
Nordic Journal of Surveying and Real Estate Research 13:1 (2018) 18–31
submitted on 30 September
revised on 7 February
accepted on 2 May 2018

How Far and Often Do Organizations Relocate Offices? Finnish HQ Relocations Suggest a Close Proximity to the Old Location

Matti Christersson^a, James Culley^a

^aAalto University, Department of Built Environment

Contact: matti.christersson@aalto.fi

Abstract. *Relocation is one of the tasks that corporate real estate management is responsible for. They are important events for organizations as there can be a variety of different impacts due to relocation. Previous research has made a distinction between long and short distance relocations. This paper focuses on contributing to the knowledge of the relocation phenomenon. The purpose is to examine the relocation distances and frequencies of companies' HQ relocations. The study uses quantitative data of address changes of Finnish companies. The data is qualitatively analyzed in respect to the relocation distance and the amounts of relocated companies in order to formulate an understanding of how far and often companies have relocated. The findings of this study indicate that the majority of relocations are short distance relocations. Two thirds were relocations of less than ten kilometers. The median relocation distance was less than five kilometers. Further, 30 percent of the companies had relocated at least once during the five and half year period and six percent during the last year of the dataset. In addition, there were some evidence of SMEs relocating more frequently and to a closer proximity than large corporations. The increased knowledge of the relocation phenomenon's scale, volume, and nature supports the development of relocation management, as well as the relocation related service business, thus enabling organizations, possibly, to relocate more efficiently and optimally. The dominant role of short-distance relocations suggests that from organizations' perspective, there are certain underlying drivers for organizations to remain within same region. Also as relocations appear to take place infrequently, sufficient knowledge of relocations within organizations should be ensured case-by-case.*

The findings of the study give an overall view of the scale and volume of the relocation phenomenon within the private sector in Finland by substantiating the phenomenon. The relocation distances or frequencies of Finnish HQs have not previously been studied in this detail and quantity. The importance of relocation management and workplace change requires more attention as opposed to the mere location selection approach.

Keywords – *Corporate Real Estate Management, Relocation, Headquarters (HQs), Finland*

1 Introduction

Relocation is a key responsibility for corporate real estate. Here, relocation is defined as by Pellenbarg *et al.* (2002) as “a change of address of a firm from location A to location B”. They are critical yet potentially stressful events (Peach *et al.*, 2005) for organizations and there can be a variety of economic, social and environmental impacts due to the relocation (see e.g. a framework developed by Christersson and Rothe, 2012). These impacts can derive from the relocation management, or location, building, or workplace changes. At best, relocation appears as an opportunity for organizations to use it as a catalyst for positive change while at worst, the result is the opposite. Economic impacts can include for example cost reduction, relocation costs and disruption to business. Social impacts on the other hand can include e.g. changes in employees’ commuting, satisfaction and wellbeing, as well as change resistance. Environmental impacts can include factors such as change in the environmental footprint of the organization.

A certain body of previous relocation research has focused on long distance relocations i.e. relocation between cities, countries or continents and the impacts of such relocations on organizations and their employees (see e.g. Piotti, 2009; Gregory *et al.*, 2005; Stroh, 1999 and Feldman and Bolino, 1998). *Inter alia* employee quality of life (Rabianski, 2007), willingness to relocate (Eby and Russell, 2000) and cost reduction (Spee and Douw, 2004) are a few of the impacts to be addressed from this viewpoint. These classes of relocations to new geographic areas, which e.g. O’Mara (1999) defined as “*New Horizons*”, “*Pick Up and Go*” and “*Consolidation to Beachhead*”, can be expected to have certain financial, social and environmental impacts and influence the relocating organizations in various ways, not least due to the long relocation distance which usually means that (retained) employees are required to move their homes.

However, short distance relocations (i.e. the ones taking place within the same geographic area) can arguably have crucial impacts as well – despite not a drastic distance relocated. For example, Hanssen (1995) studied the changes in means of commuting while relocating from CBD to suburban location. Moreover, e.g. Greenhalgh (2008) reported of a case where a company had relocated only 6 kilometres but had still lost nearly half of its workforce. On the positive side, Brown *et al.* (2010) studied employee experiences and satisfaction due to a relocation of an HQ, and identified gains in comfort, productivity, health and wellbeing. Further, a short distance relocation can, for instance, change employees’ ways of working and their productivity (Morgan and Anthony, 2008). Hence, as the nature and impacts of short distance relocations differ from the long-distance ones, there is a need for them to be addressed as a distinct group of their own. This distinction has been made previously by e.g. O’Mara (1999) and Pellenbarg and Kemper (1999). Whilst this difference is already recognized, the proportion of these different relocation types (i.e. short and long distance) has not been explicitly identified to date, especially in the corporate real estate research context.

