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A.E. Brouwer
I. Mariotti
J.N. van Ommeren

vrije Universiteit amsterdam

The firm relocation decision: an empirical investigation¹

A.E. Brouwer*, I. Mariotti*, J.N. van Ommeren^o

a.e.brouwer@frw.rug.nl, i.mariotti@frw.rug.nl, jommeren@econ.vu.nl

^{*} Department of Spatial Sciences, University of Groningen, Groningen, the Netherlands

^o Department of Economics, Free University, Amsterdam, The Netherlands

Abstract: In the current paper, the determinants of firm relocation behaviour in twenty-one countries (²) during the period 1997-1999 are analyzed. We demonstrate that internal growth factors measured by increases, but also decreases, in the workforce induce firm relocation. Firms that serve larger markets relocate more often. It is also demonstrated that relocations are often a result of acquisitions, mergers and take-overs, which are a consequence of external growth.

1. Introduction

The geographical movements of firms, together with firm formation and expansion, decline and closure, influence the geographical distribution of economic activity at any point of time. The analysis of firm relocation aims to inform and contribute to regional policy guidance and has wider implications in regional planning policy. Studies published since the 1970s on firm relocation, especially in the United Kingdom, but also in the Netherlands, Germany, France and Italy, focus on the effect of the firm's age, size and market.³ This paper will focus on these factors, but goes beyond the current literature and focuses on other factors as well. In particular, it is demonstrated that acquisition and take-over are the main reasons for firm relocation.

Three main categories of factors influencing firm migration can be found in the literature: (i) internal factors (e.g. size); (ii) external factors (e.g. market size) and (iii) location factors (e.g. region) (Lloyd and Dicken, 1992; Van Dijk and Pellenburg, 2000). In the current paper, the effects of these factors on the decision to relocate are investigated, employing data on firms' relocation behaviour in twenty-one countries, mainly European countries, between 1997 and 1999.

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¹ The study was conducted as a common research project, but can attributed as follows: A.E.Brouwer is the author of sections: 1 and 5; I. Mariotti the author of sections 2 and 3; J.N. Van Ommeren the author of sections 4 and 6. The authors would like to thank Jouke van Dijk, Leo Van Wissen and Piet Pellenburg of the University of Groningen, the Netherlands, for their helpful suggestions and comments as well as the two referees for their useful comments.

² The 21 countries have been chosen based on data availability.

³ See Pellenburg et al. (2002) for a recent literary review of firm migration studies.

The paper is organized as follows. In the next section, a definition of firm relocation is provided and the motives driving relocation are presented. The third section formulates hypotheses of determinants of firm relocation. Section four introduces the data employed for the analysis (the 1999 Cranet Survey). In section five, the empirical results of the analysis are presented and the hypotheses are tested. In section six, the conclusions for the relationships between the factors and the decision to relocate are discussed and guidelines for future research are presented.

2. Theoretical background

Most studies about firm relocation distinguish between two forms: (1) complete relocation, defined as the movement of an establishment from one location to another; and (2) partial relocation, whereby a new local unit, linked with a pre-existing unit, which is not eliminated, is set up (see among others, Schmenner, 1980). The first is a strategy mainly adopted by single site firms and tends to be executed locally, because firms prefer to find a new location that is near their existing site to keep their workforce and suppliers (Kemper and Pellenbarg, 1997). The second is contemplated by larger and/or multi-plant firms, which aim at differentiating their production in space taking advantage of the most favourable locations. Relocation does not necessarily concern the whole production process: it can only affect a segment of the production or it can arise through different types of agreements between partner firms, as joint-ventures or through subcontracting (Mucchielli and Saucier, 1997). In this paper the word 'relocation' is used to indicate both relocation forms.

According to the literature, the main forces driving firm relocation are expansion and the need for more suitable premises.⁴ A second reason is cost saving. Firms aim at taking advantage of favourable cost conditions in other locations i.e. due to wage differentials, scale economies, energy prices, local incentives or other factors. Access to raw material and energy sources and market-oriented strategies are other prevailing motivations. Finally, firms are 'pushed' to move by government policy through subsidies⁵.

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⁴ See among others Klaassen and Molle (1983), Pellenbarg (1985), Lloyd and Dicken (1992), Hayter (1997), Pellenbarg et al. (2002).

⁵ This strategy has been adopted in most industrialised countries since the 1950s, mainly to reduce interregional inequalities in income and employment opportunities.

