

Jukomaa, Minna; Koivisto, Jussi; Tahvanainen, Marja

Working Paper

Recruitment of foreign IT professionals in Finland

ETLA Discussion Papers, No. 790

Provided in Cooperation with:

The Research Institute of the Finnish Economy (ETLA), Helsinki

Suggested Citation: Jukomaa, Minna; Koivisto, Jussi; Tahvanainen, Marja (2002) : Recruitment of foreign IT professionals in Finland, ETLA Discussion Papers, No. 790, The Research Institute of the Finnish Economy (ETLA), Helsinki

This Version is available at:

<https://hdl.handle.net/10419/63903>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



ELINKEINOELÄMÄN TUTKIMUSLAITOS

THE RESEARCH INSTITUTE OF THE FINNISH ECONOMY

Lönnrotinkatu 4 B 00120 Helsinki Finland Tel. 358-9-609 900

Telefax 358-9-601 753 World Wide Web: <http://www.etla.fi/>

Keskusteluaiheita – Discussion papers

No. 790

Minna Jukomaa – Jussi Koivisto – Marja Tahvanainen

RECRUITMENT OF FOREIGN IT PROFESSIONALS IN FINLAND

JUKOMAA, Minna – KOIVISTO, Jussi – TAHVANAINEN, Marja, RECRUITMENT OF FOREIGN IT PROFESSIONALS IN FINLAND. Helsinki: ETLA, Elinkeinoelämän Tutkimuslaitos, The Research Institute of the Finnish Economy, 2002, 23 p. (Keskusteluaiheita, Discussion Papers, ISSN, 0781-6847; no. 790).

ABSTRACT: Shortage of top qualified IT professionals and recruiting them from abroad have become current issues in European, including Finnish, high technology firms. As recruiting people from other countries and cultures may be different from domestic recruitment, the present study finds out that the Salient issues of such recruitment are fourfold: (1) recruits do not only bring in technical skills, but they also may facilitate the employing firm's internationalisation; (2) recruits' cross-cultural adaptability and family flexibility are important yet often neglected factors behind their success or failure; (3) in such recruitment process, firms pose challenges of geographical-logistical distances and cultural differences in communication; and (4) due to Finland's peripheral position, proper communication of the Finnish high quality of life and advanced technology are important in attracting good recruits. Moreover, there are notable differences between the recruits of different national-cultural backgrounds: for instance Russian recruits regarded proximity to Russia as an important argument, while Indian recruits were less easily attracted by any other factors than good income.

KEY WORDS: Finland, Immigration, IT Professionals, Recruitment, Technology Firms.

JUKOMAA, Minna – KOIVISTO, Jussi – TAHVANAINEN, Marja, RECRUITMENT OF FOREIGN IT PROFESSIONALS IN FINLAND. Helsinki: ETLA, Elinkeinoelämän Tutkimuslaitos, The Research Institute of the Finnish Economy, 2002, 23 s. (Keskusteluaiheita, Discussion Papers, ISSN, 0781-6847; no. 790).

TIIVISTELMÄ: Pätevien informaatioteknologia-ammattilaisien puute ja näiden rekrytointi ulkomailta on noussut ajankohtaiseksi teemaksi eurooppalaisissa ja siten myös suomalaisissa teknologiasektorin yrityksissä. Tämän tutkimuksen mukaan rekrytoiminen ulkomailta ja vieraita kulttuureista poikkeava kotimaisesta rekrytoinnista etenkin neljän keskeisen tekijän osalta: (1) Ulkomailta rekrytoidut eivät vain tuo mukanaan teknistä kompetenssiaan, vaan he usein myös edistävät uuden työnantajayrityksensä kansainvälistymistä. (2) Ulkomailta rekrytoidun henkilön sopeutumiskyky uuteen kulttuuriin Suomessa ja hänen perheensä joustavuus ovat keskeisiä elementtejä onnistuneessa kansainvälisessä rekrytoinnissa, joskin nämä elementit jäävät rekrytoinnissa usein liian vähäiselle huomiolle. (3) maantieteelliset etäisyydet ja kulttuurierot tuovat kansainväliseen rekrytointiin erityisiä haasteita. (4) Suomen periferisen sijainnin vuoksi on tärkeää tarjota asiallista tiedotusta Suomen korkeasta elämänlaadusta ja teknologisesta kehityksestä. Näiden neljän keskeisen tekijän lisäksi tutkimuksessa nousee esille eroja eri maista ja kulttuureista tulevien rekrytoitavien henkilöiden välillä. Esimerkiksi venäläisille Suomen sijainti lähellä entistä kotimaata oli tärkeä peruste hakeutua suomalaiseen yritykseen, kun taas italialaisia voidaan motivoida lähinnä vain hyvällä palkalla.

AVAINSANAT: informaatioteknologia-ammattilaiset, maahanmuutto, rekrytointi, Suomi, teknologiasektori

Recruitment of Foreign IT Professionals in Finland

Table of Contents

1 INTRODUCTION	1
2 PROPOSITIONS	2
2.1 COMPANIES' NEED FOR COMPETENCIES – THE COMPETENCE NEED DIMENSION	2
2.2 IDENTIFYING SKILLED EMPLOYEES FROM ABROAD – THE COMPETENCE RECRUITMENT DIMENSION	3
2.3 RECRUITING FROM ABROAD – THE DISTANCE DIMENSION	4
2.4 RECRUITING TO FINLAND – THE FINLAND, OR PERIPHERY, DIMENSION	6
3 METHODOLOGY	7
4 RESULTS	10
4.1 THE TECHNICAL AND INTERNATIONALISATION NEEDS – THE COMPETENCE NEED DIMENSION	10
4.2 CRITERIA FOR QUALIFIED RECRUITS – THE COMPETENCE RECRUITMENT DIMENSION	11

1 INTRODUCTION

Increasing labor shortage, particularly of qualified Information Technology (IT) professionals has recently become a topic of major economic and political discussion in several European societies, including for instance Finland, France, Germany, and the Netherlands (Ylänkö 2000). In Finland, the IT sector has been identified as one with particularly severe shortage of qualified resources (Rantala 1999), yet also some other industries, such as shipbuilding, have been put forward in Finnish newsmedia (Hyvärinen 2001). Consequently, recruitment of IT professionals from abroad and their immigration have been proposed as a solution to the labor shortage, yet very controversial arguments have been put forward in this context (Forsander 2000). Moreover, it has been argued that immigration-based countries, such as the United States and Australia, are in a more advantageous situation, because their societies and companies are better prepared to recruit and receive skilled workforce from abroad (Ylänkö 2000). At the same time, competition for the best IT professionals on the global market is hard, since many countries are lacking these scarce resources and are therefore competing for them.

Over the last thirty years the amount of research on recruitment has increased strongly (Breaugh & Starke 2000). Nevertheless, several authors still emphasize that there is a salient need for further research on the recruitment and selection process. Barber (1998) states that the existing research on the recruitment process seems to be still far too simple to adequately capture the complex recruiting environment. Breaugh & Starke (2000) claim further that more studies should be designed with an appreciation of the complexity of the recruitment process. Barber (1998) states also that significantly more research has focused on the applicant perspective than on the organizational perspective and in order to fill this gap, Rantala (1999) suggests that new information is needed especially about the demand side of the labor market, i.e. about organizations' recruitment practices. Barber (1998) claims further that there is still not enough knowledge about how recruitment issues vary across industries or across occupations. All of these arguments are valid as to recruitment in general. When one keeps in mind the complexities of international recruitment, the need for research becomes even more apparent.

The competition for the highly skilled workforce on the global market can be seen as one aspect that creates even more complexity in the recruitment process. The recruitment practices that work well on the home labor market are not necessarily bringing skilled workforce from abroad to work in Finland. The decision that a foreign applicant has to make in order to start an employment in Finland is not only accepting the job offer, but also to moving to a new country and starting life there. That's why in the process of recruiting employees from abroad, besides attracting them to come to work in a particular company, an additional aspect is attracting them to come to work in Finland. In the same way the selection process might get more complex when the applicants come from different countries. Comparing the applicants and selecting the best one in a very heterogeneous group might be quite a challenging task for the selecting company. Additionally, also in the selection process it's important to take some cultural aspects into consideration, for instance the applicant's probable adaptability to the new cultural environment.

