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**Employment and professional capabilities of international graduates from  
Finnish higher education institutions**

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*Abstract:*

The paper provides an overview of factors affecting graduate employability which are further explored through the case of international graduates and their employment situation in Finland based on the VALOA study (2012). The main finding is that despite the recent EU and national policies aiming to attract foreign talent, international graduates still constitute a disadvantaged group in terms of labour market opportunities and their transition from higher education to the world of work need to be further explored. The paper concludes with recommendations for future research.

*Key words:* international graduate employability, Finland

## Introduction

The Bologna process has fostered the policies of enhancing the attractiveness of European Higher Education Area. Consequently, a growing number of OECD countries are trying to attract international students as a way to complement the funding sources for higher educational institutions (HEIs) and, after they graduate, to contribute to the economic growth of the host countries by integrating this foreign talent in their labour markets (OECD, 2012). It is also the objective of the Finnish government to considerably increase the number of international graduates (Finnish Ministry of Education, 2009). The advantages of international graduates for host-country economies in general and employers, in particular, are apparent. They often have established ties with both the host- and home-country societies and labour markets and even in companies that only operate in the domestic markets, the international graduates bring innovation and new ways of thinking (Vehaskari, 2010).

To higher education institutions, the employability of graduates is often used as a benchmark to measure the quality of education (Teichler, 2009) and even allocate additional funding. In the context of HEIs' increased financial autonomy and the problem of ageing population in Finland, the international graduates' employment is increasingly becoming a concern in terms of both attracting potential international students and supporting Finnish labour market development and economic growth. In order to attract more international students and retain them after graduation some aspects of international education need to be improved in Finland. For instance, the long tradition of tuition fee free education has resulted in the fact that a number of key elements in international education are underdeveloped as compared to Anglo-Saxon countries that adopted a more commercialised approach, namely the marketing of international programs, their relevance to the labour market; the career services and the alumni relations. Regardless of realising these problems, Finnish HEIs are lacking experience and knowledge in how to improve. To cope with this situation, two research gaps are expected to be filled before many other efforts. One is to uncover the employment situation of international graduates from Finnish HEIs, since such kind of information is scarce. The other is to understand what factors influence international graduate employability. This is not only a challenge for policy makers, higher education administrators, and scholars in Finland, but also an unsolved academic puzzle globally.

To fill the first gap, a study (Shumilova, Cai, & Pekkola, 2012) was conducted during 2011 and 2012 as part of VALOA Project<sup>1</sup>. It examined the activities, outcomes and experiences of international students after graduation from Finnish HEIs in year 2009-10. The study represents the first attempt to approach the issue of international graduate employment on a larger scale both quantitatively and qualitatively and from the perspectives of both the graduates and their employers. It provides a comprehensive picture of the activities, outcomes and experiences of international graduates from Finnish HEIs in the year 2009-10, discovers a

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<sup>1</sup> VALOA is a national project, partly funded by European Social Fund, promoting the employment opportunities of international degree students in Finland. In June, 2011, the Higher Education Group (HEG), University of Tampere won the public tender announced by VALOA to conduct a study on international graduate employability in Finland.

number of skills and factors affecting the employment of international graduates, and elicits recommendations on how Finnish HEIs can help enhance the employability of international graduates.

While this study mainly sought to fill the first research gap by adding substantial information on employment of international graduates educated in Finland, the empirical results have a potential to contribute to the knowledge on factors affecting graduates' employability in general and particularly in the Finnish context. This paper is an extension of the VALOA study with a special intention to fill the second research gap. It presents the main results of the VALOA study and primarily discusses how the findings concerning the factors and skills affecting the graduates' employment can support or challenge the scholarly arguments in existing literature. In so doing, it tries to develop hypotheses about the relationships between different factors and employability of international graduates educated in Finnish HEIs.

## **Major scholarly discussion on factors associated with employability**

### ***Defining and measuring employability***

Before addressing the factors affecting graduate employability we need to define this multidimensional concept and point out some issues with measuring it. After revising the numerous definitions of employability, we have adopted the following one in our study: *having the skills and abilities to gain, retain and (when necessary) find new fulfilling/satisfying/self-rewarding job* (Harvey, 2001; Hillage & Pollard, 1998; Pavlin, 2011). Therefore, the fact of finding employment is only one of the components of the employability along with the labour-market relevant skills and job satisfaction.