Location theory focuses on the optimal location choice that is determined by the attractivity of a site for firm location (*pull* factors). In contrast, *relocation theory* also takes into account the first step, the *push* out of the present location. This section analyses the relocation process on the basis of *neo-classical*, *behavioural* and *institutional* theories⁶ (Machlup, 1976; Hayter, 1997).

The *neo-classical location* theory focuses on the premise of the rationale firm that maximises profit in choosing the optimal location.⁷ It is based on explanatory models where 'location' factors (e.g. transportation cost, labour cost and market size) are the main forces driving firm relocation. A firm moves from the current location to a new one when the first is no longer inside the spatial margins to profitability (*push* factors) and the second might be a profitable one (*pull factor*). Relocation costs are generally disregarded in the simple neo-classical framework because the emphasis is on full information and rational behaviour. Thus, relocation appears to be a costless exercise (McCann, 2001).

The *behavioural location* theory interprets firms as agents that have limited information, are boundedly rational, and settle for sub-optimal outcomes rather than maximum profits.⁸ It explores 'internal' factors (e.g. age and size) that are important in the decision-making process of the firm, and that lead to a particular location.⁹ The behavioural theory seeks to understand actual behaviour of entrepreneurs and focuses on the decision making process, that may led to relocation and takes also path-dependency and relocation costs into account.¹⁰ Relocation costs may be very significant, comprising the cost of the real-estate site search and acquisition, the dismantling, moving, and reconstruction of existing facilities and the hiring and training of new labour employed (McCann, 2001). These relocation costs, along with imperfect information will mean that firms are unlikely to move. However, if they have to move, they will choose more frequently nearer places because they are more familiar or easier to imagine than distance places ('*mental maps*').

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⁶ Relocation theories are hardly applied and are often treated as a special case of location theories. As for location theories, relocation approaches can be classified into three main streams: neo-classical, behavioural and institutional approaches.

⁷ See, among the others, Von Thunen (1826), Weber (1929), Losch (1954) and Moses (1958). Mainstream economists have shown a renewed interest on the 'neo-classical' approach and labelled it 'New economic geography' (see, among others, Krugman, 1995 and Fujita et al., 1999).

⁸ See, among others, Simon (1955); Cyert and March (1963); Pred (1967), Townroe (1972).

⁹ Behavioural location theories regard "*the location of factories as a decision-making process*" (Hayter, 1997).

Neo-classical and behavioural theories have been subject to considerable criticism, because they consider the firm as an active decision making agent in a static environment. The *institutional location* theory starts from the assumption that economic activity is socially and institutionally situated: it is shaped by society's cultural institutions and value systems rather than by firm behaviour (Thrift and Olds, 1996).¹¹ Economic activities are 'embedded' in ongoing social institutions or networks (Granovetter, 1985; 1993; Storper and Salais, 1997). Firm location behaviour is the result of firm's investment strategies. It is the outcome of a firm's negotiation with suppliers, government, labour unions and other institutions about prices, wages, taxes, subsidies, infrastructure, and other key factors in the production process of the firm. The institutional theory is more suitable for large firms that have more negotiating power and are able to exert a substantial influence upon the environment (Pellenbarg, et al, 2002). In the institutional theory, 'external' or 'institutional' factors (e.g. spatial adjustments such as expansion, merger, acquisition and take-over, but also trust, reciprocity, co-operation and convention) play a key role at all levels in the economy, from the structure and functions of the firm, through the operation of markets, to the form of state intervention (see, among others, Hayter, 1996 and Martin, 2000).

The neo-classical theory defines the 'optimal' behaviour of the firm in economic terms, under the assumptions of rationality and perfect information. It may be considered particularly useful to analyse relocation behaviour of small firms¹². Nowadays, most firms are complex organisations, consisting of many individuals and groups who may influence decisions, as managers, shareholders or workers' representatives (Wood, 1987). Relocation studies are therefore primarily based on behavioural principles, such as Townroe (1972), Keeble (1978) and Pellenbarg (1985). The current study is based on micro data and focuses on large firms.

3. Hypotheses of relocation decision

In this section, hypotheses related to the firm's relocation decision are proposed on the basis of the theoretical firm relocation literature reviewed in the previous section.

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¹⁰ It relies on questionnaires and detailed empirical work rather than on an explanatory model.

¹¹ See the '*geography of enterprises*' by Krumme, 1969 and the '*industrial district literature*' by Pike et al. 1990; Brusco and Paba, 1997; Becattini, 1990, 2002; Amin, 2000.

