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Location Behavior of Family Firms – Evidence of Poland

Abstract: The choice of the location for a company is one of the most important strategic decisions of an enterprise. In family businesses, strategic targets most commonly combine the company's development with the interests of the family. This article aims to compare the factors influencing the location decisions of family and non-family enterprises. It seems, that due to the specificity of family businesses, factors of a personal nature (associated with the person making the decision and his/her family) will have greater significance, while in non-family businesses – the factors of a cost nature. The results of the study on 251 Polish entities from the SME sector, presented in the paper, confirm that in the case of family business, when deciding on the place for their business activity, majority choses a location near the place of the owners' residence. Another significant factor is family considerations e.g. the ease of accommodating childcare with work. An increased significance of the cost factors for non-family entities was not confirmed.

Key-words: family business, location decisions, location preferences, strategic management, Poland

Introduction

The American maxim addressed to the people starting their own business says: „Do the right thing, at the right time, with the right people, at the right place, for the right

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price" [Jezak, Popczyk, Winnicka-Popczyk 2004, p. 103]. This statement shows how important of a success factor is an enterprise's location.

The characteristics of the place of a company's location determine the conditions of its functioning and influence its development and competitiveness. How the company obtains the resources of production factors and what is their quality and price depends on those characteristics. What is more, a company's location affects its values, the values of both the tangible and intangible assets. It also affects the company's viability in the network structures, its accessibility to public funds, and the possibility of using preferential fiscal solutions.

The issue of enterprise location has been undertaken in global studies in the fields of economic geography, regional development and strategic management since the 18th century [Budner 2004, p. 51]. Less often, the matter of the place of business is undertaken in the field of finances.

In location theories, enterprises are not differentiated in term of size, while the issue of the family nature of an enterprise is not undertaken at all in characterization of the general and the specific factors of industry layout. The choice of the place for business activity is one of the main strategic decisions in an enterprise, just as the choice of the place of residence for a family. Due to the fact that in a family business it is not possible to entirely separate the processes occurring in the family from those in the company, influence of the family on the choice of the place of business seems to be very important. Certainly, such influence is greater in the case of micro and small entities, where the interdependency between the enterprise and the owner's family is very strong, compared to medium and large organizations.

The purpose of this article is to compare the factors influencing the location decisions of family and non-family enterprises. The paper will present the results of empirical studies on the factors influencing location decisions of family and non-family enterprises of the SME sector in the suburban areas of the Tricity Metropolitan Area (TMA). The study was carried out in 2015 using the CATI method, in 251 entities, in 6 municipalities characterized by the highest SME location quotient. To examine the interdependencies between the variables the chi square test was used, while to measure the strength of interdependence the V-Cramera and the Φ (Fi) Yule coefficients were used.

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Characteristic of the theory of business location

In microeconomic terms, the theory of location refers to one enterprise, which is looking for the best place to conduct its business activity, taking into consideration the costs and the benefits; whilst, in macroeconomic terms, the theory of location is a part of a broadly defined spatial economy [Budner 2004, p. 50].

Assumption that production costs and company's income depend on its location is the basis of the theory of location. The first foundations of this theory were laid by A. Smith and D. Ricardo (the fathers of the classic theory of economy)¹. The A. Weber's theory of location is a basic, yet a representative theory of enterprise location. According to Weber, a point in space which provides the most favorable location is the point of minimum transport costs. This means that optimal location is determined by the lowest value of the sum of the weight ratio, the weight and distance ratio of all raw materials and semi-finished products from the enterprise, and the ratio of the final choice of the place of sale. He was the first to introduce and formulate the concept of a location quotient (LQ) and he singled out three LQs that define location of industrial plants: the transport factor, the labor factor, and the agglomeration factor [more in Budner 2004, pp. 57–60; Godlewska-Majkowska 2013, pp. 34–36].

Supporters of the second mainstream in the theory of location, apart from the spatial variability of the costs, focused their attention on the sales income. Important role in development of this mainstream was played by H. Hotelling. According to this theory, the choice of location is determined by the conditions on the sales market (the demand and the price). The price varies with location, due to the changes in market absorption and the possibilities of its expansion, however, this is associated with a change in a company's competitive position [Godlewska-Majkowska 2013, p. 36].