Further, the relocation distance is integral to the impacts of relocation and this has been addressed from various perspectives. The relationship between relocation distance and the extent of the financial impacts has been previously

studied e.g. by Gregory *et al.* (2005): they concluded that there was no significant correlation between the relocation distance and the financial performance of the firm after HQ relocation. Further, although there is a common belief that relocation decisions could be motivated by incentives offered by the public sector (see e.g. Hu *et al.*, 2008), studies by e.g. Smith (2016) and Guimarães *et al.* (1998) suggests this would not be the case. Regarding the social impacts, e.g. a study made by Lawson and Angle (1998) revealed that the relocation distance does have a strong influence on the employees' willingness to relocate. From the environmental perspective, the relocation alters the impacts of the transportation (commuting, business and stakeholder journeys) and hence, the distance can contribute to the changed environmental footprint of the organization, in addition to the changed environmental footprint of the building (Christersson and Rothe, 2012).

Furthermore, relocations for individual organizations do not come about on frequent basis. Lease lengths can serve as one possible proxy indicators of relocation frequency since office relocation usually takes place (if at all) at the expiration of lease. For instance, in a global dataset containing 2,703 leases from years 2000–2010 Titman and Twite (2013) identified a median lease length of *ca.* 4.5 years. Since lease expiry does not necessarily result in relocation, as a renewal or extension is also possible, the length of the lease term could be translated to constitute a minimum period between relocations. The frequency of relocation can also vary over organizational characteristics: For instance, the size and age of organization have been suggested to be decreasing factors for relocation tendency (Brouwer *et al.*, 2004). Further, the results by a study made by Strauss-Kahn and Vives (2009) suggest that HQs which are larger (in terms of sales) and younger tend to relocate more often (corporate history matters), as do firms that are larger (in terms of the number of HQs), are foreign, or are the outcome of a merger. Also, a relationship between business cycles and the office relocation frequency of growth firms has been identified (Dettwiler, 2008).

This paper focuses on contributing to the knowledge of the relocation phenomenon. The aim is twofold. First, we examine the distance of companies' HQ within-country relocations in order to shed light on what is the role of long distance relocations within the whole relocation phenomenon. Secondly, we examine how frequently companies go through HQ relocations. The study is conducted by descriptively analyzing the relocation distances, calculating the portion of relocations done within and between municipalities, and assessing the volume of relocated companies. This allows formulating an understanding of how far and how often companies have relocated. The study uses quantitative data of address changes of Finnish limited liability companies between years 2006–2011.

2 Methodology

Research design

Given that organizational relocation as a phenomenon is complex and includes various drivers, aims, impacts and stakeholders, this study is descriptive by nature and employs a mixed-model research design (Johnson and Onwuegbuzie, 2004):

quantitative data is collated and qualitatively analyzed using spreadsheet and GIS softwares. This study uses the registered change of address of companies as a proxy for relocation, following the definition for a relocation used by Pellenburg *et al.* (2002): “a change of address of a firm from location A to location B”. Although there appears to be no universal definition of long or short distance relocation in terms of kilometres or miles, e.g. a distance of 5 miles has been used in a study by Gregory *et al.* (2005) whereas Pellenburg and Kemper (1999) discuss short distance relocations as local and regional ones, opposed to interprovincial relocations. In this study, we use a distance threshold of 10 kilometres to consider the relocation a short or long distance one.

While the data is quantitative, this particular piece of research employs the use of descriptive qualitative analysis and concentrates thus on the descriptive statistics and the parameters of distribution, such as the mean, median and percentile threshold values. The aim is not to analyze or identify any correlations between different variables, investigate causal relationships or conduct statistical analysis, but merely to form an overall understanding of the nature of the relocation phenomenon. Further, this study is geographically limited to the within country HQ relocations of Finnish companies, and by the form of company to “*Fi: Osakeyhtiö*”, abbreviated “*Oy*”, i.e. the Finnish equivalent of a limited company (Ltd or LLC), a juridical form of company the most common in Finland. Regarding the relocation frequency, the proportion of relocated companies in the dataset is analyzed by comparing the amount of relocated limited liability companies to the amount of all limited liability companies. This analysis is conducted independently for different headcount categories by employing Statistics Finland and Finnish Business Information System data.

Data description

The initial dataset used in this study contains all address changes of Finnish companies between 1 January 2006 and 12 July 2011. If the same company had changed address multiple times during this time period, only the last change of address was included in the data. This is an original limitation of the dataset, which may lead to some loss of information. The data is based on the information in Finnish Business Information System and was acquired for research purposes from a private company. This dataset contained in total 134,993 rows of address changes. The dataset included the following details: Company ID, Company Name, New address, New post code, Old address, Old Postcode, Category of revenue, Description of the Category of revenue, Category of Headcount number, Description of the Headcount Category, Code for Field of Business, Description of Field of Business, Date of Registration, Date of Address Change, Code of Company Form and Description of Company Form.