The concept of employability is closely linked to *'professional success'*, which can be described by a number of subjective and objective indicators such as: "a) the smoothness of the transition from higher education to the labour market (duration of job search); b) income and socio-economic status; c) a position appropriate to the field and level of educational attainment; d) desirable employment conditions (independent, demanding and responsible work); and e) a high degree of job satisfaction" (Pavlin, 2010:5).

It seems to be challenging to bring all these constituents to a common denominator. Nevertheless, one attempt has been made in the framework of the Erasmus Mundus employability survey (Hemmer et al., 2011) in which the *index of the quality of employment* was applied to analyse international degree programs in terms of their labour market relevance. The index is based on the sum of five key variables, each multiplied by a certain coefficient (depending on its importance):

variable	coefficient
% of active graduates currently employed;	0.4

% of graduates who are employed in permanent terms;	0.15
% of graduates who claim to earn above average;	0.15
% of graduates who are employed in medium or senior positions;	0.15
% of graduates who claim to be satisfied with their job.	0.15
Index composite	1

The resulting index allows to add a qualitative value to the employment rate figures and make the employability picture more comparable, e.g. across fields of study, nationality, gender, etc. On the other hand, it may bring the researchers closer to the factors affecting the graduate employability. As after singling out the cohort of graduates with quality employment it will be easier to see what they have in common.

### ***Skills needed at work***

The skills/ competences agenda is very prominent in the debates around the factors affecting graduate employability. There have been many attempts to classify skills and abilities with the major distinction being made between specific and generic ones. Yet, these classifications are rather artificial and even the employers do not seem to have found a common ground in their perceptions of the graduate competences. While some employers tend to be generally happy with the graduates' subject specific skills and less satisfied with the generic or transferrable ones (Yorke, 2006), other studies indicate that “the ‘missing’ skills are just as likely to be technical and/or employer-specific in nature as they are to be transferable” (HEFCE, 2003).

Below we discuss the lists of skills, abilities and competences that have been identified by various researchers as the most important ones for the world of work (Hoo et al., 2009; Badillo-Amador et al., 2005; Shmarov & Fedyukin, 2004; Department of Education Science and Training, 2002; Allen & van der Velden, 2009, 2012; OECD, 2012) trying to expand the classification used in the Erasmus Mundus employability study (Hemmer et al., 2011).

First, there is an evident need for *professional expertise or context/job specific skills* involving mastery of own field or discipline, interdisciplinary know-how and research skills. The automation and computerisation of routine work tasks and the opportunities for outsourcing have led to “a growth in jobs that involve high level expert thinking and complex communication” (Allen & van der Velden, 2012). However, in the rapidly changing world, this expertise quickly becomes outdated. Hence, this category also includes an ability to rapidly acquire new knowledge.

Second, the field/specific skills depend upon a number of essential skills that can be grouped as follows:

*Innovative and knowledge management competences* including the ability to come up with new ideas and solutions, critical thinking, ability to write reports, memos or documents; presentation skills, problem-solving skills; analytical thinking, creativity, entrepreneurial skills. These skills are in line with the paradigm of the ‘knowledge society’ in which people are

required to deal with ideas and concepts rather than objects, materials and machines (Allen & van der Vende, 2012); and which emphasizes the importance of flexibility, adaptability, entrepreneurialism, initiative, etc. (Lindberg, 2008; Brown and Hesketh, 2004; Chisholm, 1999).

Even though the *technical skills*, such as basic operational ICT skills have not been singled out in a separate category by Hemmer et al., (2011), there is a strong argument for mentioning them separately as the “ability to successfully use ICT will be just as essential for our ability to function in society as the ability to read, write or count” (Allen & van der Vende, 2012). While the basic computer literacy is often taken for granted these days, the use of ICT for information retrieval and strategic purposes might need a wider range of generic skills, such as logical reasoning and an ability to evaluate the trustworthiness of different sources, hence, this competence needs to be viewed in a broader sense (ibid.).

Next, the *functional flexibility* category includes skills mainly associated with one’s ability to cope with change such as the ability to negotiate effectively, ability to perform well under pressure, ability to coordinate activities, ability to use time efficiently; self-management/organisational skills and communication skills.

Furthermore, *mobilisation of human resources/workplace-interpersonal skills* involves the ability to work productively with others, ability to mobilize the capacities of others, ability to clearly express one’s opinion, ability to assert one’s authority/ leadership skills; interpersonal/teamwork/ network skills. In the modern working environment the graduates have to be able to both – work independently and in teams by bringing out and making use of the strongest qualities of the team members (Hemmer et al, 2011).