In the field of international recruitment and selection there is quite a lot of research done about the topic in the case of expatriates. These studies are typically concerned with the situation where a company sends employees to work abroad in its foreign units. (See e.g. Dowling & Welch & Schuler 1999, Black & Gregersen & Mendenhall 1992.) Re-

cruitment from abroad, on the contrary, has not yet attracted equal amount of research. Some studies have been conducted on the multicultural working environment and cross-cultural forms of domestic management that follow the international recruitment and selection (Trux 2000). There is also research on motivation of foreign employees working in another cultural context (Hytönen 1998). Nevertheless, a gap remains in research on recruitment from abroad. Therefore, more research is needed on such questions as, for example, how companies attract job applicants from abroad, how they assess and select foreign applicants, how the processes of international recruitment differs from those of domestic recruitment, and what is the role of the company's home country in international recruitment.

As the issue of recruitment of technology experts from abroad is very relevant for high technology sector companies and as there is a respective research gap, the present study endeavors to contribute toward filling the research gap by focusing on Finnish companies' recruitment processes and issues of recruiting IT professionals from abroad.

2 PROPOSITIONS

According to discussions in Finnish public media, there seems to be several issues that emerge when the Finnish high technology firms recruit IT professionals from abroad. Among them are: shortage of qualified resources in Finland; availability of such resources abroad, particularly in countries such as India and Russia, that have good level of education in quantitative sciences and notably lower salary level than in Finland; differences in the recruitment processes when recruiting domestically or internationally; and difficulties in attracting skilled people to Finland, due to Finland's disadvantaged location and high taxation (Iivonen 2000, Laatikainen 2000, Paalosalo 2000, Saksa 2000, *Silminnäkijä* 1/18/2001; see also Forsander 2000, Ylänkö 2000). The arguments can be crystallized in the following four factors:

- Competence need dimension,
- Competence recruitment dimension,
- Distance dimension, and
- Finland dimension.

In the following these factors are studied in detail and propositions on them will be put forward accordingly.

2.1 Companies' Need for Competencies – The Competence Need Dimension

When companies recruit employees, a major reason for that is to acquire various types of competencies that companies need for functioning successfully. When a company recruits people with technical competencies, like IT professionals, it appears reasonable to presume that they are trying to fill their technological competence needs. When such recruitment is

done from abroad, it can further be hypothesized that, at least sometimes, the companies attempt also to attract people who might benefit the company not only with their technical skills, but also with their knowledge of their home countries' markets and customers. Therefore, the following proposition can be put forward:

Proposition 1 Companies recruit IT professionals from abroad in order to fill such technical and internationalisation gaps in their HR competence profiles that are difficult to be filled through domestic recruitment.

The domestic shortage of qualified IT resources has resulted in difficulties to recruit domestically. It has also resulted in increased salaries and benefits, which in turn dilute the profitability of the firm. These disadvantages can be avoided by recruiting IT professionals from abroad, which calls for arguing that:

Proposition 1a Finnish high technology companies recruit IT professionals from abroad, due to shortage of qualified resources in the domestic labor markets.

The Finnish companies have their home base in a country with small and open domestic economy (Luostarinen 1979). Due to the openness of their domestic markets and due to the global nature of high and emerging technologies, the Finnish high technology companies face competition from abroad from the very beginning of their business life cycle. Moreover, their domestic markets in Finland are often too small to provide adequate customer base. (Korhonen 1999, Luostarinen & Korhonen & Jokinen & Pelkonen 1994) Consequently, the Finnish high technology companies need to internationalize in relatively early stage of business life cycle. It is therefore possible to claim that because the Finnish high technology companies are developing products to international markets, they can benefit their product development by undertaking the development by international teams of experts, who know the foreign target markets and their needs, technically and culturally. Therefore, this inward internationalisation of human resources suggests that it seems also reasonable to presume that:

Proposition 1b Facilitating their internationalisation processes is also a reason for the Finnish high technology companies when they recruit IT professionals from abroad.

Facilitating the internationalisation process of the company can take place through different ways: it may include increasing innovativeness through bringing cultural and international diversity in the organization (Bartlett & Ghoshal 1989, Trux 2000, Harvey & Speier & Novocevic 1999), bringing in international management skills, increasing knowledge on the company's foreign target markets (Deresky 1997), and bringing in native language skills in customers' mother tongues (Raban 1991).

2.2 Identifying Skilled Employees from Abroad – The Competence Recruitment Dimension

When companies recruit technology experts from abroad, they are obviously attempting to get new employees with high quality technological skills. Nevertheless, it is important to keep in mind that a new recruit from abroad needs to move to a new country, Finland in

the present study, and cultural environment to start the job. Consequently, the “hard” technology skills of the recruit are not the only relevant ones, but his ability to accommodate himself in the new country and culture may also play an important role behind the success or failure of the whole recruitment case. More specifically, if the recruit does not feel satisfied in the new country and culture, there is a likelihood that he or she decides to return to his or her native country, in which situation the company loses the very technology skills that the recruit was recruited for (see e.g. Dowling & Welch & Schuler 1999).

Previous research on expatriates has established that one’s adaptability to the new culture is one of the key factors behind success and failure of expatriate assignment (Torbiörn 1982, Deresky 1997, Kauppinen 1994, Sappinen 1992, Tung 1988, Wild & Wild & Han 2000) and should therefore be taken in account when selecting managers for expatriate assignments (eg. Black & Gregersen & Mendenhall). Based on Black, Mendenhall and Oddou (1991), Kauppinen (1994) further discusses that the key individual-related factors that contribute toward a positive cross-cultural adjustment are motivation, training, previous international experience, accurate expectations, self confidence, relation skills and perception skills. In addition to the individual expatriate himself, previous studies also strongly suggest that the success or failure of an expatriate depends strongly on his family’s adaptation to the new environment (Black 1988, Black & Gregersen 1991, Black & Gregersen & Mendenhall 1992, Black & Stephens 1989, Kauppinen 1994, Tung 1988). It has further been noted that recruits with career-oriented spouses are difficult to be accommodated for overseas assignments (Stephens & Black 1991, Harvey 1998). If these factors are applied to a foreign recruit in the present study, it appears reasonable to put forward the following proposition:

Proposition 2 The recruits’ cultural adaptability and family flexibility, after technical skills, are among the main selection criteria when Finnish companies recruit IT professionals from abroad.

It is interesting to note that based on extensive literature review, also Dowling, Welch and Schuler (1999) highlight these same three factors – technical, cross-cultural and family suitability – as the most important recruit-related ones in expatriate recruitment.

2.3 Recruiting from Abroad – The Distance Dimension

Previous literature on recruitment usually describes recruitment as a process that proceeds in several subsequent steps. According to Storey & Wright (2001), for instance, the steps are defining vacancy, attracting applicants, assessing candidates and making the final decision. When a company recruits employees from abroad, it by definition recruits across national borders. As such, it can be presumed that the general steps of a recruitment process are the same in both domestic and international recruitment, but the cross-border interaction adds its additional challenges and characteristics to the process. Compared to a domestic recruitment approach, international recruitment usually involves several impeding elements, such as interacting over longer geographical and logistical distance, a possible need to use foreign language in communications, communicating and understanding over cultural differences, and possibly communicating over time-zone differences. Consequently, the following proposition can be put forward:

Proposition 3 Recruitment processes of IT professionals from abroad are different than those when recruiting domestically, due to greater geographical and cultural distance between Finland and the recruits' home countries.

The geographic distance and possible time-zone difference make it technically harder to communicate between a company and potential recruits. Moreover, they may also make the recruitment more costly, as arranging face-to-face interviews would necessitate recruitment-related travelling. Large multinational companies can avoid much of these costs and inconveniences by vesting the recruitment interviews to the HR staff of their overseas units in the recruits' home countries. Nevertheless, because most of the Finnish high technology firms are rather small enterprises than large multinationals (Luostarinen & Korhonen & Jokinen & Pelkonen 1994), they do usually not enjoy this advantage. Consequently, they have to adjust their recruitment processes to overcome the logistical inconvenience and reduce the costs. This can be done in several different ways, for instance, by using the Internet as a tool to attract applicants, by utilizing employee referrals and informal business networks of related companies and local customers in identifying potential recruits, by using local employment agencies and consultants for both identification and interviews, and by using telephone and videoconferences instead of overseas travel for interviews (Breaugh & Starke 2000, Markkanen 1999, Rantala 1999). Therefore, the following sub-proposition has been given:

Proposition 3a The geographical distance results in that companies use telecommunications, informal networking and local employment agencies as tools to overcome the geographical distances and logistical disadvantages in recruitment from abroad.