Due to the spatial differentiation of both the production costs and the income, a stream combining both approaches in the theory of location developed over time. A. Lösch adopted profit maximization as a criterion of optimal location² [more in Budner 2004, pp. 60–63; Majkowska-Godlewska 2013, pp. 36–37]. A location meeting this

¹ The scientists who have significantly contributed to further development of this field of science were mainly German economists: inter alia, J.H. Thünen, W. Launhardt, A. Weber, A. Predöhl, A. Lösch, Swedish economists: B. Ohlin, T. Palander, G. Myrdal and American economists: E.M. Hoover and W. Isard [Szymanska, Płazia 2014, p. 73].

² The problem of searching for optimum location, taking into account the costs and the revenues, was also investigated by D.M. Smith. Analyzing the location optima, he searched for the places bringing the highest profit. He postulated the choice of an optimal location in a place where the profit reached its maximum [Majkowska- Godlewska 2013, pp. 37–38].

criterion is one providing maximum sale at minimal production costs. According to this theory, an enterprise seeks a location as close as possible to an absorbent market on which it could sell its products.

A. Marshall was another neoclassicist who noticed the phenomenon of concentration of same-industry enterprises in a particular area resultant from externalities, that is, from the actions that impose costs on third parties or the impact of which is not fully reflected in the price market. Defining the external effects of location as well as indication of their three basic origins in the form of: access to highly-qualified labor force, access to specialized suppliers, as well as the flow of information and diffusion of knowledge, was A. Marshall's merit [Majkowska-Godlewska 2013, p. 38].

A. Predöhl, in turn, introduced the theory of production factors, thus contributed to creation of the links between the theory of economy and the theory of location. According to A. Predöhl, each point in space is characterized by a specific allocation of production factors. Since the prices of production factors vary in space, a change of location from one point to another involves substitution of different factors, depending on their relative prices. This theory was expanded by W. Isard, who added a substitutional approach to transport outlays³. Introduction of such dynamic aspects to the existing theories was Isard's achievement. To what already was recognized in the theory of production in terms of substitution, a substitutional approach to transport outlays was added. As such, a spatial dimension was included in the theory of production, while the theory of location was linked with the theory of production [Budner 2004, p. 67].

In the literature dealing with the issue of location decision-making in an enterprise, since the mid-20th century, a behavioral approach can also be encountered. One of the first critics of normative location theories was A.R. Pred. He questioned the existence of the so-called rational human – *homo economicus* – who makes decisions in accordance with the economic rules and is fully informed about the problems to be encountered and about the consequences of his/her actions and choices. The behavioral approach, in its explanation of the location process, takes into account existence of the person making the decision, whose behavior is characterized by limited rationality. The decision-maker is not capable of collecting and using a complete package of information about the market situation, the capital possibilities, or even about the access to technology. Such approach infers an assumption of the so-called

³ Transport outlay is displacement of the weight unit onto a distance unit. This means the effort or the service in regard to the factors of production, required to overcome a resistant space [Budner 2004, p. 64].

satisfactory behavior of the decision-maker, accentuating the non-economic factors in the process of selecting an enterprise's location. In practice, *homo satisfaciendus* seeks satisfactory locations, in consequence, not reaching optimal locations. Satisfactory decisions are made due to many reasons. Firstly, they result from the lack of access to complete information and from inability of its full interpretation. Secondly, multi-dimensional personal factors play a significant role. As a result, many decisions can be made due to a particularly good familiarity with a given place or region, resulting from the fact that the decision-maker was born there or he/she lives there. In addition, human perception of the space, dependent on many factors, such as experience, education, aspirations, prejudice (the same space can be different for different people), plays a considerable role. Attention should also be paid to the existence of the so-called imitation effect, which refers to the tendency of imitating the decisions of the competitors. Another important behavior accompanying satisfactory decision-making is the inclination to avoid difficulties, e.g. avoidance of complicated negotiations with trade unions or with other groups or institutions [Plaziak, Szymanska 2014, pp. 148–149; Budner 2004, pp. 68–70]⁴.