3 Research process

The research was conducted using a dataset of address changes of Finnish companies. The initial dataset included altogether 134,993 address changes. Before the analysis the raw dataset was edited with the following exclusions: 204

rows were removed due to missing address data, 3,813 rows due to that the change was *de facto* only a correction of an address, 15,193 rows were removed due to the new address was identifying as a C/O-address (thus no surety of the actual address could be obtained) and 26,190 rows were removed because headcount, revenue and/or field of business details were inadequate. In addition, as the scope of study was set to the limited liability companies, 40,043 rows were removed as they contained other juridical forms of company. After these exclusions, the dataset contained 49,540 address changes.

After the initial exclusions, the address data was geocoded using GIS software ArcGIS™, and corresponding coordinates for the new and old addresses were obtained. After the transformation of the coordinates, the distances between the new and old address were calculated for each address change. The transformation process yielded 10,845 records where the coordinates could not be obtained for some reason, or the distance was zero meters indicating that only the address had changed (due to renaming of streets or mergers of municipalities for instance), not the location. All such cases were removed from the data. Hence, the final dataset contained 38,695 records.

The analysis of data was conducted in three phases. First, the data analysis included the calculation of the mean and median distances of the relocated companies. In addition, the percentiles for the distance thresholds of 10, 25, 50 and 100 kilometers were calculated. These calculations were done for each headcount category separately. Tables 1 and 2 show these figures. The data was categorized initially into four categories based on the headcount: “0–4” (Micro), “5–49” (Small), “50–249” (Medium-sized) and “250 or more” (large), and into 7 categories based on the turnover: “1–99,999”, “100,000–199,999”, “200,000–399,999”, “400,000–999,999”, “1,000,000–1,999,999”, “2,000,000–9,999,999”, “10,000,000–19,999,999” and “20,000,000 or more”. The categorization for headcount follows the recommendation used by European Commission (*see e.g.* EC, 2005), and the turnover categories are used commonly by Statistics Finland. Further, an additional category was included: one that excluded companies within the headcount category of 0–4 people. This separation was done based on a justified hypothesis that the smallest category can be considered to consist of companies which *de facto* do not operate in proper premises but in entrepreneur’s home, for instance, or are holding company type companies (i.e. the ones with 0 employees), thus their “relocation” distance and nature might differ from the other categories and they might fall out of the definition of an organization (in the case of 0 employees). The results are included in Table 1 noted by “5+”.

In addition to the descriptive statistics and distributional parameters, the distance of the relocation was addressed from within and between municipality perspective by comparing the text strings of the old municipality and new municipality information. If these two matched, the relocation (i.e., the address change) was considered as a within municipality relocation. The outcome of this comparison is illustrated in Table 2 in more detail. At the beginning of 2017 there were a total of 311 municipalities in Finland (LAU-2 level).

Table 1. Relocation distance per headcount category.

Headcount	N	Median distance (km)	Mean distance (km)	Percentile			
				< 10 km	< 25 km	< 50 km	< 100 km
0–4	30,260	5.12	31.21	65.9%	81.2%	87.3%	91.2%
5–49	7,670	3.28	20.38	75.1%	87.8%	92.0%	94.3%
50–249	559	3.46	40.19	69.6%	80.3%	84.1%	87.8%
250+	130	5.83	35.47	70.0%	86.2%	87.7%	91.5%
n/a	76	4.76	37.80	67.1%	78.9%	82.9%	85.5%
5+	8,359	3.32	21.94	74.7%	87.3%	91.4%	93.8%
Total:	38,695	4.65	29.22	67.8%	82.5%	87.9%	91.7%

Table 2. Relocation distance per turnover category.

Turnover (€)	N	Median distance (km)	Mean distance (km)	Percentile			
				< 10 km	< 25 km	< 50 km	< 100 km
1–199,999	22,271	5.55	34.18	63.9%	79.6%	86.0%	90.3%
200,000–399,999	5,167	3.91	22.43	72.1%	85.7%	90.9%	93.8%
400,000–999,999	5,218	3.37	19.95	74.0%	87.8%	92.4%	94.7%
1,000,000–1,999,999	2,503	3.68	21.92	74.4%	87.1%	91.2%	93.6%
2,000,000–9,999,999	2,444	3.59	24.86	72.6%	85.9%	90.5%	93.0%
10,000,000–19,999,999	403	4.04	31.57	69.2%	82.9%	86.4%	90.1%
20,000,000–	437	5.28	35.23	69.1%	82.8%	86.5%	89.9%
N/A	252						
200000+	16,172	3.67	22.49	73.0%	86.5%	91.1%	93.7%
Total:	38,695	4.65	29.22	67.8%	82.5%	87.9%	91.7%