The hypotheses are derived from the three theories mentioned above and refer to specific observed variables influencing firm relocation which can be grouped into three categories: internal, external and location factors (Table 1). These variables have been adopted in the empirical section.

Table 1: Location theories and factors influencing firm relocation

Theoretical Framework	Key Concepts / (Factors)	Variables
Neoclassical theory	Market situation (Location factors)	- Market size - Country of location
Behavioural theory	Information/Abilities (Internal factors)	- Firm size - Firms age
Institutional theory	Networks (External factors)	- Firm growth (positive and negative; merger; acquisition; take-over)

According to the behavioural theory, firm size is one of the key factors influencing firm relocation, because moving costs and the organizational problems associated with relocation are considerable for large firms¹³ (Van Dijk and Pellenbarg, 2000). Further, smaller firms are more willing to move because (1) they have less demanding premise requirements and less capital investment to write off; (2) small firms make a series of small locational adjustments and select the first minimum requirement site which they find, while large firms make infrequent large locational changes; (3) small firms are much more affected by redevelopment; (4) large firms have more flexibility in accommodating expansion (Mason, 1980). So, the first hypothesis is:

Hypothesis 1: Firm's mobility decreases with the size of the firm.

The institutional location theory points out that older firms are more embedded in the spatial environment; they are embedded in networks that are established through long term trust-based relations which are likely to be facilitated by spatial proximity (see among others, Granovetter, 1973; Putnam, 1993). Consequently, the second hypothesis can be formulated as follows:

Hypothesis 2: Firm's mobility decreases with the age of the firm

¹² When the models of the neo-classical location theory were published, firms were typically much smaller.

¹³ It is important to distinguish between the size of the firm and the number of sites (plants) the firm owns. While large single-site firms are less willing to move, large multiplant firms show an higher propensity to move because they have more plants that can be relocated (Pennings and Sleuwaegen, 2000). The focus is on large firms keeping the number of sites constant.

Neoclassical theory emphasizes market location as key factor in the relocation decisions. Firms that are more export oriented and exhibit significantly wider spatial patterns of customer linkage are more mobile (Keeble, 1978). A larger market has a positive impact on the relocation decision because when a firm serves a larger market, part of its activity can be relocated, by opening new plants, without incurring sunk costs which are a barrier to relocation (Caves and Porter, 1976). It follows:

Hypothesis 3: Firms that serve larger markets are more mobile

The spatial adjustment process to firm growth in relation to the external environment is one of the key explanatory factors of firm relocation in the institutional theory.¹⁴ Firms that experience growth (either positive or negative) need to find new premises.¹⁵ Growth can be divided into 'internal' and 'external' growth. The former refers to on-site expansion, branching and complete relocation and the latter to acquisition, merger and take-over. In particular, acquisition and merger are alternative to new site location decisions because they provide for faster, large-scale and less-risky growth (Hayter, 1997). As several studies point out, the number of firms with changing ownership relations is increasing, and changes such as merger, acquisition and takeover are often accompanied by firms relocations (Van Vilsteren and Wever, 1999). Nevertheless, 'external' growth has not received much attention in 'firm demography' literature that mainly deals with changes in the number of firms and/or jobs (birth, death and relocation). So, the last hypothesis reads as follows:

Hypothesis 4: Growth (positive or negative), mergers, acquisitions and takeovers induce relocation.

In this section the variables adopted in the empirical analysis are linked to the hypotheses and each hypothesis is supported and explained by a specific location approach. Nevertheless, it is important to stress that the variables can play a role in all three location theories but with different results.

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¹⁴ This reasoning fits also in the neo-classical and behavioural frameworks. Nevertheless, it has not received much attention in neo-classical location theory, with its focus on location factors.

¹⁵ Presumably, growth has a stronger effect on firm's organizational structure than decline (negative growth).

4. Data and descriptives

The data set used for the analysis is the 1999 Cranet Survey.¹⁶ It is a representative survey of Human Resource Management policies and practices, regularly carried out by 34 universities and business schools since 1990. The Cranet survey is based on standardised questionnaires sent to private and public firms¹⁷ in different countries. The questionnaire is addressed to the most senior HR/personnel specialist. Firms with more than 200 employees are analysed here.¹⁸ In total the dataset includes 5568 observations¹⁹. In the 1999 survey, respondents were asked whether their firms have relocated in the last three years (1997-1999).

