paradigm for understanding Innovation.
- CIA** (2016). The World Factbook <https://www.cia.gov/library/publications/the-world-factbook/>
Date used: 10-05-2016.
- Colombelli, A, M. Foddi & R. Paci** (2011). The knowledge regions in the enlarged Europe. Working Papers 2011(10). University of Cagliari.
- Cooke, P.** (2001), Regional Innovation Systems, Clusters, and the Knowledge Economy. Industrial and Corporate Change, vol. 10, is. 4, pp. 945-974.
- Davidsson, Per & Benson L. Honig** (2003). The role of Social and Human Capital among Nascent Entrepreneurs. Journal of Business Venturing, 18(1), pp. 301-331.
- Davies, R.** (2001). How to boost staff retention. People management, 7(8), pp. 54-56.
- De la Fuente, Ángel & Antonio Ciccone** (2003). Human capital in a global knowledge-based economy. European Commission, Directorate-General for Employment and Social Affairs. <http://www.antonioiciccone.eu/wp-content/uploads/2007/07/humancapitalpolicy.pdf>
- van Erp, Jos** (2016A). Dutch presence at the MIT European Career Fair for talent.
- van Erp, Jos** (2016B). Hightech industrie in Geografisch perspectief: Op zoek naar optimale ruimtelijke schaalniveaus in een Europa van regio's.
- Ederer, Peer** (2015). Innovation at Work: The European Human Capital Index. The Lisbon Council: Policy Brief.
- EF** (2011). http://www.ef.nl/sitecore/_/~/media/efcom/epi/pdf/EF-EPI-2011.pdf
Date used: 10-05-2016.
- ELI** (2014). <http://eduweb.eeni.tbm.tudelft.nl/TB141E/imgs/ELI-agrofood-selectie.pdf>
Date used: 16-06-2016.
- EP Nuffic** (2016a). Welcome, to work!
- EP Nuffic** (2016b). Hoe staat het met de binding van buitenlandse student? Transfer (3), Februari 2016.
- Etzkowitz, Henry** (2001). Innovation in innovation: the Triple Helix of University-Industry-Government relations.
- Etzkowitz, Henry** (1993). Technology transfer: The second academic revolution. Technology Access Report 6, pp. 7-9.
- Etzkowitz, H. Leydesdorff, L.** (1995). The Triple Helix: University – Industry – Government Relations: A Laboratory for Knowledge-Based Economic Development. EASST, 14, pp. 14-19.
- European Cluster Observatory** (2010). Benchmarking Regional Competitiveness in the European Cluster Observatory. Methodology Background Paper 1, pp. 1-25. <http://www.clusterobservatory.eu/eco/uploaded/pdf/1288016756795.pdf>
- European Commission** (2016). What is an SME? http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition/index_en.htm.
Date used: 22-06-2016.

- European Commission** (2003). A Study on the factors of Regional Competitiveness.
http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/3cr/competitivene ss.pdf.
- Financieel Dagblad** (2015). China zet de luiken open voor buitenlandse investeringen
<https://fd.nl/economie-politiek/1095436/china-zet-de-luiken-open-voor-buitenlandse-investeringen>.
 Date used: 21-03-2016.
- Freyermuth** (2007). Retaining Employees in a Tightening Labor Market. RSM McGladrey.
- Föbker**, Stefanie, Daniele Temme & Claus-C. Wiegandt (2014). A Warm Welcome to Highly-Skilled Migrants: How can Municipal Administrations Play Their Part? Tijdschrift voor Economische en Sociale Geografie, 105(5), pp. 542-557.
- Gardiner**, B., R. Martin & P. Tyler (2004), Competitiveness, productivity and economic growth across the European Regions. Regional Studies, vol. 38 (9), pp. 1045-1067.
- George**, Christeen (2015). Retaining professional workers: what makes them stay? Employee Relations, 37(1), pp. 102-121.
- Glennie**, Alex & Laura Chappel (2010). Show Me the Money (and Opportunity): Why Skilled People Leave Home – and Why They Sometimes Return.
<http://www.migrationpolicy.org/article/show-me-money-and-opportunity-why-skilled-people-leave-home-%E2%80%94-and-why-they-sometimes-return>
 Date used: 22-06-2016.
- Groot**, S., G. van Gessel & O. Raspe (2013), Foreign knowledge workers in the Netherlands.
- Guimón**, José & Sergey Filippov (2012). Competing for High Quality FDI: Management Challenges for Investment Promotion Agencies. Institutions and Economies, 4(2), pp. 25-44.
- Haelst**, Nicole van & Danielle Emans (2016). Sourcing a responsive economy. Securing access to talent; What is the sky were the limit? International Community Platform.