Finally, in order to form an understanding of the frequency of relocations, the quantity of address changes was proportioned by the total number of limited liability companies within Finland. In 2011, there was a total of 322,232 enterprises in Finland, of which 129,136 were limited liability companies (OSF, 2014). These were then further analyzed per each headcount by calculating the ratios for each of headcount categories. Two sets of ratios were calculated: one for the whole time period of the dataset and one for the last year within the dataset. The last year was selected since there is certain skewness in the data caused by the fact that only the last change of address is included.

4 Findings

The mean (i.e., average) distance that the companies relocated was *ca.* 29.2 kilometres and the median *ca.* 4.65 kilometres. The minimum relocation distance was *ca.* 10 meters and maximum *ca.* 1076.5 kilometres. Table 1 illustrates per headcount category the median and mean distances.

After calculating the mean and median distances and standard deviations per headcount and turnover category, the percentiles were calculated for distance thresholds of 10, 25, 50 and 100 kilometres. These threshold values are indicated in Table 1. *Approximately* 67.8 percent of the total relocations were less than 10 kilometres in distance and *ca.* 82.5 percent were less than 25 kilometers in distance. When the smallest headcount category of 0–4 employees was excluded, the percentiles were *ca.* 74.7 percent and *ca.* 87.3 percent respectively, and with smallest turnover category excluded they were 73% and 86.5% respectively. Figure 1 illustrates visually the distribution of the relocation distance of data sample for each of the percentile thresholds (10, 25, 50 and 100 kilometres). The dataset is sorted from smallest to largest by the distance and the y-axis indicates the relocation distance. Interestingly, when measured both by headcount and turnover, companies within the smallest i.e. micro-sized, and the largest categories had longer relocation distances (by median).

Further, while analyzing the relocations on municipality basis, *ca.* 60.6 percent of all of the address changes were done within the same municipality. Table 3 illustrates the results of the municipality analysis. The percentage of within municipality varied from 55.4 percent to 67.2 percent in different headcount categories. Apart from the “0–4”-headcount category, larger headcount categories had smaller within municipality percentages.

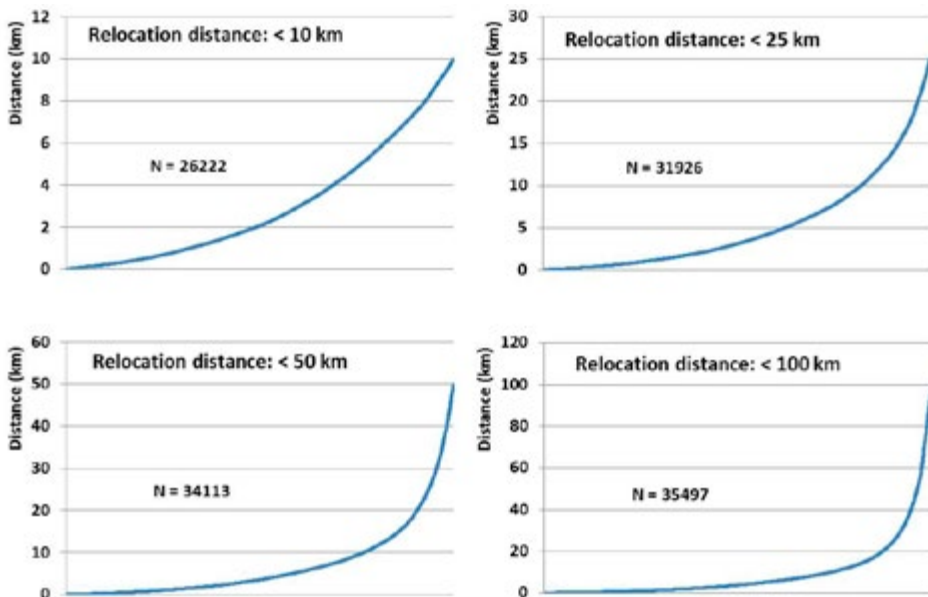


Figure 1. Relocation distances by percentile.

Finally, a relocation frequency analysis was conducted, in which the number of moves in the final dataset was divided by the total number of limited liability companies, resulting in a figure of *ca.* 30.4%. This represents the portion of companies that had relocated *at least once* during the five and half year time

Table 3. Within and between cities relocations.