While the geographical distances may make the cross-border recruitment more costly and logistically more inconvenient, the cultural differences involved in international recruitment communication bring additional uncertainty in the process, because they increase the likelihood for communication misunderstanding due to the fact that the both parties have less common basis for mutual understanding (see e.g. Gesterland 1999, Hall 1959, Hall 1976, Koivisto 1998, Trompenaars 1993). The same is obviously true also regarding the possible use of foreign languages between the recruiting company and the potential recruits (see e.g. Koivisto 1998, Marschan & Welch & Welch 1997). These uncertainty elements may even make objective evaluation of the foreign applicants' skills, and even formal qualifications, more difficult. Therefore, the following sub-proposition has been put forward:

Proposition 3b Cultural differences cause difficulties in proper evaluation of the foreign recruits.

An additional challenge that might come up while assessing the candidates from abroad is how to compare the candidates' diplomas and work experiences in an objective yet consistent manner. Already among the European Union member states the whole system of higher education is very varied (Raban 1991), which is obviously even more the case in a global comparison. Consequently, in order to make a proper comparative evaluation of potential recruits from different countries, the selecting company needs to know relevant information in advance about the respective countries' higher education systems and their equivalents in the recruiting company's home country.

2.4 Recruiting to Finland – The Finland, or Periphery, Dimension

The concepts of center and periphery – that is, focal or residual position in collective or individual perception – have often been used in social and cultural studies when describing the ways how cultures influence each other in a global setting (Yamaguchi 1992, see also Marcus 1992, Randviir 2000). These studies often point out that the center is characterised by attraction and pull-forces. The periphery, on the contrary, is characterised by escape from and push-forces. The periphery plays also the roles of otherness, curiosity and challenger. The same concepts have also been used to explain economic behavior of societies (So & Chiu 1995, see also Huntington 1996) and companies (Euro 2001). The center-periphery distinction has also been applied in studies on cross-border migrations (see e.g. Ylänkö 2000).

Finland is located in the northeastern corner of Europe, she suffers of cold and rainy climate, as she has been colonized by both Sweden and Russia until 1917 (Jutikkala & Pirinen 1984), and she speaks a “strange” language. Consequently, Finland is often considered as a residual or peripheral nation in Europe. On the other hand, Finnish Nokia’s key role and global visibility in mobile telecommunications, Finland’s membership in the European Union, her technological and economic advancement, and perception of Finland as a Scandinavian country with good quality of life, have redefined Finland’s international position during the last two decades. Actually, a parallel can be taken from Japan, that was regarded as residual and exotic when she started her modernization during the late 1800’s, but her industrial and technological advancement together with economic growth have resulted in corisation of Japan in the world arena, as So and Chiu (1995) put forward.

Nevertheless, Finland is still often considered as less “central” than the European old colonial powers (Ylänkö 2000) and Finland still “suffers” language disadvantage, particularly when compared to the English speaking countries. Finland’s climate has obviously not been changed. Therefore, it appears reasonable to presume that Finnish companies, possibly with the exception of the world-famous Nokia, need to promote Finland as an attractive target destination when they are competing on the top talents in international labor markets of IT experts. Therefore, the following proposition has been put forward:

Proposition 4 The Finnish companies pay special attention in promoting Finland as an attractive destination when attracting and recruiting IT professionals from abroad, due to Finland’s peripheral position and unpleasant climate.

Furthermore, it is interesting to note that in their relocation decision potential immigrant recruits are not only interested in their financial benefits and the new country’s centrality in the world economy, but also in the general attitudes that the new country and her people have towards foreigners (Heiskanen 2001) and in their overall quality of life in the new country (Straubhaar 2000) in terms of general standard of living, life-style, infrastructure and services. Therefore, one may even elaborate the Proposition 4 by presuming that some of the Finnish companies’ arguments for Finland as a destination would include references to good overall quality of life in Finland, social and economic stability of the Finnish society, Finland’s advanced technology, and interesting professional opportunities in the mobile IT technologies.

3 METHODOLOGY

The purpose of the present study is to identify the key characteristics of recruitment of foreign technology experts from abroad, with a particular focus on recruitment of foreign IT professionals by Finnish high technology firms. The present study is able to draw inspiration and parallels from previous studies on international expatriates. Nevertheless, as a study on technology-oriented immigrant recruits, the present study explores a new phenomenon.

The study is an empirical endeavour that focuses on an emerging and interesting contemporary real-life phenomenon in the Finnish high technology industries. The identified parallels with previous research on expatriates have made it possible to approach the phenomenon under study by formulating propositions. The propositions may either be examined against qualitative data or tested with a quantitative survey. When these two options are weighted against each other, two important aspects emerge: First, as different firms have different needs for IT experts, recruitment of such experts from abroad may vary depending on the company's business, organization and other contextual issues. Second, the present study is slanted toward an exploratory approach, because the parallels between the phenomena of inpatriate recruitment and expatriate management by in-house expatriates may not be identical enough, so that the present study shall be kept open for possible observations beyond the formulated propositions. Consequently, the present study was conducted by gathering qualitative data through in-depth interviews. Since there is quite little known about the research phenomenon and the purpose of the study is to create exploratory understanding of the phenomenon in its real-life company contexts, case study was chosen as the methodological approach applied. (Eisenhardt 1989, Yin 1989)

Evidence from multiple cases is generally considered more compelling, and the overall study is therefore regarded as being more robust in comparison to single-case study approach (Yin 1989). As the multiple case approach allows examination of similarities and differences across cases, it facilitates the researcher in finding deviating cases and evidence to enrich the data and strengthen the conclusions of the research (Miles & Huberman 1994, Yin 1989).

Table 1 The Six Case Companies

	Overall Company Size	Nationalities Employed ^(NB)	Official Company Language(s) ^(NB)	Number of All Em- ployees ^(NB)	Number of Foreign Em- ployees ^(NB)
Company A	Small	China, Germany, Ireland, New Zealand, Russia, Singapore and Venezuela	English	108	21
Company B	Small	Bulgaria, Canada, Estonia, France, Hungary, India, Norway, Russia, Switzerland, Turkey, United Kingdom, United States	English and Finnish	250	30
Company C	Small	Belgium, Denmark, Germany, New Zealand, Norway, Russia, Spain, Sweden, United States	English	61	30
Company D	Large	China, Germany, Greece, India, Portugal, United Kingdom	English and Finnish	150	11
Company E	Large	France, Germany, India, Netherlands, Poland, Russia, United States	English and Finnish	240	14
Company F	Large	Austria, Croatia, Estonia, Germany, Greece, India, Portugal, Russia, Sweden, United Kingdom	English and Finnish	300	32

^(NB) All disclosed information in this table, except the information on overall company size, is specific to the studied company units in Finland.

The research data of this study consist of eleven focused and open-ended in-depth interviews with HR personnel, top management and recruiting line managers in selected six high technology companies in Finland that had been recruiting IT professionals from abroad during the previous twelve months. Furthermore, an additional interview was conducted with Professional Connections Ltd, a leading Finnish recruitment agency that has been active in facilitating several Finnish high technology firms' recruitments from abroad. This interview was conducted for the purposes of verification and enhancement of understanding generated by interviews in the six case companies.

All research interviews were conducted by one of the Authors. The interviews were conducted in Finnish with Finnish interviewees and in English with other interviewees. All interviews were recorded on tape and subsequently transcribed, as that provided an accurate rendition of the interviews (Yin 1989).

The case companies (their main business areas are given in parenthesis) studied are, in the alphabetical order, the following:

- Akumiitti Ltd (application software for mobile entertainment),
- F-Secure Corporation (datacom security products),
- Lingsoft Ltd. (electronic language processing software and solutions),
- Nokia Corporation, one business unit within Nokia Networks (mobile telecommunications equipment),
- Siemens (Finland) Ltd., two business units related to each other (electronics), and
- Sonera Corporation, Sonera Zed Ltd Division (value-added services for mobile telecommunications networks).

It is necessary to add here that in case of Akumiitti Ltd., F-Secure Corporation and Lingsoft Ltd., the research covered the whole company. In Nokia Corporation, Sonera Corporation and Siemens (Finland) Ltd., only one selected business unit or division was studied. This was done in order to bring the research data on these large companies to the same “scale” with the other case companies that were relatively small high technology firms. As to Siemens (Finland) Ltd., it shall further be added here that while being a subsidiary of the German electronics giant, the Finnish subsidiary’s recruitment function operates as if it were a local Finnish company and therefore it was included in the company selection.

In the rest of the article, however, the companies are not referenced with their proper names but they are labeled as Company A through Company F (this order being not identical with the alphabetical order of the company names) in order to protect the company-level confidentiality required or preferred by several of the companies. More information of the six case companies studied has been put forward in Table 1. The recruitment agency whose representative was interviewed will be referenced hereinafter as Recruitment Agency.