Finally the *international competences* are becoming increasingly important in the global labour market that the graduates are competing at these days and in the context of multicultural work environments that become a reality worldwide. They include the ability to write and speak in a foreign language; professional knowledge of other countries; knowledge/understanding of international differences in culture and society.

In the case of international education, the researchers (Garam, 2005; Salisbury et al., 2009; Støren& Wiers-Jenssen, 2010, p.31) argue that a broad range of skills and traits can be developed during the period of study abroad, such as social or life skills; a deeper understanding and respect for global issues, more favourable attitudes toward other cultures, improved personal and professional self-image, self-confidence, ability to handle ambiguity and difficult situations, insight into their own value systems and overall maturity. The question is whether these broader skills bring advantage to international graduates in the home or host country labour markets or whether they are still in a disadvantaged position due to the lack of integration and other factors.

### ***Other factors affecting employability***

Following Harvey, 2001, and Crossman & Clarke, 2010, we recognize that employability cannot be a purely individual or institutional achievement, rather an outcome of the joint initiatives of the involved stakeholders including - students, graduates, academics, program coordinators, project managers, employers, representatives of relevant associations (e.g. AIESEC) and policy makers (See Appendix). Similarly, Leuze (2010) argues that “the

institutional set-up of both, higher education systems and graduate labour markets, is the decisive factor for shaping the career prospects of higher education graduates”. She further identifies the four institutional spheres that are important for the transition from higher education to work: the structure of higher education systems (stratification), the content of study (occupational specificity), the structure of graduate labour market (segmentation), and finally, labour market flexibility (regulation). In relation to the labour market conditions, for instance, there has been a growing concern since 1970s about the overproduction of the overqualified labour force associated with the massification of HE and the subsequent increase in the unemployment rates among HE graduates (*ibid.*).

Along with other researchers, we acknowledge that the employability is also contingent on a number of other *factors external to HE* such as socio-economic background (e.g., gender, age of entering higher education, parents’ education and income, ethnicity); career aspirations, networks, access to information; the peculiarities of the job search behaviour and employers’ beliefs. (Harvey, 2001; CHERI, 2002; Lindberg, 2008; Krempkow & Wilke, 2009; Pavlin, 2010; Cai, 2011). As an illustration – ethnicity would be one of the most important factors being relevant in the research of international graduate employability. And previous studies demonstrate that being a foreign graduate (or even the representative of an ethnic minority) can be a disadvantage of its own when applying for a job due to discrimination and prejudice (CHERI, 2002; Vehaskari, 2010; Majakulma, 2011, Shumilova, Cai & Pekkola, 2012). However, in the framework of this paper we mainly focus on the aspects of higher education that affect the graduate transition to the world of work, or on the factors that could be the target for possible policy intervention.

As discussed above, HEIs have an important role in helping students develop not only the academic skills but also the generic or transferable ones more valued by employers in highly skilled professions. The graduate employability studies conducted in the last decade (CHERI, 2002; HEFCE, 2003; Allen & van der Velden, 2009; Hemmer, 2011) conclude that HEIs need to have closer links to the world of work and provide other opportunities to their students in order to enhance graduate employability. The following observations derived from these studies are relevant in this respect:

- Prior *work experience* appears to be a highly positive influence on employability, yet, the role of internships and work placements should not be overestimated, as these studies show no significant link between internship taken and the employment rate. Also combining studies with non-relevant work during the academic year might have a negative effect.
- Employer involvement in course design and delivery is positively associated with the quality of initial employment found by graduates.
- Involvement in extra-curricular activities and study/work abroad opportunities are also related to successful employment outcomes.

Finally, it has also been argued that the *institution attended*, the level of the degree obtained and the subjects studied affect one’s career prospects. The former is associated with the stratification of the higher education system. The (vertical) stratification of HEIs by status is not yet a reality in Finland as compared to the UK, for example. However, there is a horizontal stratification of a binary system comprising the University and the University of Applied

Sciences (polytechnic) sector. The CHERI study (2002) contends that the socio-economic background would affect the students' choice of HEI and the major to be studied and consequently one's employment opportunities. In particular, the international students' choice in non-English speaking countries is largely affected by the offer of programs and courses available in English – and the competition for jobs in these study fields might be higher.