Table 2: Firm relocation within three years (1997-1999) by firm size

Size	Relocation propensity (%)	Number of observations
200-500	9	2477
5001-1000	8	1349
1001-1500	8	525
1501-more	7	1217
TOTAL	8	5568

Source: elaboration on 1999 Cranet Survey

In this section we provide a relationship between the relocation propensity and a range of variables by means of simple tables. We emphasise here that the relationships do *not* control for a range of explanatory variables, which we will show in the next section to be relevant. The data indicate that relocation is not common: 8% of the firms in the sample have relocated within a period of three years, so the annual moving rate equals 2.7 %. The propensity to relocate is lower than reported in other studies because the survey sample covers large firms (more than 200 employees) which change location less. Table 2 presents the propensity of relocation by firm size (number of employees). The data suggest that relocation propensity does not vary

¹⁶ Cranet stands for 'the Cranfield Network on European Human Resource Management'. The Cranet Survey is co-ordinated by the Centre for European Human Resource Management at Cranfield School of Management.

¹⁷ Firm units are not included in the sample of analysis; it is supposed that the relocation decision is taken by the firm.

¹⁸ The use of micro data presents the advantage to explore individual characteristics of firms. The focus is on large firms (with more than 200 employees) which in most industrialised countries cover about 50% of employment. By choosing a random sample, determinants of relocation of large firms cannot be investigated.

¹⁹ The country-specific response rates are between 16.6-22.5%. The willingness of firms to respond is higher in Northern Europe than in Southern European countries.

significantly according to the number of employees, nevertheless firms with less than 500 employees are more mobile (9%).

Table 3: Firm relocation by age cohorts of firms in the period 1997-1999

Age	Relocation propensity (%)	Number of observations
Younger than 30 years	9	2603
30 to 80 years	8	1787
Older than 80	7	1178

Source: elaboration on 1999 Cranet Survey

Firms younger than 30 years have a somewhat higher relocation propensity (9%) but the difference with older firms is small (Table 3). Firms that serve international as well as local markets, are more mobile than firms serving national market (Table 4).

Table 4: Firm relocation within three years (1997-1999) by market size

Market	Relocation propensity (%)	Number of observations
International	9	2774
Local	9	1406
National	6	1388

Source: elaboration on 1999 Cranet Survey

As Table 5 shows, firms that experienced a certain type of change such as: acquisition, merger, take-over and increase in the number of employees are more willing to relocate. On the other hand, firms facing a decrease in the number of employees are less mobile.

Table 5: Firm relocation within three years (1997-1999) by firm changes

Firm changes	Relocation Propensity (%)	Number of observations
Employees increase (5%)	10	2153
Employees decrease (5%)	8	1763
Acquisition*	13	1569
Take-over **	11	501
Merger	12	661

* acquisition of another firm; ** take-over by another firm.

Source: elaboration on 1999 Cranet Survey

5. The empirical model and the results

The decision to relocate activities is modeled by means of a logit model relating the probability to relocate in the period 1997-1999 to a set of explanatory variables x_i . The probability of relocation is $F(x_i' \beta)$ where $F(\cdot) = \exp(\cdot) / [1 + \exp(\cdot)]$, and β is the

vector of coefficients (Greene, 1997). The explanatory variables are all re-grouped in dummy-categories and are labeled as follows: AGE (age in years), SIZE (number of employees), SECTOR (the industrial sector of the firm), MARKET (size of market), REGION (the region where the firm is located) and TYPE (type of organization).²⁰ Furthermore, we include variables that measure changes in the three years before the moment of the survey: INCREASE (more than 5% increase in number of employees), DECREASE (more than 5% decrease in the number of employees), ACQUISITION (firm has been involved in acquisition), TAKE OVER (firm has been taken over), MERGER (firm has been involved in merger).

Table 6 presents the estimates based on the logit model.²¹ In literature when the relationship size and relocation is discussed, it is found that smaller firms, e.g. firms with 1-100 employees are more willing to relocate, for the reasons as stated in section 3. Although firms with less than 200 employees are not included in this analysis, the results indicate that even with a larger size in general, the number of employees does matter in the decisions to relocate. Firms with more than 1500 employees are most immobile, probably due to high costs in site relocation and high costs in engaging large numbers of new employees. Thus, hypothesis 1 can be accepted because the variable SIZE shows that larger firms are less willing to relocate.