4 RESULTS

4.1 The Technical and Internationalisation Needs – The Competence Need Dimension

According to the Proposition 1, companies recruit IT professionals from abroad in order to fill technical and internationalisation gaps in their HR competence profiles that are difficult to be filled through domestic recruitment. This proposition was further divided into two sub-propositions that focused on technical and internationalisation dimensions of the main proposition. In the following discussion, the Proposition 1 is examined, first from its technical and then from its internationalisation argument.

When a company recruits technical staff from abroad or from its home country, the recruits' technical skills play an obviously important role. Moreover, it was proposed that recruitment of such skills from abroad is particularly salient due to domestic skill shortages. This line of argumentation was clearly supported by the data of this research on Finnish companies, as the following citation indicates:

When there is a shortage of skilled people in Finland, then you quite easily start looking for them abroad. (HR Resourcing Manager, Company E)

The same phenomenon – that the companies have been facing challenges in finding skilled people in some specific technical fields from Finland – is also demonstrated in the following statements:

This is such a narrow branch, especially this our branch, that if we want to have skilled people, we have to go looking for them abroad. For example, just something like anti-virus side, practically seen we have in Finland only one top fellow, Mr. Antti Suomalainen [name altered], who is working for us, and that's it. So ... in this branch in Finland there just aren't any people.

(HR Coordinator, Company B)

The situation has changed a little, so most likely in some branches [skilled people from abroad] will be needed and [the need] will in a way still continue. There aren't just enough of those people for all companies. ... I see ... that IT as a sector has to compete for the IT-specialists.

(HR Development Manager, Company D)

Also the internationalisation argument that was put forward in Proposition 1b is supported by the data. Company E emphasized that increasing the international diversity of the own organisation in Finland was a deliberate goal in Company E's recruitment from abroad. As illustrated in the citation below, an interviewee in Company E emphasised further that they wanted to create international and intercultural diversity because such diversity brings substantial positive added value to their organization and their business outputs.

Diversity brings added value, you have people from different cultures doing things, seeing things a bit different way. It's doesn't have to be that everybody is born in Finland and thinks the Finnish way. ... We want foreign people, different people, people from different backgrounds. They have their own networks in their own countries and that brings added value in long term, if not also in short term.

Also in two other companies it was mentioned that they have had good experiences of the multicultural working environment, and for instance using English as a working language.

Getting in native speakers of foreign languages was specifically mentioned by two companies as reasons for recruitment from abroad. Also this shall be regarded as a factor facilitating toward company's internationalisation "from inside" (see e.g. Forsander 2000). An interviewee in Company C argued that their business requires them to have native speakers of different languages, who are able to translate and localize the company's products for their foreign customers. Also in Company A the need for having native speakers of different languages comes from their customers. As an interviewee in Company A told:

For instance, we have customers in China, and with them it is not possible to take care of things in English. (HR Manager, Company A)

For this reason Company A had hired an employee from Singapore who is native in Chinese.

In conclusion, it can be stated that the Proposition 1 was supported by the research data. In other words, the competence need factor plays a role when Finnish companies recruit IT professionals from abroad. This is true as to the technical competencies, native language skills and intercultural competencies.

4.2 Criteria for Qualified Recruits – The Competence Recruitment Dimension

When companies recruit technology experts, the recruits' technology skills are, by definition, among the core selection criteria. It was further argued in Proposition 2 that when the recruitment takes place across national borders and the selected new recruits are expected to relocate themselves to a new country, their adaptation flexibility, in terms of cross-cultural and family flexibility, are among the key selection criteria after the core technology expertise. This is well in line with the overall response that was brought up by the interviewees when they were asked about the most important selection criteria. According to them, the criteria are usually technology skill-based, but also assessing the candidate's personal fit to the job, the team and the organisation. As the below citations demonstrate, the interviewees emphasised that it is very important to assess also a foreign candidate's cultural and family adaptability.

I think, it's the ability to adapt and come to a new country what you are constantly trying to assess from the candidate. (President, Recruitment Agency)

It's not enough that he [the candidate] manages only in the job, but he has to manage also in the outside world ... So definitely we take a stance on Finland and his thoughts about Finland, and the ability and willingness of his family to come here, and how the decision to go to Finland has been made. ... It is extremely important to take the adjustment to the Finnish society into consideration in the assessment.

(HR Resourcing Manager, Company E)

One of the interviewees further pointed out that cultural inadaptability may result in weakened retention of foreign recruits:

It is a loss for the both sides, the organization and the individual, if it will be noticed within a couple of months that the selected person doesn't adapt at all. (HR Coordinator, Company B)

The cultural adaptability was generally noted as a key factor behind success or failure of a foreign recruit and, consequently, as an important selection criteria by the interviewees in all of the six case companies (A, B, C, D, E and F). While the importance of cultural adaptation was universally acknowledged, most interviewees further argued that it is difficult to assess. As one interviewee put it:

Such [culturally based] ways of acting you don't necessarily find out in any interview. So it might come as a little surprise then. ... I don't have myself either an adequate picture of all cultural backgrounds and such things that especially come out in a working environment. So maybe that is information that I would need also myself when recruiting.

(Product Development Manager, Company F)

Considering what was told above, it is not surprising to note that many companies actually used quite unsystematic or even amateurish methods for assessing their potential foreign recruits' cultural adaptability. For instance, an interviewee in Company C suggested that people who have traveled a lot and speak several languages could, maybe, adapt easier to a new environment. An interviewee in Company A mentioned that usually they were more certain in the selection situation, if the foreign candidate had already spent some time in Finland, for instance as a student. Also family connections to Finland were pointed out as indicators of a person's intent to adapt to the Finnish society and culture.

The interviews gave also some emphasis on the candidate's home culture and its disparity to the Finnish culture as a potential indicator of the candidate's cross-cultural adaptability in Finland. For instance, some of the interviewees pointed out that if the candidate comes from a culture that is very different to the Finnish one, they have more concerns about hiring the person due to the possible difficulties in cultural adaptation. This is in line with Mendenhall & Oddou (1985) who mention in their four-dimensional scale describing expatriates' acculturation one of the dimensions to be so called cultural toughness dimension, which suggests that adapting to a host culture very different from one's own home culture is usually most difficult.

Even though language is a major part of culture, and therefore local language skills would facilitate cultural adaptation, none of the case companies did not expect their foreign recruits to have prior skills in the Finnish language. All six case companies, however, regarded good command in English essential to a recruit's cultural and work adaptability. Moreover, in order to integrate themselves to the global high technology industries, all of the six case companies had adopted English either as their sole or as one of their corporate languages.

In line with the issue of cross-cultural adaptability, also family flexibility came up as a selection criterion in the interviews. Interestingly, the importance of a foreign recruit's family as a factor behind employment decision has also even been noted in Finnish public media (Hankonen 2001). Moreover, the companies saw bringing the family along as a sign of long-term commitment to the job and a factor that facilitates the well being of the recruit. In the words of an interviewee:

Yes, it is quite important, they like it here much better when they have their own family [in Finland]. So then they have also something outside the work. Because often it

might happen that if they come without family, they just sit at work. And no person can do that for a long time... Therefore we always encourage them to bring the family along.

(HR Coordinator, Company A)

Nevertheless, none of the companies did conduct any interviews with the applicants' family members, which is suggested to be one way to assess the family's adaptability in the expatriate literature. One reason for that was mentioned to be the following:

One obstacle that we have noticed here [in interviewing the spouse] is that in practice it might be quite impossible even to interview them, because especially of these Russian wives, they don't speak anything else but Russian. So it's like, we don't see it to bring any added value. And finally, it's anyway a family internal negotiation whether to go, and who all will go.

(HR Coordinator, Company B)

Finally, it is interesting to note that the interviewees in several companies emphasised also that it is not important only to assess the foreign candidates' cultural adaptability in the selection situation, but also to provide support to the adaptation after recruitment. Interviewees in Company B and Company C told that their companies attempted to facilitate the cross-cultural adaptation by arranging some free-time activities where the employees can meet each other also outside work. An interviewee in Company C further told that they had arranged a trip to the Finnish countryside in order to make their foreign employees learn to know Finland better. In Company B these kind of activities included also the foreign employees' family members, in order to support the whole family's adaptation to the country. The interviewee from Company B mentioned that for helping the family's adaptation they are arranging also language training for the family members, which was told to be the case in Company E as well. The interviewee from Company A was telling that especially their foreign employees spend a lot of time together also after work, and in their daily working environment the cultural boundaries seem to have got somewhat blurred. Finally, the same interviewee mentioned that the IT industry culture was more significant to the recruits than the Finnish national culture because:

... in a way the IT-people seem to be a certain type of people, who seem to speak the "same language" even over cultural boundaries.