In terms of *subject differences*, the labour market position of vocational science/hard applied major graduates (e.g. computing and medicine, engineering, law) is in general more favourable, as compared to the position of non-vocational arts/ pure soft discipline graduates (e.g. art, humanities and languages) (CHERI, 2002; Allen & van der Velden, 2009). Yet, as argued by Leuze (2010), in some countries the *type of degree* obtained might be even more important than the discipline. For instance, *Fachhochschule*-degrees and *Staatsexamen* in Germany are linked to specific labour market segments and are mutually exclusive (Leuze, 2010). Again, there is no consensus, on which level of degree offers better opportunities in the labour market. According to the Europe-wide study of employers' perceptions of graduate employability (Gallup Organisation, 2010), "a slim majority of employers (55%) answered that graduates with bachelor's degrees would best match the skill requirements in their company, while 35% said that graduates with master's degrees would be a better fit, while Allen & van der Velden (2009) claim the opposite.

## **International graduate employability in Finland: outcomes of the VALOA study**

The outcomes of the VALOA study showed that Finland is quite attractive for foreign talent as a place to live, study and work. And the three major reasons for potential students to come to study to Finland are tuition fee free education, along with an opportunity to study in English and a chance to enhance one's employability (Shumilova, Cai, & Pekkola, 2012). Among the international graduates of 2009–2010 who participated in the survey (N=363), only 22% returned to their home countries or moved elsewhere one or two years after graduation.

Speaking about the transition from higher education to the world of work the statistical data look quite positive. The employment rate of the VALOA study participants is 70%, which is lower than the national level, but this is a general trend for international graduate employment rates. Among those who are not employed 61% are undertaking further studies, which makes it the most popular strategy of enhancing one's employability. Although the first jobs taken by graduates are characterised by fixed term work contracts (only 33% of contracts are permanent and full time), the situation improves further in the career with half of the contracts being permanent in the current job. Another positive finding is that 90% of those who have been employed at least once after graduation managed to find their first job within half a year.

However, in the context when the tuition fees are being gradually introduced for non-EU/EEA students, the quality of Finnish higher education cannot be taken for granted. The question is what would be the next unique selling point of the country with a difficult native language, high cost of living and a small competitive labour market after the 'free' education is no longer available?

Although, the majority of jobs taken by the graduates are both relevant to their field and level of studies, 25% of the respondents claimed that they had to take jobs that require a lower degree of education or no higher education whatsoever. This underemployment might be attributed to the fact that the international graduates, being a more vulnerable group, often have to lower their job expectations in a foreign labour market due to e.g. insufficient language skills. This argument has been supported by several open-ended comments like this:

*“People with MBAs and different cultural knowledge work as cleaners and have no chance of getting proper job, because the job market is not ready for international candidates, or does not have enough vacancies.” (ID: 14)*

Despite the discussed above added value of the international education, the disadvantaged position of international graduates may apply not only to the host but also to the home country labour market. If the international graduate decides to return to his/her home country, they may need to adjust their salary expectations, compensate for the missed out networking and re-integrate back to the society (Cai, 2011).

Along with education-job mismatch we also focused on skills mismatch. The VALOA study findings corroborate the statement “that a significant proportion of jobs in developed countries is characterised by higher formal education, and more highly acquired skills than the expected ones” (Verhaest & van der Velden, 2010:2, Pavlin, 2011). As seen from Figure 1, the only competence that should be enhanced according to the graduates is work experience. The significance of the work experience (although it is not a competence as such) is also confirmed when correlating the level of skills to employment rate. Other skills that proved to have a significant correlation to the employment rate are:

- a. Mastery of one’s own field or discipline
- b. Knowledge of other fields or disciplines
- c. Analytical / research skills
- d. Ability to rapidly acquire new knowledge
- e. Leadership skills
- f. Team working skills
- h. Ability to coordinate activities / projects
- m. Inter-cultural competences
- o. Computer skills