- Harvey**, Will (2013). Victory can be yours in the global war for talent: Social factors and lifestyle help to attract top employees.
- Hercog**, Metka (2008). The Role of the State in Attracting Highly-skilled Migrants: The Case of the Netherlands.
http://www.eipa.eu/files/repository/eipascope/20090130170607_SCOPE2008-3_3_MetkaHercog.pdf
 Date used: 26-06-2016.
- Hessels**, Jolanda (2005). Internationalisation of Dutch SMEs. Onderzoek voor Bedrijf & Beleid, pp. 1-11.
- Hofstede**, G., & Hofstede, G.J. (2005). I, we and they. In: Hofstede, G., & Hofstede, G.J. Cultures and organizations: Software of the mind, pp.73-114. New York: McGraw Hill.
- Hofstede**, G. (2011). Dimensionalizing Cultures: The Hofstede Model in Context. Online Readings in Psychology and Culture, 2(1).
- Holland Alumni** (2016). Organisational structure. <https://www.hollandalumni.nl/career/our-dutch-business-culture/organisational-structure>.
 Date used: 27-06-2016.
- Holland High Tech** (2015).
<http://www.hollandhightech.nl/nationaal/actueel/nieuws/topteam-presenteert-visiedocument-2025/visiedocument-topsector-htsm>

- Holland** trade and Invest (2016). <https://www.hollandtradeandinvest.com/business-information/export--import>
Date used: 26-06-2016.
- Holtslag**, Jan-Willem, Monique Kremer & Erik Schrijvers (2012). In betere banen: De toekomst van arbeidsmigratie in de Europese Unie. Wetenschappelijke raad voor het Regeringsbeleid.
- HR.com** (2000). Recruitment and Retention in the High Tech Field.
<http://www.hr.com/SITEFORUM?&t=/Default/gateway&i=1116423256281&application=story&active=no&ParentID=1119278077613&StoryID=1119642322000&xref=https%3A//www.google.com>
Date used: 29-02-2016.
- Huizingh**, Eelko K.R.E. (2010). Open Innovation: State of the art and future perspectives. Elsevier.
- Horwitz**, F.M., C.T. Heng & H.A. Quazi (2003), Finders, keepers? Attracting, motivating and retaining knowledge workers. Human Resource Management Journal, vol. 13, no. 4, pp. 23-44.
- Husys Consultancy** (2013). How can SMEs retain talent effectively? Whitepaper – 2013.
- I am Expat** (2016). The Dutch Healthcare System. <http://www.iamexpat.nl/expat-page/healthcare/dutch-healthcare-system-netherlands>.
Date used: 27-06-2016.
- International Organization for Migration** (2015). Labour Migration.
<https://www.iom.int/labour-migration>. Laatst geraadpleegd: 22-02-2016.
- Iredale**, R. (2001), The Migration of Professionals: Theories and Typologies. International Migration, vol. 39, is. 5, pp. 7-24.
- Irshad**, Muhammed. Factors affecting employees' retention: evidence from literature review.
<http://aupc.info/wp-content/uploads/2012/12/V4I1-7.pdf>
- Jennissen**, R.P.W. (2012). De Nederlandse migratiekaart: Achtergronden en ontwikkelingen van verschillende internationale migratietypen.
<http://www.cbs.nl/NR/rdonlyres/2C023D63-66E6-4E51-BFB5-D899B63B34B0/0/2012denederlandsemigratiekaartpub.pdf>
Date used: 26-06-2016.
- Johnson**, M. (2000). Winning the People War, Talent and the Battle for Human Capital. Copyright Licensing Agency, London.
- Kennismigrant** monitor.
<https://ind.nl/Documents/2013%20Monitor%20Kennismigranten,%20Kwantitatieve%20analyse.pdf>
Date used: 27-06-2016
- Kitson**, Michael, Ron Martin & Peter Tyler (2010). Regional Competitiveness: An Elusive yet Key Concept? Regional Studies, 38(9), pp. 991-999.
- Kreisman**, Barbara J. (2002). Insights into Employee Motivation, Commitment and Retention. Business Training Experts, Denver.
http://www.businesstrainingexperts.com/white_papers/employee_retention/Employee%20Motivation,%20Commitment,%20&%20Retention.pdf
Date used: 27-06-2016.
- Kremer**, Monique & Erik Schrijvers (2013). Arbeidsmigratie in betere banen: taken voor assertieve overhead. Beleid en Maatschappij, 40(1), pp. 71-76.

- Krugman, P.**, 'Competitiveness: A Dangerous Obsession', *Foreign Affairs*, 1994, Vol. 73(2), pp. 28-44.
- Kucharčíková, Alžbeta** (2011). Human Capital – Definitions and Approaches. *Human Resources Management & Ergonomics*, Volume 5(2).