Location conditionality of family businesses

The choice of the location of conducting business activity is one of the main strategic decisions made by an enterprise. Making a decision about situating a given business entity within space usually leads to far-reaching, long-distance and often irreversible effects in its future functioning. This means, that the decisions cannot be made only on the basis of feelings and intuition, but they must be well thought out and prepared using scientific methods and approaches that are applied in decision-making processes. Decisions, therefore, should result from a decision-making process guaranteeing their rationality. Rational decisions ought to, thus, result from the decision-making process involving a logically related group of mental operations, arranged in correct order and allowing assessment of the decisional situation, determination of the conditions for solving the problem, as well as selection of the most favorable

⁴ Contemporary trends in the theory of location include the concept of the location selection in conditions of imperfect competition, that is the R. Vernon's concept of the product's life cycle, which concerns allocation of enterprises abroad or the concepts relating to the location decision-making process on the part of international enterprises – the J.H. Dunning's eclectic model (OLI), the Uppsala's model as well as the concept of path dependence [more in Godlewska-Majkowska 2013, pp. 39–53].

variant [Wiecek-Janka 2013, p. 182]. However, in family businesses, strategic decisions are never based solely on cold market calculations. In family companies, strategic behaviors are significantly influenced by the values, the dreams and ideas, in the later period of their functioning also the multi-generational tradition. Integration of the company sphere and the family sphere is a natural quality influencing the process of shaping the development strategy in family businesses. Family priorities – involving: development of the family members' careers, assurance of the family members' welfare and satisfaction – are always included in the key targets of the family business's functioning [Marjanski 2015, pp. 157–158]. It certainly has impact on the location decision-making in family enterprises. Therefore, it seems, that in this group of entities, more importance is attributed to the location factors associated with the quality of life in a given place than to the cost and the demand factors, as opposed to non-family businesses. Consequently, when selecting a place for business activity, family enterprises will rather choose the places near their residence or the places guaranteeing high quality of life for the owners' families. As such, two hypotheses can be posed:

H 1: in family enterprises, the place of the owners' residence has bigger influence on the location decisions, compared to non-family businesses.

H 2: The needs of the family influence the location decisions in family enterprises.

H 3: The owners of non-family enterprises, compared to family business owners, more often consider the cost factors when making a location decision.

Research on Polish literature in the field of family entrepreneurship indicated that studies analyzing the factors of family business location have never been carried out. International research in this area is not very broad either. Such research was carried out by J.A. Kahn and D.A. Henderson in the United States on a sample of 393 family companies and 457 non-family enterprises. The results of these studies confirm that proximity of the place of the owners' residence has significant impact on the location of a family businesses, much higher than in case of non-family businesses. The question of the quality of life in a given place (the proximity of cultural objects, the quality of health services, or recreational possibilities) does not influence the location decision-making. These studies have also confirmed a much greater impact of the cost factors and of the factors associated with infrastructure on the decisions about the place of business activity, in case of non-family companies. This involved labor costs and costs of technical infrastructure.

Methodology of the empirical research

The empirical research was carried out on a random study sample encompassing 251 enterprises located in those municipalities of the Tricity Metropolitan Area⁵ that have been subject to the highest-extent suburbanization processes and are characterized by the highest level of concentration of the companies from the SME sector. The study was carried out in 6 municipalities: Kartuzy, Kolbudy, Kosakowo, Pruszcz Gdański, Szemud, and Zukowo. Migration rates for the years 2003–2012 as well as the building activity indicators for the years 2008–2012 were the measures of the intensity of the suburbanization processes. To measure the concentration of the companies from the SME sector, the Florence indicator (location indicator), determined for the year 2012, was used. The data necessary to calculate the Florence indicator came from the Database of Local Data maintained by the Central Statistical Office.

The National Register of Economic Entities REGON was selected as the sampling frame. The following constituted the subject of the study:

- enterprises employing 2 – 9 people (micro-enterprises with exclusion of self-employment), which in the sample constituted 83.3% of the researched entities;
- enterprises employing 10 – 49 people (small enterprises), which in the sample constituted 14.7% of the researched entities;
- enterprises employing 50–249 people (medium enterprises), which in the sample constituted 2% of the researched entities.

In terms of the type of business activity, the largest group of the units in the research sample were the entities from Section G (wholesale and retail trade; repair of motor vehicles, including motorcycles) – 26.4% of the researched enterprises, the entities from Section C (industrial processing) – 18.3% of the researched enterprises, entities from Section F (construction) – 11.2% of the researched entities.