(HR Coordinator, Company A)

Thus, this study seems to support the argument that the professional and industry cultures, in addition to the national cultures, are all important environments and factors of international adaptation (Cf. Schneider & Barsoux 1997).

4.3 Overcoming the Geographical and Cultural Divides – The Distance Dimension

It has been proposed earlier in this article that recruitment processes of IT professionals from abroad are different than those when recruiting domestically, due to geographical and cultural distances between Finland and the recruits' home countries. It is also proposed that the companies may use telecommunications, informal networking and local employment agencies as tools to overcome the geographical distances and logistical disadvantages in recruitment from abroad.

Among the possible channels of recruitment advertising, all of the case companies regarded the company web pages in the Internet as the most efficient method to attract applications from abroad. As one interviewee pointed out:

We have such a tradition that we don't go much "fishing" [abroad] since we have units everywhere. Also close here we have product development in Hungary and we have it in UK and in Germany, so you don't go much to that area to recruit, like extensively in newspapers. ... So our recruitment abroad is not that, that we would go there saying loudly that come to work in Finland. But rather we rely on that, that those people go on our com-site and careers-site, and see there that there are this kind of possibilities in Finland.

(HR Resourcing Manager, Company E)

Nevertheless, the Company C had also run a roadshow recruitment campaign for programmers in Russia, in which the company had also used local Russian newspaper advertising. Also an interviewee in Company D mentioned that they were considering at the moment the use of a recruitment agency. In addition, the large companies were able to rely on their local units abroad combined with Internet-based information channels.

Informal networking was also often emphasized as a major method for attracting applicants or identifying high potential individuals. In the smaller companies (A, B and C) employee referrals were mainly based on their current employees recommending their friends, studying colleagues, ex-co-workers from their previous jobs or some colleagues that they have met in international courses, conferences and trade fairs, as the following comments indicate:

[Through] that way [informal networks] probably the most people are coming. For instance, these different nationalities, they have heard about our company from some friend of theirs or somewhere else, and then contacted some person, whose name they have got, and then they have come to work here.

(CEO, Company C)

Quite many [employees] come the informal way ... such way that we have also quite many foreigners who have been studying here, and the circles of the foreign students are quite small, and then ... the network is pretty active. So if we have one foreign applicant, then often his friends apply as well. So it's ... probably the biggest [way], how we get foreign employees, these social networks. And then, of course, ... they might have had foreign friends in their former job, and then they share experiences. ... I'm surprised myself, too, ... how small the circles are.

(HR Coordinator, Company A)

For instance if our guys go to some courses, study trips or lectures abroad, then they easily bring greetings that there was such and such guy, who is really "tough" [skilled]. Or another thing is that ... the circles are very small, actually everybody knows each other, and there they actually get to know each other. And then if we need for instance an anti virus specialist, they already know that they are these five people who come into question, and then we just start negotiating.

(HR Coordinator, Company B)

These types of employee referrals were also used in the bigger companies (D, E and F) but there employee referrals within the international organisation seems to be also very much used as supervisors in different countries kept contact with each other and often arranged their subordinates for internships or training programs in the foreign units of the companies.

The companies relied often in telecommunications and the Internet, not only in attracting applications, but also in communicating and interviewing potential candidates, particularly at the earlier stages of the recruitment process. In all of the case companies, after a candidate whom the company was interested in, had sent his application to the company, the first contacts with him were often done either through telephone or e-mail. The telephone contacts often included also some kind of phone interview. In Company B, a pre-screening was additionally done by sending all candidates a job-related technical exercise by e-mail, through which the candidates could demonstrate their problem-solving skills. Usually, a face-to-face interview was arranged only with the most promising candidates, after preceding rounds by e-mail or telephone that were used in order to reduce costs and inconvenience of international travel needed to arrange a face-to-face interview. In the large companies, particularly in Company E, the local units of the companies closest to the applicant's home often conducted the first interview. Interviewees in Company E and Company G told also that sometimes the first interviews were done through videoconferencing, as well.

In addition to the geographic distance, also the cultural divide was reported to have its significance in the recruitment process. For instance, informal networking was mentioned as a way to overcome the cultural differences in the recruitment communication, particularly if the company could rely on existing employees of the same nationality – in addition of being a method of identifying potential recruits. As one interviewee pointed out:

Clearly we have had such that first one [employee] comes from Jordan, and then suddenly we have 20 from Jordan. (HR Resourcing Manager, Company E)

Nevertheless, the cultural differences apparently played a role in recruitment communication and evaluation of applicants. For instance, several interviewees brought up that different nationalities have very different ways to present themselves, to write applications and vitae. Where a Finn might tell about all his skills and experience in a bit more modest way, an American probably does not save words when writing a job application. An interviewee in Company A describes this phenomenon in the following words:

It is difficult, the biggest challenge is probably to know that if there is an application from abroad, let's say for instance from USA, there are lots of differences between cultures in how you express your skills. You know, the American people are like that that they can do everything greatly and magnificently and fantastically, although actually they can't do anything then. And then again ... a Finnish woman, for instance, says that she can't do actually anything. And then when she comes here to tell, she is a great applicant. So you have to learn to read them a bit according to the nationality, that what the person is in reality.

An interviewee in Company F pointed out same kind of differences in the way of telling about own skills between Finnish and some foreign applicants, and an interviewee in Company E mentioned that people from some countries could prepare nicer resumes than others. In the most interviews it was mentioned that the best way to "meet" the person behind the nicely written application letter and all the cultural aspects is to discuss these things in an interview and ask specific questions about the things mentioned in the vitae. An interviewee in Company F also recommended contacting the referees whenever possible.

Nevertheless, conducting employment interviews with foreign applicants was reported to have cultural constraints, particularly as to how to see and understand the person

“behind” the culture. The recruiting company’s representative who is interviewing a foreign applicant should also pay attention to avoid misinterpreting the culture bound things, as the following example shows:

Of course when it’s a question about different cultures it’s emphasized, in a way you have to be able to interpret through the culture that how does this person work then in normal life. There can be some typical traits, something like, in Estonia you don’t look a person into the eyes. For them it’s not good behavior. But it doesn’t mean that they would be unreliable, which is here [in Finland] immediately interpreted that way. This kind of things, you have to be able to see in a way, what is culture bound and what is not.
(HR Development Manager, Company D)

In sum, communication difficulties, either due to cultural differences or due to the use of foreign language, were mentioned by the interviewees as salient ones when dealing with the potential recruits (Cf. Marschan & Welch & Welch 1997). This seems to be in line with previous research suggesting that the use of a foreign language in international management may result in mutual misunderstanding as the both parties tend to use the language through conceptual filters borrowed from their mother tongues (Koivisto 1998).

4.4 Overcoming the Periphery Disadvantage – The Finland Dimension

Finland’s peripheral position, comparatively to the old European colonial powers, cold and wet climate and high taxation may cause an additional challenge to the Finnish companies’ international recruitment efforts, though Finland’s societal stability and advancement in telecommunications and information technology are able to provide more positive sides to the overall country image, as it has been discussed earlier in this paper. When this was taken up in discussions with the interviewee from the Recruitment Agency, she claimed that the situation is very competitive between countries because the best potential recruits get usually several invitations to interviews in many different countries.

Consequently, it is not surprising that many of the Case Companies had paid attention in communicating a realistic country image for Finland. Interviewees in Company B and Company C and in the Recruitment Agency argued that in order to persuade foreign IT professionals to relocate to Finland it was important to provide them with a positive and realistic view of the country and society. For instance, an interviewee in Company C mentioned that one very efficient tool was to let foreigners living in Finland tell about the Finnish culture, lifestyle and working environment, since the words of a non-Finnish person might sound more reliable and objective to the foreign applicants. The efforts of the Recruitment Agency included presentations about Finland – about the Finnish culture, climate, food, lifestyle.

The arguments that seem to attract recruits from abroad may include, not surprisingly, the overall safety and high quality of life in Finland, flexibility and informality of the Finnish working culture, and Finland’s high technology and Finnish companies’ advanced IT tools together with Finland’s and Nokia’s reputation in mobile telecommunications. In some situations, Finland’s geographical proximity to Russia can be used as an argument. An interviewee in Company A further added that actually Finland as a country had already taken care of advertising its technological leadership, so the company did not need to concentrate on it in its communications.