Headcount	N	Within the same municipality	Between municipalities	Within (%)
0–4	30,260	17,831	12,429	58.9%
5–49	7,670	5,151	2,519	67.2%
50–249	559	348	211	62.3%
250+	130	72	58	55.4%
N/A	76	46	30	60.5%
Total	38,695	23,448	15,247	60.6%
5+	8,435	5,617	2,818	66.6%

Table 4. Ratio of relocated companies and all companies per headcount category.

Headcount	Total amount of limited liability companies 31.12.2011	N	Ratio	Relocations 13.7.2010 - 12.7.2011	Ratio
0–4	100,106	30,260	30.2%	6,482	6.5%
5–49	26,348	7,670	29.1%	1,596	6.1%
50–249	2,203	559	25.4%	109	4.9%
250+	479	130	27.1%	21	4.4%
n/a		76			
5+	29,030	8,359	28.8%	1,726	5.9%
Total:	129,136	38,695	30.0%	8,208	6.4%

Table 5. Ratio of relocated companies and all companies per turnover category.

Turnover (€)	Total amount of limited liability companies 31.12.2011	N	Ratio	Relocations 13.7.2010- 12.7.2011	Ratio
1–199999	69,549	22,271	32.0%	4,662	6.7%
200,000–399,999	17,532	5,167	29.5%	1,172	6.7%
400,000–999,999	18,,809	5,218	27.7%	1,136	6.0%
1,000,000–1,999,999	9,317	2,503	26.9%	520	5.6%
2,000,000–9,999,999	9,769	2,444	25.0%	483	4.9%
10,000,000–19,999,999	1,577	403	25.6%	87	5.5%
20,000,000+	1,850	437	23.6%	81	4.4%
n/a	733	252			
Total:	129,136	38,695	30.0%	8,208	6.4%

period of the dataset. In addition, another figure was calculated for the last year of the dataset using a filter in the date of address change (i.e. for relocations between 13.7.2010 – 12.7.2011): *ca.* 6.4 percent of the total companies had relocated during the last year in the dataset. The proportions were calculated for each headcount and turnover category separately. Tables 4 and 5 show these proportions. There is little evidence of the influence of the headcount or turnover category over the relocation frequency. However, the larger companies' proportions were to a recognizable degree lower than the smaller companies' proportions.

4.1 Key practical implications

The key practical implications of this study's findings arise mainly from three issues. Firstly, organizations usually appear to relocate within a rather close proximity of their existing location. This information does have implications for instance on planning and executing of relocation processes within organizations which are seeking new locations, as well as maintaining the proximity to key stakeholders of the organization. Secondly, relocations are not something that organizations do regularly: as *ca.* 30% of all companies had relocated during the 5.5 year time-period, it implies that *ca.* 70% had not. In other words, as relocations are not frequently conducted, a typical organization does not necessarily have a sufficient amount of expertise to conduct such processes. Consequently, organizations might be surprised by the complexity and change resistance associated to relocations. Thirdly, the behavior of different sized companies i.e. small and medium-sized enterprises (SMEs) and larger companies appears to be different: SMEs (apart from the micro-sized) tend to locate to a closer proximity and more frequently in comparison to larger companies (with a headcount of 250 or more). As a practical implication, the differently sized companies could benefit from different relocation management approaches accordingly.

Further, in short distance relocations the workplace change and the relocation management itself could arguably play a more significant role compared to long distance relocations, where often majority of the employees are not retained due to the location change being more drastic, and usually requiring a change of home. Hence, the location change is perhaps a more dominating factor for the long-distance relocation impacts as it is for the short distance relocations, where the location change from the employee's perspective affects mainly their commuting and the availability of amenities or services in the vicinity of the new location. These differences in the two types of relocations should therefore be accounted for in relocation management.

Thus, from the corporate real estate management perspective, the main findings of this paper open up the discussion for the importance of relocations and their impacts to be adequately addressed especially in relation to a short distance perspective. Hence, the focus within practice should be more on these types of relocations, as they appear to form the majority of all relocations. At the same time organizations usually conduct relocations on irregular basis, thus suggesting that in-depth relocation knowledge is perhaps not always withheld by every organization.

5 Discussion

Since a part of the previous relocation related research has focused on making a distinction between short and long-distance relocations, this paper was motivated by an interest to better understand the role of long-distance relocations i.e. what is their share of the total amount of relocations. Long-distance relocations appear to be rare: the findings of this study indicate that the vast majority of within country HQ relocations in Finland are short distance relocations: two thirds of all relocations had a distance of 10 kilometres or less and the median distance was only 4.7 kilometres. When companies of five or more employees were analysed, three quarters of the relocations were less than 10 kilometres by distance (and the median 3.3 kilometres). In terms of differences in size (both by headcount and turnover) the opposing ends of the spectrum, the smallest companies on one hand and the largest on the other, appeared to relocate the longer distances. As an international comparison, e.g. Nunn (1980 in Mariotti, 2005) found out in a study of UK relocations that 70% of them were less than 12 miles (*ca.* 19.3 kilometres) in distance and these consisted in the majority of small firms. A more recent study from the Netherlands revealed that half of the relocated firms moved a maximum of 1.5 kilometres and three quarters were relocations of less than 3.5 kilometres by distance (Hoogstra, 2005 in Pellenburg, 2005). The findings of this paper appear to be somewhere in between the identified relocation distances in the Netherlands and in the UK.