- Lengyel, Imre** (2000). A Regionális versenyképességről. *Közgazdasági Szemle*, 47(1), pp. 962-987.
- Lengyel, Imre** (2004). The Pyramid-Model: Enhancing Regional Competitiveness in Hungary. *Acta Oeconomica* 3(1), pp. 1-18.
- Lisbon** European Council (2000). Presidency Conclusions. 23 & 24 March 2000.
- Mahroum** (2000). Highly skilled globetrotters: mapping the international migration of human capital.
- Marimuthu, Maran, Lawrence Arokiasamy & Maimunah Ismail** (2009). Human Capital Development and its Impact on Firm Performance: Evidence from Developmental Economics. *The Journal of International Social Research*, 2(8), pp. 265-272.
- Martin, Ronald L.** (2016). A Study on the Factors of Regional Competitiveness. The European Commission, pp. 1-184.
http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/3cr/competitiveness.pdf
- Van der Meer, Han** (2007). Open Innovation – The Dutch Treat: Challenges in thinking in Business Models. *Creativity and Innovation Management*, 16(2), pp. 192-202.
- NewGeography.com** (2016). <http://www.newgeography.com/content/003292-what-is-a-global-city>
 Date used: 20-06-2016.
- NOS.nl** (2015). Meer techniekstudenten, maar het zijn er nog steeds te weinig.
<http://nos.nl/artikel/2041549-meer-techniekstudenten-maar-het-zijn-er-nog-steeds-te-weinig.html>
 Date used: 25-05-2016.
- OECD** (2016). Stats.
<https://stats.oecd.org/index.aspx?queryid=60702>
 Date used: 11-07-2016.
- Ontario** (2004). Long-term care facility worker retention. Ministry of Health and Long-term Care. Learning Series, Booklet 4.
- Osteraker, M.C.** (1999). Measuring motivation in a learning organization. *Journal of Work Place Learning*.
- Overheid** (2016). <https://www.rijksoverheid.nl/onderwerpen/ondernemen-en-innovatie/inhoud/rijksoverheid-stimuleert-innovatie>.
 Date used: 05-06-2016.
- Oxford Dictionary** (2016). <http://www.oxforddictionaries.com/>.
 Date used: 27-06-2016.
- Paillé, P.** (2013). Organizational citizenship behaviour and employee retention: How important are turnover cognitions? *The International Journal of Human Resource Management*, 24(4), pp. 768-790.
- Planbureau voor de Leefomgeving** (2014). Buitenlandse kenniswerkers in Nederland: Waar werken ze en waarom?
- Porter, M. & C. van der Linde** (1995). Toward a New Conception of the Environment-Competitiveness Relationship. *The Journal of Economic Perspectives*, vol. 9, is. 4, pp. 97-118.

- Ragupathi**, Dasam (2013). The Employee Retention Practices of MNC's in Hyderabad. *Research Journal of Management Sciences*, 2(4), p. 21-24.
- Ranga**, L.M., J.L. Miedema, R.J. Jorna (2008). Enhancing the innovative capacity of small firms through Triple Helix interactions: challenges and opportunities. *Technological Analysis and Strategic Management*, 20(1), p. 697-716.
- Reiche**, Sebastian (2008). The Configuration of Employee Retention Practices in Multinational Corporations' Foreign Subsidiaries http://www.expatica.com/nl/employment/Business-culture-in-the-Netherlands_102490.html
- Reitz**, O. & M.A. Anderson (2011). An overview of job embeddedness. *Journal of Professional Nursing*, 27(5), pp. 320-327.
- Robinson**, S.L. (1996). Trust and breach of the psychological contract. *Administrative Science Quarterly*. 41(1), pp. 574-599.
- Rosak-Szyrocka-Borkowski**, S. (2007), Workers as the Basic Determinant of the Stationary Medical Treatment Services Quality. *Proceedings of 4th international scientific conference Manaťment ľudského potenciálu v podniku. Ťilina. EDIS – vydavateľstvo Ťilinskej Univerzity*, pp. 142-147.
- Roudgar**, Iraj & Cameron Richards (2015). The Policy Challenge of the Global Brain Drain: Addressing the dilemmas of contributing push-pull factors. *International Journal of Public Policy*, 11(1), pp. 73-85.
- Sassen**, Saskia (2006). *Cities in a World Economy*. Thousand Oaks: Pine Forge Press.
- Saxenian**, A. (1994), *Regional Advantage: Culture and Competition in Silicon Valley and Route 128*. Harvard University Press. Cambridge.
- Schütt**, F. (2003), *The Importance of Human Capital for Economic Growth*. Institute for World Economics and International Management.
- Schwab**, K. (2015), *The Global Competitiveness Report 2014-2015*. World Economic Forum.