In this context, it is interesting to note that the same arguments for Finland did not work in the same way toward potential recruits from different countries of origin. Instead, the message had to be tuned to emphasize different aspects of Finland to different nationalities. For instance, interviewees in Company C and Company B pointed out that arguments that could appeal to Russian applicants are the big Russian community already living in Helsinki, the closeness of Finland e.g. to St Petersburg and Finland's better salary level compared to Russia. An interviewee in Company B further noted that it was quite impossible for a Finnish company to compete with the American level of salaries, but the general safety and quality of life served as some arguments that made foreign recruits to choose Finland anyway. An interviewee in Company C further added that also for one of their American recruits Finland's convenient living environment was a reason to come. The President of the Recruitment Agency further emphasized that when recruiting IT professionals from South and South-East Asian countries, where Finland is generally not very well known, there is a need to provide accurate country information. Yet, it needs to be pointed out that the country information is not very essential for getting good applicants from everywhere. Financial benefits outweigh any other motivations among Indians, while Thais and Filipinos are more interested in getting a possibility to an international career and life in wealthy Western Europe.

It is interesting to realize that while the small case companies (A, B and C) paid notable attention to promotion of Finland as a destination, the large and internationally well known case companies (D, E and F) relied more on their company images. For instance, an interviewed HR manager at the Company E argued that many of their foreign employees had actually come to Finland just because of Company E itself. The name of Company E is well known and appreciated in the information technology sector and people are interested in coming to work to Company E in Finland, where some of its cutting edge R&D is located. The same interviewee in Company E further emphasized that the company works continuously on its employer image by spreading a message of Company E as a big, secure and leading company, which offers very interesting international diversity and multicultural working environment. Similarly, the interviewees in Company F claimed that the company's internationally known name might be one of the things attracting people from abroad to apply for work in their company. In addition to the large companies, the importance of the company name and reputation was pointed out also by an interviewee in Company B, which is a small company. In the words of an interviewee from Company B:

Actually we are in the mercy of our reputation that way that it can be said that all these people that we have know us already from before, so that they have been able to go and search us and our job openings. ... And these people who are in this branch are very well aware and make these decisions independently. So there are certain companies that are interesting and followed. ... So if we talk about these real professionals, they are already in such situation that for them it's of secondary importance, their standard of living is already so high that they can't be attracted by money or such. But it's rather whether they find the company's field of business interesting, or see that the company has future, or enough challenges to offer or something else.

(HR Coordinator, Company B)

Finally, it is interesting to note that according to the interviewees, many foreign IT professionals had actually sought themselves into Finland by their own initiative. Moreover, it is interesting to note that many of them had actually some kind of "Finland-connection" already before. These included having a Finnish girl- or boyfriend, Finnish ancestral roots, or some hobby related to the Finnish nature like skiing, hiking or fishing.

5 CONCLUSIONS

The present study is a qualitative and explorative approach to Finnish high technology firms' recruitment of IT professionals from abroad. Based on earlier literature, it was proposed that four dimensions play important roles in the recruitment: competence need, competence recruitment, distance, and Finland as a periphery. These dimensions were found to be valid. It was furthermore found that the foreign recruits do not only bring in technical skills, but they also may facilitate the employing firm's internationalisation and bring the benefits of cultural diversity. The study also confirmed that a recruit's cross-cultural adaptability and family flexibility are important factors behind his success or failure, though the case companies paid only little efforts in rigorous assessment of the recruits' family and cross-cultural adaptability. The companies did, however, make efforts in integrating their newly recruited foreign IT professionals in the Finnish society and culture. When the companies undertook recruiting from abroad, they had to overcome the geographical and cultural divides between them and the applicants. This was done by relying on the Internet, industry culture, and informal networks. Finally, the companies acknowledged that proper communication of the Finnish high quality of life and advanced technology are important in attracting good recruits to Finland. Moreover, there are notable differences between the recruits of different national-cultural backgrounds, for instance between Indian and Russian recruits.

The Authors believe that the results of the present study are generalisable, at least to other Finnish companies, though this paper is based on qualitative approach and relatively small number of companies and interviewees. Nevertheless, it is suggested that a wide quantitative survey on the same topic should be conducted in order to increase reliability and generalisability. Moreover, the suggestion of further quantitative study is supported by the fact that as a qualitative study, the present paper brings forth also other issues than those originally identified based on previous literature and put forward in Propositions 1-4. Consequently, also these additional issues could be included in and rigorously examined through a quantitative survey.

The present study focused on IT professionals, very much as a representative token group of technology experts. As different technologies have their own resource bases and industry dynamics, it would add understanding to widen the study to other technology areas. The present study found that recruitment of IT professionals can be used in order to facilitate a company's internationalisation process. That is, presumably, true to an even greater extent as to recruitment of managers and commercial experts from abroad, which deserves a study of its own. Moreover, the present study did not focus on bringing forth comparative results as to e.g. Russian, Indian or American recruits, even though it was able to bring forth some of their origin-specific recruitment characteristics. Based on these initial findings, it can further be hypothesized that a recruits' cultural background has an impact in the recruitment process and dialogue between him and the recruiting company. Consequently, more focused comparative research on the impact of foreign recruits' national and cultural backgrounds in the recruitment would add our knowledge on international recruitment.

The present study was a single-country study on Finnish firms. That scope could be widened by conducting a comparative multi-country study on European companies' recruitment of technological skills from abroad. That, in turn, could be followed by com-

parative research between European, American and Japanese firms' international recruitment endeavors and experiences.

The study focused on recruitment from abroad. A subsequent issue to recruitment is the multinational workplace that emerges due to international recruitments. Even though some studies exist on that topic (Trux 2000), rigorous studies on cross-cultural management within firms' domestic units, companies' experiences and satisfaction on their foreign recruits and cross-cultural adaptation of the recruits would be beneficial.

In conclusion, the present study added understanding about international recruitment processes of technology experts, particularly regarding IT professionals in the context of Finnish high technology firms. Consequently, the present study provides a good platform for related further studies, as has been suggested above.

REFERENCES

- Bartlett, Christopher A. & Sumantra Ghoshal** (1989): *Managing Across Borders: The Transnational Solution*, Harvard Business School Press, Boston MA
- Black, J. Stewart** (1988): Work Role Transitions: A Study of American Expatriate Managers in Japan, *Journal of International Business Studies*, Vol. 19, No. 2, pp. 277-294
- Black, J. Stewart & Hal B. Gregersen** (1991): When Yankee Comes Home: Factors Related to Expatriate and Spouse Repatriation Adjustment, *Journal of International Business Studies*, Vol. 22, No. 4, pp. 671-694
- Black, J. Stewart & Hal B. Gregersen & Mark Mendenhall** (1992): *Global Assignments: Successfully Expatriating and Repatriating International Managers*, Jossey Bass, San Francisco CA
- Black, J. Stewart & Mark Mendenhall & Gary Oddou** (1991): Toward a Comprehensive Model of International Adjustment: An Integration of Multiple Theoretical Perspectives, *Academy of Management Review*, Vol. 1, No. 2, pp. 291-317
- Black, J. Stewart & Gregory K. Stephens** (1989): The Influence of the Spouse on American Expatriate Adjustment and Intent to Stay in Pacific Rim Overseas Assignment, *Journal of Management*, Vol. 15, No. 4, pp. 529-544
- Barber, Alison E.** (1998): *Recruiting Employees: Individual and Organizational Perspectives*, Sage Publications, Thousand Oaks CA
- Breaugh, James A. & Mary Starke** (2000): Research on Employee Recruitment: So Many Studies, So Many Remaining Questions, *Journal of Management*, 3/2000, pp. 405-434
- Deresky, Helen** (1997): *International Management: Managing Across Borders and Cultures*, Addison-Wesley
- Dowling, Peter J. & Randall S. Schuler & Denise E. Welch** (1994): *International Dimensions of Human Resource Management*, Wadsworth Publishing Company, Belmont CA
- Eisenhardt, Kathleen M.** (1989): Building Theories from Case Study Research, *Academy of Management Review*, Vol. 14, No. 4, pp. 532-550
- Euro, Kalevi** (2001), *Locational Changes of Headquarters of Multinational Corporations: A Theoretical Study on the Motives and Reasons for Relocating Finnish Divisional Headquarters Abroad*, doctoral dissertation thesis, Acta Universitatis Oeconomicae Helsingiensis A-194, Helsinki School of Economics and Business Administration, Helsinki
- Forsander, Annika** (2000): Työvoiman tarve ja maahanmuuttopolitiikka – onko maahanmuuttajien osaaminen vastaus työvoiman kysyntään? [Need for Labor and Immigration policy – Is Immigration an Answer to Labor Demand?], *Aukeavat ovet: kulttuurien moninaisuus Suomen elinkeinoelämässä [Opening Doors: Cultural Diversity in the Finnish Economy]*, edited by **Marja-Liisa Trux**, Sitra/WSOY, Helsinki, pp. 143-202 (in Finnish)
- Gesterland, Richard R.** (1999): *cross-cultural Business Behavior: Marketing Negotiating and Managing Across Cultures*, Copenhagen Business School Press, Copenhagen
- Hankonen, Riitta** (2001): IT-ulkomaalainen tulee Suomeen usein perheensä takia [IT-Alien Moves to Finland Often for His Family], *IT-viikko*, 8/9/2001, pp. 14-15 (in Finnish)
- Hall, Edward T.** (1959): *The Silent Language*, Doubleday, Garden City NJ