Furthermore, most of the relocations (*ca.* 60.6 percent) are conducted within municipalities, not between municipalities. For instance, a study of Dutch companies (Knoben, 2011) revealed that *ca.* 52 percent of relocated companies had limited their relocation search scope to within the same municipality, which is at the same level as the findings of this paper. On the other hand, another Dutch study identified that a majority, over 90 percent, (Pellenburg and Kemper, 1999) of relocations was local or regional (i.e. of short-distance). Relocation activity either within and between municipalities is of importance from a few reasons. Firstly, there are taxation reasons for municipalities to try to host companies within their region; e.g. the corporate taxation is based on the location of the HQ of a company. On the other hand, also some subsidies could be offered in order to attract companies to relocate into a specific municipality. Secondly, employment considerations are of interest to the municipalities in order to remain attractive and viable in the eyes of potential and current inhabitants. Similarly, in (especially locally operating) property owners' perspective attracting companies to remain within the municipality is of interest.

In addition to the relocation distance, this paper addressed the relocation frequency of companies' HQ: *ca.* 30 percent of all limited liability companies had relocated (at least once) during the 5 and half years' time period and *ca.* 6 percent (at least once) during the last year of the dataset. In other words, the results suggest that companies do not appear to relocate on a regular basis, something that is supported by the findings of e.g. Rothe *et al.* (2015). As an international comparison, in the Netherlands, the annual relocation frequency has been identified to be *ca.* 6–8% (Pellenburg, 2005; Pellenburg and Kemper,

1999), and for HQs *ca.* 5% (Strauss-Kahn and Vives, 2009). With regards to the size of the company and the frequency, smaller (both in terms of headcount and turnover) companies appeared to some extent relocate more frequently. This different behavior of small and large companies has been identified in the existing research literature on relocation; for instance, Greenhalgh (2008) concluded that the decision-making and processes differ between small and large companies and Brouwer *et al.*, (2004) suggested that the tendency to relocate decreases with older and larger organizations. The remarks of this paper in this respect are in line with the past studies, although Strauss-Kahn and Vives (2009) found that larger HQ's would relocate more frequently.

Since the impacts of relocation can derive from relocation management, location, building or workplace change (Christersson and Rothe, 2012), perhaps the most interesting reflection of this paper's findings from the Corporate Real Estate perspective is that it highlights the importance of relocation management and workplace change as opposed to the influence of the relocation distance and change of location which are more impactful factors in long-distance relocations. Hence, as the majority of the within country relocations analyzed here are short distance, whilst at the same time there are examples of short distance relocations being failures (e.g. Greenhalgh, 2008: p. 120), one could ask the question: is it often more about *how* the relocation is done rather than *where-to* or *how far* it is done?

As one has to follow the utmost caution in making statistical generalizations over the findings of the descriptive research that this study represents, the findings do support the view that short distance relocations are dominant. The reliability of the findings is considered moderate, as the aim of the study was not to analyze any statistical correlations or causalities but merely to develop an understanding of the role of long and short distance relocations. The validity of the data can also be considered to be moderate, as the initial dataset was reduced and thus it does not represent the total relocation sample during the time period.

6 Conclusions

This paper accentuates that short distance relocations are the most common relocation type. Furthermore, volume-wise most of the relocations are conducted within municipalities, not between municipalities. These two main observations suggest that the analyzed companies tend to relocate in close proximity of their existing locations. Thirdly, the paper briefly addresses the frequency of relocation concluding that organizations do not conduct HQ relocations on constant basis. Further, some differences of smaller and larger companies' relocation behavior were evidenced. The findings of the study provide an overall understanding of the distance as well as frequency of the relocation phenomenon within the private sector in Finland.

From the corporate real estate management perspective, the main findings of this paper open up the discussion for the importance of other aspects of relocation impacts in addition to the mere institutional location-selection focus, that many of the past relocation related studies have adopted. Further, based on the findings of this paper, one could hypothesize that there exists certain drivers and motivations

for organization to relocate within a close proximity of the existing location; e.g. aiming to retain employees, maintaining the proximity to external stakeholders and benefiting from the same geographical area could all be possible reasons for companies to decide to relocate within the same area.