The estimated parameters for AGE show that older firms have a somewhat lower probability to relocate. This effect is only significant at the 10% level. Firms older than 80 years have the lowest probability of relocation. One would expect that for younger firms, in the age-band younger than 30 years old, there would be differences in relocation behaviour within this younger age-band. This has been controlled in earlier versions of the analysis, and in contrast with literature, no age-

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²⁰ Most of the variables have few observations that are either missing or not included in the categories presented here. These observations are included in the reference group. In a previous version of the paper, missing observations were explicitly modeled as dummy variables. The results are almost identical.

²¹ We have also analysed the relocation behaviour of independent single-sites. The main reason for this analysis is to identify complete relocations. The term 'relocation' in the Cranet Survey can be interpreted as either complete or partial relocation (opening a branch plant). In case of 'single-site' firms, that have not been involved in a merger, acquisition or take over, relocation must imply a complete relocation. From our sample, we selected these firms, reducing the number of observation to 219, of which only 6 moved. Unfortunately, the number of observations is too low for a multivariate analysis. Furthermore, to verify whether the results of overall 1999 analysis were possibly period specific, the same analysis was applied to similar data of the Cranet Survey of 1995. The results were similar.

specific differences within the age group younger than 30 years were found. The lower probability to relocate in the estimated parameters can be due to two patterns: (i) relocation is questioned over the last three years; (ii) only firms with more than 200 employees were taken into consideration. We expected older firms to be more embedded and consequently relocate less, the evidence is consistent with this, however moderate. Thus, the model tends to accept Hypothesis 2.

The parameters for the variable MARKET were hypothesized to give an indication that firms with a 'larger' market have a higher chance of relocating. In line with the hypothesis, firms that serve a local market have lower propensity to relocate than other firms, however this is only significant at the 10% level. Consequently, Hypothesis 3 can be accepted. The probability to relocate for firms that operate on a national market does not differ significantly from firms that serve international markets. Especially with in mind that branch-plant / partial relocation are included in this research, a higher chance of firms to open a branch-plant while serving a larger market is to be expected.

The variables INCREASE and DECREASE provide indications of positive or negative growth of the firm. The results are as hypothesized. Those firms that have experienced an increase or a decrease have a higher probability of relocation. Interestingly, the effect of increase and decrease are of similar magnitude. This implies that firms are equally sensitive to increases as to decreases in the workforce. This result suggests that firms move if they experience internal growth; the number of employees differs positively or negatively from the 'optimal' number of employees. These results are in line with literature; spatial adjustments in premises are most needed with positive or negative growth, which can result in relocating the entire firm or certain activities.

As for external growth, firms that recently have been involved in an acquisition (ACQUISITION) have a much higher probability of relocating. Firms that have been involved in a merger (MERGER) are also more mobile. Firms that were taken over (TAKE-OVER) have a slightly higher probability of relocating, but the latter result is only significant at the 10 % level. In literature, as stated in section 3, acquisition, merger and take-over can be alternatives to relocation, but as found in this analysis also trigger relocation. Growing firms can differentiate their production over space, taking advantage of more favorable locations. Both internal (increase or decrease in the number of employees) and external (acquisition, merger and take

over) growth of the firm have an influence on relocation, thus Hypothesis 4 is accepted

Finally, the results for the control variables will be discussed. The results for the variable SECTOR show that firms in the quaternary service sector have the highest probability of moving, whereas other sectors have equal probabilities of moving. Plausibly, quaternary sector firms are more mobile than others because they are less exposed to incur sunk costs in the relocation process.

The variable REGION presents four groups. Three of them represent the three main regions in Europe (respectively North Europe, West Europe and South Europe), the last group includes non-European countries. The estimates show that firms located in North Europe have the highest probability of relocating. Firms in South Europe are the least mobile. These results are new and lead to the question why these differences occur. It might be possible that country specific factors such as e.g. legislation, size of the country, population density, GDP might give further insight in these relocation differences per region. To answer this question is however beyond the objectives of the current paper.

The variable TYPE shows that single site firms have a significantly lower chance of relocating than other firms because they contain fewer sites. The international corporate headquarter has a significant higher probability of moving than the reference group. The other types of firms are equally mobile compared to the firms in the reference group. However, again the issue of total relocation or partial relocation plays a part in this. Considering the higher probability of international corporate headquarters to relocate indicates that partial relocation can be the cause of the high mobility chance for this group. Since these firms are already working with a multi plant operation, opening another branch plant in the last three years is not unexpected.