- Hall, Edward T.** (1976): *Beyond Culture*, Doubleday, Garden City NJ
- Harvey, Michael** (1998): Dual-career Couples During International Relocation: The Trailing Spouse, *The International Journal of Human Resource Management*, Vol. 9, No. 2, pp. 310-331
- Harvey, Michael & Cheri Speier & Milorad M. Novocevic** (1999): The Role of Inpatriation in Global Staffing, *The International Journal of Human Resource Management*, Vol. 10, No. 32, pp. 459-476
- Heiskanen, Mirva** (2001): Uusi Suomi on ulkomaalainen [The New Finland is a Foreigner], *Talouselämä* 12/2001, pp. 18-23 (in Finnish)
- Huntington, Samuel P.** (1996): *The Clash of Civilizations and the Remaking of World Order*, Simon & Schuster, New York NY
- Hytönen, Hannele** (1998): *Employee Motivation in a Foreign Cultural Context: A Case of Foreign Employee Motivation in Nokia Telecommunications in Finland*, unprinted Master's Thesis, Helsinki School of Economics and Business Administration, Helsinki
- Hyvärinen, Irja** (2001): Suomen telakat tarvitsevat kiireesti ulkomaista lisäväkeä laivanrakennukseen [Finnish Shipyards Need Urgently More People to Shipbuilding], *Helsingin Sanomat*, 1/16/2001 (in Finnish)
- Iivonen, Jyrki** (2000): Teollisuus haluaa portit auki ulkomaiselle työvoimalle [The Industry Wants Open Gates to Foreign Labourforce], *Helsingin Sanomat*, 11/24/2000, p. D1 (in Finnish)
- Jutikkala, Eino & Kauko Pirinen** (1984): *A History of Finland*, Fourth Revised Edition, Weilin & Göös, Espoo
- Kauppinen, Marja** (1994): *Antecedents of Expatriate Adjustment: A Study of Finnish Managers in the United States*, Helsingin kauppakorkeakoulun julkaisuja B-140, The Helsinki School of Economics and Business Administration, Helsinki
- Koivisto, Jussi V.** (1998): *Cultural Heritages and Cross-Cultural Management: Cross-Cultural Synergy and Friction in Finno-Japanese Management*, Acta Universitatis Oeconomicae Helsingiensis A-144, doctoral dissertation thesis, Helsinki School of Economics and Business Administration, Helsinki
- Korhonen, Heli** (1999): *Inward-Outward Internationalization of Small and Medium Enterprises*, Acta Universitatis Oeconomicae Helsingiensis A-147, doctoral dissertation thesis, Helsinki School of Economics and Business Administration, Helsinki
- Laatikainen, Tuula** (2000): Kolme kertaa kyllä aivotuonnille [Threefold 'Yes' to Brain-Imports], *Tekniikka & Talous*, 11/16/2000, pp. 14-15 (in Finnish)
- Luostarinen, Reijo** (1979): *Internationalization of the Firm: An Empirical Study of the Internationalization of Firms with Small and Open Domestic Markets with Special Emphasis on Lateral Rigidity as a Behavioral Characteristic in Strategic Decision-Making* Acta Universitatis Oeconomicae Helsingiensis A-30, doctoral dissertation thesis, The Helsinki School of Economics, Helsinki
- Luostarinen, Reijo & Heli Korhonen & Jukka Jokinen & Tommi Pelkonen** (1994): *Internationalization and SME*, Helsinki, [Finland] Ministry of Trade and Industry
- Marcus, Solomon** (1992): Center and Periphery in International Communication, *Center and Periphery in Representations and Institutions*, Acta Semiotica Fennica I, edited by **Eero Tarasti**, ISI International Semiotics Institute, Imatra, pp. 135-157

Markkanen, Mikko (1999): *Etsi, arvioi, valitse – onnistunut rekrytointi [Search, Assess, Select – Successful Recruitment]*, WSOY, Helsinki (in Finnish)

Marschan, Rebecca & Denice Welch & Lawrence Welch (1997): Language: The Forgotten Factor in Multinational Management, *European Management Journal*, Vol. 15, No. 5, pp. 591-598

Mendenhall, Mark & Gary Oddou (1985): The Dimensions of Expatriate Acculturation: A Review, *Academy of Management Review*, Vol. 10, No. 1, pp. 39-47

Miles, Matthew B. & A. Michael Huberman (1994): *Qualitative Data Analysis*, Sage Publications, Thousand Oaks CA

Paalosalo, Mari (2000): Teollisuus vaatii ulkomaisten johtajien lähdevero takaisin [The Industry Insists Return to Tax-at-Source System for Foreign Managers], *Taloussanomat*, 11/3/2000, p. 6 (in Finnish)

Raban, A. J. (1991): *Working in the European community*, Office for Official Publications of the European Communities, Brussels

Randviir, Anti (2000): Reunojen ymmärtäminen: miten 'perifeerisen' kuva kartoitetaan kulttuuriseen tietoon [Understanding the Margins: How the Image of 'Periphery' is Mapped to Cultural Awareness], *Ymmärtämisen merkit: Samuuden ja toiseuden ikoneja suomalaisessa kulttuurissa [Signs of Understanding: Icons of Sameness and Others in Finnish Culture]*, Acta Semiotica Fennica VIII, edited by **Eero Tarasti**, ISI International Semiotics Institute, Imatra, pp. 41-55 (in Finnish)

Rantala, Juha (1999): *Toimipaikkojen rekrytointikäyttäytyminen: analyysi toimipaikkojen rekrytoinneista Suomessa 1997 [Recruitment Behavior of Companies: An Analysis of Companies' Recruitment's in Finland in 1997]*, Työministeriö [Finland Ministry of Labour], Helsinki (in Finnish)

Saksa, Markku (2000): Pääkaupunkiseutu tarvitsee 440000 ulkomaalaista 2020 [The Capital Region Needs 440000 Immigrants by 2020], *Helsingin Sanomat*, 9/30/2000, p. B14 (in Finnish)

Sappinen, Jukka (1992): *The Wave-Curve Hypothesis, Role of Culture and Cross-Cultural Adjustment*, CIBR Working Paper Series 6/1992, HSE Press, Helsinki

Silminnäkijä (1/18/2001): *Intialainen insinööri ja muita maailman työläisiä [Indian Engineer and Other Workers of the World]*, a television documentary, produced by **Jyrki Richt**, broadcast on YLE [Finnish National TV Company] Channel 2, January 18, 2001

Schneider, Susan C. & Jean-Louis Barsoux (1997): *Managing across Cultures*, Prentice Hall, London

So, Alvin Y. & Stephen W. K. Chiu (1995): *East Asia and the World Economy*, Sage Publications, Thousand Oaks CA

Storey, Julie & Mary Wright (2001) Recruitment and Selection, *Human Resource Management: A Contemporary Approach*, edited by **Ian Beardwell & Len Holden**, Pearson Education, London, pp. 225-266

Straubhaar, Thomas (2000): *International Mobility of the Highly Skilled: Brain Gain, Brain Drain or Brain Exchange*, Hamburg Institute of International Economics, Hamburg

Stephens, Gregory K. & J. Stewart Black (1991): The Impact of Spouse's Career-Orientedness on Managers During International Transfers, *Journal of Management Studies*, Vol. 28, No. 4, pp. 417-428

Torbiörn, Ingemar (1982): *Living Abroad:: Personal Adjustment and Personnel Policy in the Overseas Setting*, Wiley, New York NY

Trompenaars, Fons (1993): *Riding the Waves of Culture*, The Economist Books, London

Trux, Marja-Liisa, editor (2000): *Aukeavat ovet: kulttuurien moninaisuus Suomen elinkeinoelämässä* [Opening Doors: Cultural Diversity in the Finnish Economy], Sitra/WSOY, Helsinki (in Finnish)