Corporate real estate managers' focus should be more on the short distance relocations as these types of relocations appear to form the majority of all relocations, and while at the same time organization often do not conduct relocations regularly, thus suggesting that in-depth relocation knowledge is perhaps not always withheld by every organization. Therefore, the mere quest for the new optimal location itself is by no means sufficient *per se*: it should be acknowledged that understanding the relocation impacts is also of importance, indeed.

The limitations of this study arise mainly from the shortcomings of the data in terms of generalizability, validity and the depth of conducted analysis. As the dataset only captures the HQ address data of the enterprises, a certain body of relocations is excluded: multi-sited enterprises can conduct relocations and consolidations of other-than-HQ sites, which thus are not included in the analysis presented in this paper. Further, this study covers only the relocations of limited liability companies and therefore the relocation behavior of other juridical forms of companies is not addressed. Finally, due to the limitations of the obtained dataset, it only included the details of the last address change; hence, the cases of multiple relocations during the time period could not be captured. In addition, as the dataset used in this study is some years old at the time of study, the relocation behavior of the companies could have evolved since. Despite these limitations, the findings do give overall indications of the scale and nature of the Finnish corporate HQ within-country relocations.

In the future, the focus in corporate real estate and relocation related research could be directed to cover in more detail the impacts of short distance relocations in addition to long distance relocations. Further, as this study uses mainly qualitative and descriptive analyses, the dataset could be analyzed also by means of quantitative analysis in order to identify possible correlations between the relocation distances and e.g. company size, headcount and field of business, which could possibly provide more detailed knowledge on the possible differences in relocation behavior and tendencies of organizations. Furthermore, using a more recent dataset would allow for a comparison over time to investigate whether the relocation behavior changed over time.

Acknowledgments. *The authors owe their sincere gratitude to Lauri Pulkka and Peggie Rothe who greatly contributed to the initial data analysis of this paper.*

References

Brouwer, A.E., Mariotti, I. and van Ommeren, J.N. (2004), "The firm relocation decision: An empirical investigation", *The Annals of Regional Science*, 38(2), pp. 335–347. <https://doi.org/10.1007/s00168-004-0198-5>.

Brown, Z., Cole, R., Robinson, J. and Dowlatabadi, H. (2010), "Evaluating user experience in green buildings in relation to workplace culture and context", *Facilities*, 28(3/4), pp. 225–238. <https://doi.org/10.1108/02632771011023168>.

Christersson, M. and Rothe, P. (2012), "Impacts of organizational relocation – a conceptual framework", *Journal of Corporate Real Estate*, 14(4), pp. 226–243. <https://doi.org/10.1108/JCRE-12-2012-0030>.

Dettwiler, P. (2008), "Modelling the relationship between business cycles and office location: The growth firms", *Facilities*, 26(3), pp. 157–172. <https://doi.org/10.1108/02632770810849490>.

Eby, L. T., Russell, J. E. A. (2000), "Predictors of Employee Willingness to Relocate for the Firm", *Journal of Vocational Behaviour*, 57, pp. 42–41. <https://doi.org/10.1006/jvbe.1999.1724>.

European Commission (2005), "The new SME definition – User guide and model declaration", available at: http://ec.europa.eu/enterprise/policies/sme/files/sme_definition/sme_user_guide_en.pdf (accessed 17th September 2014), ISBN: 92-894-7909-4.

Feldman, D. C., Bolino, M. C. (1998), "Moving on out: When are employees willing to follow their organization during corporate relocation?", *Journal of Organizational Behaviour*, 19, pp. 275–288. [https://doi.org/10.1002/\(SICI\)1099-1379\(199805\)19:3<275::AID-JOB840>3.0.CO;2-S](https://doi.org/10.1002/(SICI)1099-1379(199805)19:3<275::AID-JOB840>3.0.CO;2-S).

Greenhalgh, P. (2008), "An examination of business occupier relocation decision making: Distinguishing small and large firm behaviour", *Journal of Property Research*, 25(2), pp. 107–126. <https://doi.org/10.1080/09599910802605368>.

Gregory, R., Lombard J. R., Seifert, B. (2005), "Impact of Headquarters Relocation on the operating Performance of the Firm", *Economic Development Quarterly*, 19(3), pp. 260–270. <https://doi.org/10.1177/0891242405276360>.

Guimarães, P., Rolfe, R. J., Woodward, D.P. (1998) "Regional Incentives and Industrial Location in Puerto Rico," *International Regional Science Review*, 21(2), pp. 119 –138. <https://doi.org/10.1177/016001769802100202>.