Table 6: Empirical results

All observations

	B	t-value ^a
Constant	-2.5170	
SIZE (in number of employees)		
200-500		
501-1000	-.0591	0.48
1001-1500	-.0942	0.53
1501 or larger	-.3355	2.41 ***
AGE		
Younger than 30 years		
30 - 80 years old	-.1411	1.21
Older than 80 years	-.2510	1.84 *
SECTOR		
Manufacturing		
Public services	-.0663	0.38
Tertiary services	.0701	0.46
Quartary services	.2868	1.90 *
MARKET (for products and services)		
International		
Local	-.2808	1.86 *
National	.0751	0.61
INCREASE (1)	.4340	3.27 ***
DECREASE (2)	.4017	2.89 ***
ACQUISITION	.6109	5.60 ***
TAKE OVER	.2227	1.42 *
MERGER	.4032	2.98 ***
REGION (3)		
North Europe		
West Europe	-.2876	2.25 *
South Europe	-.9510	5.22 ***
Outside Europe	-.1929	1.27
TYPE (Type of organization)		
Subsidiary of international		
Subsidiary of national	-.3635	0.54
Corporate HQ international	.3850	2.30 ***
Corporate HQ national	.0617	0.35
Independent single site	-.6182	2.58 ***
Independent more than one site	.0072	0.05
Number of observations	5568	
P. reference group	0.09	
^a : * = significant at 10 % ** = significant at 5 % *** = significant at 1 %		

(1) and (2): change in the number of employees (more than 5%)

(3): the 21 countries in the different regions are the following: North Europe: Denmark, Sweden, Norway and Finland. West Europe: United Kingdom, the Netherlands, Ireland, Germany, Austria, Belgium, Poland and Switzerland. South Europe: Spain, Italy, France, Czech Republic, Hungary and Greece. Outside Europe: Australia, New Zealand, Japan and the USA.

6. Conclusions

This paper investigates the effect of firms' factors (internal, external and location) on the probability to relocate, employing data on firm relocation behaviour in twenty-one countries (1999 Cranet Survey). Our focus is on large firms with more than 200 employees. The analysis shows that 8% of the firms relocated in the period 1997-1999, so the annual relocation rate is 2.7%.

In line with the behavioural theory, we find that relocation propensities decrease with the firm's size and maybe also with the age of the firm. This result is plausible because larger firms have to incur higher sunk costs whereas older firms are more embedded in their spatial environment. As the institutional theory stresses and the firm demography literature emphasises, firms that experience 'external' factors such as changes in the number of employees, either positive or negative (INCREASE and DECREASE), are more willing to relocate. One of the other novel findings is that firms that have been involved in a merger or an acquisition activity are much more likely to relocate than other firms. This implies that 'external growth' factors are particularly important to explain the relocation behaviour of large firms. Finally, location factors such as market size and region of location that can be explained by the neoclassical theory, play a role in the decision to relocate. Firms that serve larger markets are more likely to relocate and firms settled in North Europe have higher chances of relocation, than firms located in South Europe.

As the results show, the relocation factors can be linked to the neoclassical, behavioural and institutional theories described in section 2. However, questions such as: 'Which is the role played by the institutional context in firm relocation decision?'; 'Is the location of the firm a 'neoclassical' pattern or it can be considered an 'institutional' pattern?' have not been answered yet. Qualitative research, based on questionnaire and interviews with the actors involved in the relocation process, should be applied to find additional information on the location factors (e.g. more specific geographical data and characteristics of the premises), internal factors (e.g. turnover) and external factors (like labour market issues, government policies and general economic conditions). This exercise could be useful to identify the role played by the

'neoclassical' factors (location factors), the 'behavioural' factors (internal factors) and the 'institutional' factors (external factors) in firm relocation decision.

Another theme that needs to be investigated in more detail is the relevance of external growth factors (merger, acquisition and take-over) in the relocation decision that have been neglected by firm demography literature which focus mostly on growth of the individual firm (single-site establishments). The results of this analysis show that indeed external growth factors have a significant influence on relocation of firms, however by doing additional qualitative research more precise conclusions might be found.

Finally, future research needs to be done to explain the national differences in firms' moving propensity by focusing on the national determinants of the relocation process (for example, national legislation, size of the country, density of population, unemployment, GDP etc) and controlling for a large number of firm characteristics (for example, size of the firm).

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