Trux, Marja-Liisa (2000): Monimuotoinen työyhteisö [Multidimensional Working Community], *Aukeavat ovet: kulttuurien moninaisuus Suomen elinkeinoelämässä* [Opening Doors: Cultural Diversity in the Finnish Economy], edited by **Marja-Liisa Trux**, Sitra/WSOY, Helsinki (in Finnish), pp. 261-316 (in Finnish)

Tung, Rosalie L. (1981): Selection and Training of Personnel for Overseas Assignments, *Columbia Journal of World Business*, Spring 1981, pp. 68-78

Tung, Rosalie L. (1982): Selection and Training Procedures of US, European and Japanese Multinationals, *California Management Review*, Vol. 25, No. 1, pp. 57-71

Tung, Rosalie L. (1988): *The New Expatriates: Managing Human Resources Abroad*, Ballinger, Cambridge MA

Wild, John J. & Kenneth L. Wild & Jerry C. Y. Han (2000): *International Business: An Integrated Approach*, Prentice Hall, Engelwood Cliffs NJ

Yin, Robert K. (1989): *Case Study Research: Design and Methods*, Sage Publications, Beverly Hills CA

Ylänkö, Maaria (2000): Kansainvälistymisen kahdet kasvot – muuttoliikkeet ja kulttuurien globalisaatio [The Two Faces of Internationalisation – Migrations and Cultural Globalisation], *Aukeavat ovet: kulttuurien moninaisuus Suomen elinkeinoelämässä* [Opening Doors: Cultural Diversity in the Finnish Economy], edited by **Marja-Liisa Trux**, Sitra/WSOY, Helsinki (in Finnish), pp. 21-84 (in Finnish)

Yamaguchi, Masao (1992): The Origin of Center/Periphery Theory in the Human and Social Sciences, *Center and Periphery in Representations and Institutions*, Acta Semiotica Fennica I, edited by **Eero Tarasti**, ISI International Semiotics Institute, Imatra, pp. 115-123

ELINKEINOELÄMÄN TUTKIMUSLAITOS (ETLA)

THE RESEARCH INSTITUTE OF THE FINNISH ECONOMY

LÖNNROTINKATU 4 B, FIN-00120 HELSINKI

Puh./Tel. (09) 609 900

Int. 358-9-609 900

<http://www.etla.fi>

Telefax (09) 601753

Int. 358-9-601 753

KESKUSTELUAIHEITA - DISCUSSION PAPERS ISSN 0781-6847

- No 758 ERKKI KOSKELA – RONNIE SCHÖB, Optimal Factor Income Taxation in the Presence of Unemployment. 23.04.2001. 16 p.
- No 759 JUHA FORSSTRÖM – JUHA HONKATUKIA, Suomen ilmastostrategian kokonaistaloudelliset kustannukset. 24.04.2001. 28 s.
- No 760 PETRI BÖCKERMAN, Tietokone- ja informaatioteknologian vaikutukset työmarkkinoihin. 12.06.2001. 16 s.
- No 761 COLIN HAZLEY, EU Enlargement and Finnish Forest Industry: A Special Emphasis on the Packaging Industry. 22.06.2001. 110 p.
- No 762 KARI E.O. ALHO, Catching up and Unemployment in the EU. 05.07.2001. 10 p.
- No 763 PIA WALDEN – PEKKA YLÄ-ANTTILA, Skenaariot ja kansantalous 2026. Kansainvälisten skenaarioiden tulevaisuuskuvia Suomen näkökulmasta. 30.07.2001. 21 s.
- No 764 OLAVI RANTALA, EU:n itälaajenemisen vaikutus Suomen väestökehitykseen. 03.09.2001. 15 s.
- No 765 JUKKA LASSILA – TARMO VALKONEN, Ageing, Demographic Risks, and Pension Reform. 03.09.2001. 34 p.
- No 766 PERTTI HAAPARANTA – HANNU PIEKKOLA, Taxation and Entrepreneurship. 26.09.2001. 39 p.
- No 767 REIJO MANKINEN – JYRKI ALI-YRKKÖ – PEKKA YLÄ-ANTTILA, Palveluiden vienti ja kansainvälistyminen. 25.09.2001. 42 s.
- No 768 ARI HYYTINEN – OTTO TOIVANEN, Asymmetric Information and the Market Structure of the Venture Capital Industry. 03.10.2001. 13 p.
- No 769 MINNA SEPPÄLÄ, Vihreä veroreformi: Laskelmia Suomen aineistolla. 05.10.2001. 28 s.
- No 770 PEKKA MANNONEN, Advancing Information Technology and Financial Intermediation. 10.10.2001. 20 p.
- No 771 MIKA WIDGRÉN – STEFAN NAPEL, The Power of a Spatially Inferior Player. 23.10.2001. 20 p.
- No 772 TEEMU HAUKIOJA – JARMO HAHN, The Emergence of the New Economy, and its Challenge to Financial Intermediation and Banking: A Survey. 01.11.2001. 30 p.
- No 773 MIKKO MÄKINEN – MIKA PAJARINEN – PEKKA YLÄ-ANTTILA, Hyvinvointiklusterin vientimenestys ja merkitys kansantaloudessa 1990-luvun jälkipuoliskolla. 06.11.2001. 31 s.

- No 774 ARI HYYTINEN – MIKA PAJARINEN, Financial Systems and Venture Capital in Nordic Countries: A Comparative Study. 14.11.2001. 57 p.
- No 775 ARI HYYTINEN – IIKKA KUOSA – TUOMAS TAKALO, Law or Finance: Evidence from Finland. 19.11.2001. 54 p.
- No 776 ARI HYYTINEN – TUOMAS TAKALO, Preventing Systemic Crises through Bank Transparency. 20.11.2001. 17 p.
- No 777 RITA ASPLUND, Koulutus, palkkaerot ja syrjäytyminen. 22.11.2001. 20 s.
- No 778 STEFAN LEE, Financial Analysts' Perception on Intangibles – An Interview Survey in Finland. 26.11.2001. 44 p.
- No 779 JYRKI ALI-YRKKÖ – PEKKA YLÄ-ANTTILA, Globalisation of Business in a Small Country – Does Ownership Matter? 10.12.2001. 20 p.
- No 780 PENNA URRILA, Suhdanneindikaattoreiden käyttö talouskehityksen seurannassa. 12.12.2001. 66 s.
- No 781 JYRKI ALI-YRKKÖ – ARI HYYTINEN – JOHANNA LIUKKONEN, Exiting Venture Capital Investments: Lessons from Finland. 17.12.2001. 54 p.
- No 782 JUHA FORSSTRÖM – JUHA HONKATUKIA – PEKKA SULAMAA, Suomen asema EU:n komission vihreän kirjan hahmottelemassa unionin laajuisessa päästökaupassa. 31.12.2001. 56 s.
- No 783 ARLINDO VILLASCHI, An Analytical Framework for Understanding the Finnish National System of Innovation. 10.01.2002. 24 p.
- No 784 AKI T. KOPONEN, Competition in Local Loan Markets, An Application of Linear City-Model with Price Discrimination. 15.01.2002. 15 p.
- No 785 MATHIAS CALONIUS, Findings about Design and the Economy. 30.01.2002. 46 p.
- No 786 PETRI ROUVINEN, Competitiveness in the New Economy. 01.02.2002. 17 p.
- No 787 PASI HUOVINEN – HANNU PIEKKOLA, Early Retirement and Use of Time by Older Finns. 25.02.2002. 19 p.
- No 788 PANU PELKONEN, Esitutkimus rekrytointiongelmien ja tuotannon yhteyksistä Suomen teollisuudessa 1987-2000. 18.02.2002. 24 s.
- No 789 ERKKI KOSKELA – MARKKU OLLIKAINEN – MIKKO PUHAKKA, Saddles, Indeterminacy and Bifurcations in an Overlapping Generations Economy with a Renewable Resource. 18.02.2002. 30 p.
- No 790 MINNA JUKOMAA – JUSSI KOIVISTO – MARJA TAHVANAINEN, Recruitment of Foreign IT Professionals in Finland. 22.02.2002. 23 p.

Elinkeinoelämän Tutkimuslaitoksen julkaisemat "Keskusteluaiheet" ovat raportteja alustavista tutkimustuloksista ja väliraportteja tekeillä olevista tutkimuksista. Tässä sarjassa julkaistuja monisteita on mahdollista ostaa Taloustieto Oy:stä kopiointi- ja toimituskuluja vastaavaan hintaan.

Papers in this series are reports on preliminary research results and on studies in progress. They are sold by Taloustieto Oy for a nominal fee covering copying and postage costs.