- SEO** (2010). Wat beweegt kennismigranten?
- SER Rapport kennismigranten** (2014).
https://www.ser.nl/~media/db_adviezen/2010_2019/2014/arbeidsmigratie.ashx
 Date used: 28-05-2016.
- Silbert**, L.T. (2005). The effect of Tangible Rewards on Perceived Organizational Management Sciences.
- Simonsen**, P. (1997). *Promoting a Development Culture in Your Organization: Using Career Development as Change Agent*, 1(1). Davies-Black Publishing, Palo Alto, California.
- Skeldom**, Ronald (2008). *Of Skilled Migration, Brain Drains and Policy Responses*.
- Smith**, M.K. (2001). *Young people, informal education and association*. The informal education homepage.
- Stanford** (2012). http://triplehelix.stanford.edu/3helix_concept
 Date used: 25-06-2016.
- Sutherland**, M, Jordaan, W. (2004). Factors affecting the retention of knowledge workers. *Journal of Human Resource Management*, 2.
- Techniek Pact**. <http://investinholland.com/wp-content/uploads/2015/05/Summary-Dutch-Technology-Pact-2020.pdf>
 Date used: 03-06-2016.
- Thompson**, C.A. & D.J. Prottas (2005). Relationships among Organizational Family Support, job autonomy, perceived control and employee well-being. *Journal of Occupational Health Psychology*, 11(1), pp. 100-118.

- Times Higher Education List (2016).** World Reputation Rankings.
https://www.timeshighereducation.com/world-university-rankings/2016/reputation-ranking#!/page/0/length/25/sort_by/rank_label/sort_order/asc/cols/rank_only
 Date used: 11-07-2016.
- Toubourg, Giorgio** (2011). Soft skills, tacit ties: Exploring the role of non-geographical proximities in international knowledge transfer. Faculty of Social Sciences. Erasmus Universiteit Rotterdam.
- Topsector Energie** (2016). Feiten & cijfers. <http://topsectorenergie.nl/feiten-cijfers/>
 Date used: 03-06-2016.
- Tremblay, M.L, L. O'Brien-Pallas, C. Viens, L.H. Brabant & C. Gelinas** (2006). Towards an integrated approach for the management of ageing nurses. *Journal of Nursing management*, 14(3), pp. 207-212.
- Tung, Rosalie L.** (2016). New Perspectives on Human Resource Management in a Global Context. *Journal of World Business*, 51(1), pp. 142-152.
- Turnley W.H. & D.C. Feldman** (2000). Re-examining the effects of psychological contract violations: unmet expectations and job dissatisfaction as mediators. *Journal of Organizational Behavior*, 21, pp. 25-42.
- Turok, Ivan** (2004). Cities, Regions and Competitiveness. *Regional Studies*, 38(9), pp. 1069-1083. <http://www.clusterobservatory.eu/eco/uploaded/pdf/1288016756795.pdf>
- Van Knippenberg, D.** (2000). Work motivation and performance: a social identity perspective. *Applied Psychology: An International Review*.
- Vos, de A., D. Buyens & R. Schalk.** Psychological contract development during organizational socialization: adaptation to reality and the role of reciprocity. *Journal of Organizational Behaviour*, 24(1), pp. 537-599.
- Vos, de A. & Annelies Meganck.** What HR managers do versus what employees value; Exploring both parties' views on retention management from a psychological contract perspective
- Wang, Ming & Chieh-Jen Shieh** (2008). Effect of Human Capital Investment on Organizational Performance. *Social Behavior and Personality*, 36(8), pp. 1011-1022.
- Wiesbrock, Anja & Metka Hercog** (2010). The Legal Framework for Highly-Skilled Migration to the EU: EU and US Labour Migration Policies Comparison. Working Paper 2010(1), Maastricht University.
- Williams, A. M., Vladimir Baláž & Claire Wallace** (2004), International Labour Mobility and Uneven Regional Development in Europe; Human Capital, Knowledge and Entrepreneurship. *European Urban and Regional Studies*, vol. 11, is. 1, pp. 27-46.
- WorldAtWork** (2016). Development & Career opportunities.
https://www.worldatwork.org/home/html/development_home.jsp
 Date used: 27-06-2016.
- World Bank** (2016). GDP rates. <http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG>.
 Date used: 26-06-2016.
- XE.com** (2016). Currency converter.
<http://www.xe.com/currencyconverter/convert/?Amount=54353>
 Date used: 11-07-2016.
- Yanadoria, Y., T. Katob.** (2010). Work and Family Practices in Japanese Firms: Their Scope, Nature and Impact on Employee Turnover. *The International Journal of Human Resource Management*, 20(2), pp. 439-456.