Hanssen, J. (1995), "Transportation impacts of office relocation – A case study from Oslo", *Journal of Transport Geography*, 3(4), pp. 247–256. [https://doi.org/10.1016/0966-6923\(95\)00024-0](https://doi.org/10.1016/0966-6923(95)00024-0).

Hu, W., Cox, L.J., Wright, J., Harris, T.R. (2008), "Understanding Firms' Relocation and Expansion Decisions Using Self-Reported Factor Importance Rating", *The Review of Regional Studies*, 38(1), pp. 67–88.

Johnson, R. B. and Onwuegbuzie, A. J. (2004), "Mixed Methods Research: A Research Paradigm Whose Time Has Come", *Educational Researcher*, 33(7), pp. 14–26. <https://doi.org/10.3102/0013189X033007014>.

Knoben, J. (2011), "The Geographic Distance of Relocation Search: An Extended Resource-Based Perspective", *Economic Geography*, 87, pp. 371–392. <https://doi.org/10.1111/j.1944-8287.2011.01123.x>.

Lawson, M. B. and Angle, H. L. (1998), "Upon reflection", *Group & Organization Management*, 23(3), 289–317. <https://doi.org/10.1177/1059601198233006>.

- Mariotti, I. (2005), “Firm relocation and regional policy”, *Netherlands Geographical Studies* 331, ISSN 0169-4839
- Morgan, A. and Anthony, S. (2008), “Creating a high-performance workplace: a review of issues and opportunities”, *Journal of Corporate Real Estate*, 10(1), pp. 27–39. <https://doi.org/10.1108/14630010810881649>
- O’Mara, M.A. (1999), “Strategic Drivers of Location Decisions for Information-Age Companies”, *Journal of Real Estate Research*, 17(3), p. 365.
- Official Statistics of Finland (OSF) (2014): Finnish enterprises [e-publication]. Helsinki: Statistics Finland, available at: http://tilastokeskus.fi/til/syr/index_en.html (accessed 5th May 2014).
- Pellenbarg, P.H and Kemper, N.J. (1999), “Industrial mobility in the Netherlands – Patterns, causes, and impacts for spatial policy”, SOM Research Report 99D34, University of Groningen, Groningen, available at: <http://som.eldoc.ub.rug.nl/FILES/reports/1995-1999/themeD/1999/99D34/99D34.pdf> (accessed 27th November 2014).
- Pellenbarg, P.H, van Wissen, L.J.G. and van Dijk, J. (2002), “Firm relocation: state of the art and research prospects”. SOM Research Report 02D31, Groningen: University of Groningen.
- Pellenbarg, P.H (2005), “Firm migration in the Netherlands”, Paper for the 45th ERSA congress, August 2005, Amsterdam, available at: http://www.ekf.vsb.cz/export/sites/ekf/projekty/cs/weby/esf-0116/databaze-prispevku/clanky_ERSA__2005/435.pdf (accessed 28th November 2014).
- Piotti, G. (2009), “Cost Reduction through Relocation, or the Construction of Myths in Discourse”, *Competition and Change*, 13(3), pp. 305–326. <https://doi.org/10.1179/102452909X451396>.
- Rabianski, J.S. (2007), “Employee quality of life in corporate location decisions”, *Journal of Corporate Real Estate*, 9(1), pp. 50–64. <https://doi.org/10.1108/14630010710742482>.
- Rothe, P., Heywood, C., Christersson, M., Sarasoja, A-L (2015), “Office relocation management in Finland – challenges and service opportunities”, *Property Management*, 33(4), pp. 348 –366. <https://doi.org/10.1108/PM-04-2014-0019>.
- Spee, R., Douw, W. (2004), “Cost-reduction location strategies”, *Journal of Corporate Real Estate*, 6(1), pp. 30–38. <https://doi.org/10.1108/14630010410812225>.
- Smith, R. (2016), “Did the Community Renewal Tax Incentives Pirate Businesses From Other Places?”, *Economic Development Quarterly*, 30(1), pp. 46–61. <https://doi.org/10.1177/0891242415620008>.
- Strauss-Kahn, V. and Vives, X. (2009), “Why and where do headquarters move?”, *Regional Science and Urban Economics*, 39, pp. 168–186. <https://doi.org/10.1016/j.regsciurbeco.2008.07.001>.
- Stroh, L. K. (1999), “Does relocation still benefit corporations and employees? An overview of the literature”, *Human Resource Management Review*, 9(3), pp. 279–308. [https://doi.org/10.1016/S1053-4822\(99\)00022-4](https://doi.org/10.1016/S1053-4822(99)00022-4).
- Titman, S., and Twite, G. (2013), “Urban density, law and the duration of real estate leases”, *Journal of Urban Economics*, 74, pp. 99–112. <https://doi.org/10.1016/j.jue.2012.10.003>.