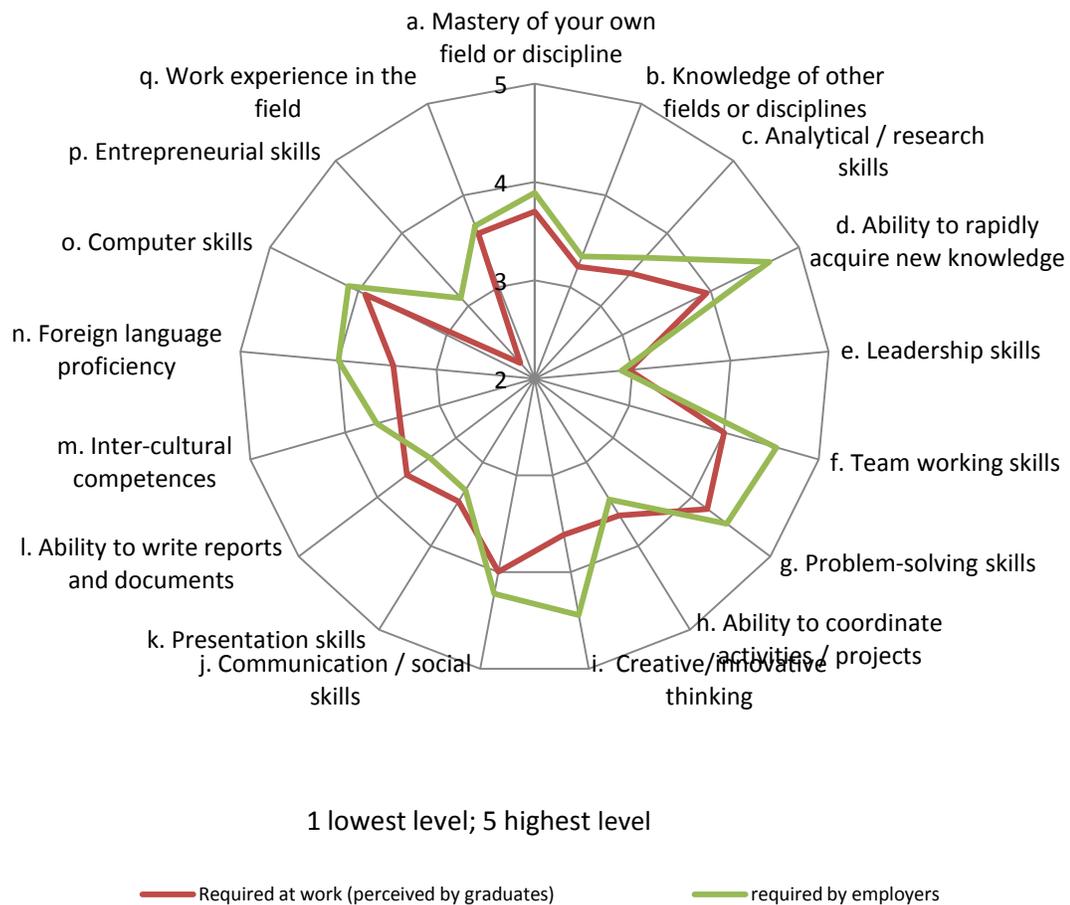
Strangely the foreign language skills are not in this group, while the interviews and answers to open-ended questions strongly supported the need for better Finnish/Swedish language skills and more opportunities to learn these languages. The only explanation for this statistical irrelevance could be the fact that most of the graduates were employed in companies where English was the official working language (e.g. in IT and telecommunications).



**Figure 1. The level of own and required competences as perceived by international graduates (VALOA study, 2012)**

The ten interviewed employers have also been asked to rank the list of skills according to their relevance in the workplace and interestingly their rankings were higher than those perceived by the graduates (Figure 2). Apart from professional (subject-specific) skills, qualifications and educational background, the employers are looking for the following set of attributes in job applicants:

*“Energy, ambition, ...evidence of being an achiever, and goal minded person. Self-motivated characteristics and attitude”, “negotiation & presentation skills”, “understanding of economic matters”, “innovativeness and the independent research skill”, “ability to work without supervision”*



**Figure 2. The skills required at work by employers’ expectations and graduates’ beliefs**

To sum it up, despite the discrepancy in graduates and employers views on which skills are most important in the workplace and the actual skills possessed by graduates, the soft skills along with the ability to learn throughout life and the right attitude to work are vital for a successful career. However, generalizations can only be made when discipline-specific differences are taken into account.

## **Obstacles to finding employment and higher education weaknesses**

While the interviewed employers have positive attitudes towards hiring and working with international graduates, the graduates themselves find the following *obstacles* to securing a job in Finland:

- the lack of adequate Finnish/Swedish language skills (86%);
- the lack of the right networks (51%)
- the lack of work experience, especially through internships (43%)
- the small labour market (35%) ,
- ethnic discrimination in the recruitment process (32%)
- lack of career guidance in HEIs (26%)

As can be seen from the list, HEIs can help with four or even five out of the six aspects. The respondents felt that there is also room for improvement in terms of the higher education's relevance to the labour market.

*“As far as the labour market is concerned with all the soft and hard skills needed the Finnish universities are not even close. The hard skills become obsolete very fast, so I would not say that it's very important to know, e.g. the programming very well. That would change in 6 month. But the soft skills, for example, how to sell yourself, how to keep up your continuous learning, how to recognise your personal advantage and weakness, how to work within a team and so on... that I have not seen in the curriculum, that's what is required. (G5)*

The other main issues with higher education were the lack of courses offered in English, the lack of Finnish language courses; the over-reliance on one industry, and the lack of practice in social skills and customer service. Moreover, the university career centres turned out to be the least used when searching for a job and the majority of HEIs happened to keep no track of their international students after they graduated. The recommendations to HEIs are self-evident based on these identified weaknesses.

## **Revisiting the literature and suggestions for future research**

One cannot overestimate the importance of conducting graduate employability studies. From students' perspective, the employability factor is one of the key components associated with the quality of education, while from the university' perspective – good employment rates of their graduates will help successfully market the educational programs, build their reputation and raise the prestige.

As prompted by the literature review, the following factors are affecting graduate employability: the socio-economic background (age, gender, ethnicity, parental income), the type of institution attended, the study field, the skills and competences obtained; work experience, study/work abroad and extra-curricular activities. The VALOA study outcomes have confirmed that these factors largely hold true for international graduates as well.

To illustrate these factors a summary of some differences in employment rate among recent international graduates in Finland is given in Table 1.

**Table 1. Employment rate of international graduates in Finland (VALOA study)**

	Type of HEI & degree		Gender		Disciplinary area		Ethnicity		Work experience during studies	
	University, Master	University of Applied Sciences, Bachelor	male	female	hard sciences	soft sciences	lowest rate (African countries)	highest (South, West, Central Asia)	yes	no
<b>Employment rate</b>	75,5%*	68%**	72,1%	68,2%	72,1%	67,3%	55,1%	86,4%	73,7%	63%

\*The corresponding rates for all graduates in the country are 88% and \*\*86% respectively

As can be seen from the Table and the abovementioned obstacles to finding employment, international graduates tend to be more vulnerable as opposed to the local ones in terms of labour market opportunities (Walters, 2011). The ethnicity, limited access to professional networks and the sub-optimal knowledge of the language of the host country may prove to be interfering factors resulting in labour market disadvantage. Also, the type of educational program attended in terms of language of instruction appeared to have an effect on further employment opportunities. As the international programs tend to provide fewer courses than their full-fledged national counterparts, there is a legitimate concern among some employers about the quality of such programs. In addition, the students pursuing programs taught in English in Finland do not manage to develop their Finnish language skills well enough to be able to use them in the workplace (Majakulma, 2011). Hence, in order to help international graduates overcome these obstacles, more joint efforts are required from the stakeholders, especially with the view of helping students with the Finnish language mastery, networking with the potential employers, gaining the relevant work experience, providing more courses in English and raising the awareness among the employers of the benefits of hiring foreign talent. Unfortunately, the “relationship between foreign students and employment-based immigration has not been specifically addressed in the policies and strategies of the Finnish Ministry of Education and Culture” (National Report for EMN study, 2012).

In terms of *future research*, there is still need for more studies, especially systematic, longitudinal and comparative ones on the transition of international graduates to the world of work. Below is a list of recommendations for further research that is based on our experience of conducting the VALOA study:

- While the VALOA study focused on recent graduates, it would be interesting to track their careers at a later stage, e.g. five years after graduation. This will reveal more clearly where the international graduates eventually end up. Also it would be useful to further compare the employment situations of international vs. local graduates.

- As discussed above, employability is more than the ability to gain any employment; it is closely related to early career success. Hence, instead of relying solely on employment rate figures (or making separate correlations with job satisfaction and salary rates), using the quality of employment index might provide a better ground for comparisons.
- Bearing in mind the multifaceted nature of the ‘employability’ concept, it should also be explored from the point of view of other stakeholders through policy analysis and by investigating the HEIs’ strategies of responding to the changing labour market demands (Teichler, 2009).
- The identified discrepancies between the perceptions of graduates and the employers towards skills and competences required at work are prompting that more studies comparing both perspectives need to be done to find a common ground. The discussed categorization of skills provides a useful framework, even though the current study mainly focused on subject-specific and soft skill divide in its analysis.
- Also, the way the employers’ beliefs and perceptions about international graduates are shaped need to be further studied in order to be able to affect them (see Cai, 2011).
- Finally, in the VALOA study we have only been able to focus on the hard/soft disciplinary divide, while in future studies on international graduates’ career paths the disciplinary background differences need to be addressed in more detail (Pavlin, 2011)

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## Appendix 1

**Figure 1. Multiple stakeholders and factors affecting international graduate employability**