⁵ For the purpose of the project, the Tricity Metropolitan Area (TMA), which constitutes an important element of the functional-spatial structure of Southern Baltic, was adopted as the research area. Delimitation of the area was adopted in accordance with the „Spatial Development Plan of the Pomerania Province”. It was determined that for the TMA – the center of agglomeration is composed of the following cities: Gdańsk, Sopot, Gdynia. The agglomeration’s functional zone is made up of the following towns: Pruszcz Gdański, Rumia, Reda, Wejherowo, Tczew, urban-rural municipality Zukowo and the rural municipalities – Pruszcz Gdański, Kolbudy, Szemud, Wejherowo, Kosakowo. The surroundings of the agglomeration are made up by the following cities: Hel, Jastarnia, Puck, Kartuzy, Władysławowo, rural municipalities – Puck, Luzino, Przodkowo, Kartuzy, Somonino, Przywidz, Trabki Wielkie, Pszczółki, Suchy Dąb, Cedry Wielkie, Stegna, Tczew. (Spatial Development Plan of the Pomerania Province 2009, pp. 143–145; more in Martyniuk, Martyniuk-Peczek, Peczek 2015, pp. 23–29).

As the criteria qualifying a given entity in the „family business” group, the following were selected:

- involvement of at least two family members in the current activities of the company,
- the owners’ opinion regarding the family or non-family character of the business.

Family enterprises constituted 39.8% of the respondents in the research sample (100 entities), non-family enterprises constituted 60.2% of the subjects (151 entities).

On average, 3 persons who are family members work in family enterprises, in micro-enterprises averagely 2 persons, in small enterprises the average is 4 persons, none of the medium enterprises were described as a family business.

The study used a questionnaire. The research was conducted using the CATI method, in the last trimester of 2015.

Interdependencies between the following variables were examined in family and non-family enterprises:

- the size of the enterprise (micro, small, medium),
- the age of the enterprise (1-5 years, 6-15 years, over 15 years)
- economic activity under the Polish Classification of Business Activity (production – categories A, C, E, F; trade – categories G and H; services – categories I, J, K, M, N, P, Q, S)

and the variables defining whether the factors presented to the entrepreneur were the determinants of the location decision for an enterprise:

- the factors related to the decision-maker (personal factors)
- the entrepreneur’s place of residence (yes/no),
- small distance from the place of residence (yes/no),
- family reasons – the ease of combining childcare with work (yes/no),

the cost factors

- low land / real estate price (yes/no),
- easy access to cheap labor force (yes/no),
- relatively low costs of investment outlays (yes/no),
- low operating costs related to the transport of goods / raw materials (yes/no),

infrastructural factors

- infrastructure (yes/no),
- favorable transport/communication conditions (yes/no),

the demand factors

- the entrepreneur expected a high demand (yes/no),
- small distance from the main recipient/buyer (yes/no),

other factors

- the results indicated in the conducted study (yes/no),
- proximity to the Tricity (yes/no).

The chi square test was used in the study. In this test, the frequencies observed in the sample are compared with the expected frequencies, assuming that the two variables are independent. It has been shown, that the below presented interdependencies are statistically significant ($p\text{-value} < 0.1$).

To measure the strength of the dependence, the V-Camera and the Φ (Fi) Yule coefficients were used. They take the values from 0 to 1, where the values close to 0 indicate a weak dependency, while those close to 1 strong one.

The results of the empirical studies

Most of the surveyed operate in the place of their permanent residence. This group constitutes 44.6% of the respondents. 33.9% of the entrepreneurs operate in the place of their residence, while 21.5% of the entrepreneurs are registered in another municipality that is not associated with the place of the owner's residence. The place of business activity depends on the size of the company. Micro enterprises, generally, are ran in the place of the owner's permanent residence, small enterprises in the place of the owner's residence, while small entities in other municipalities not associated with the owner's place of residence.

To verify the hypotheses posed in the study, the relationship between the nature of the company (family / non-family business) and the location determinants was examined. It has been shown that the following dependencies are statistically significant:

- The nature of the company and the place of residence as a determinant of the company's location ($p\text{-value} = 0.0001$, Φ Yule = 0.25)

Among the family companies, the place of residence was a location determinant for 58% of the companies. In the case of non-family companies, this percentage was 32%

- The nature of the company and small distance from the place of residence as a determinant of the company's location ($p\text{-value} = 0.059$, Φ Yule = 0.12)

For 37% of small companies, small distance from the place of residence was the location determinant. Among non-family companies, this percentage was 26%.

- The nature of the company and family reasons as a determinant of the company's locations (p-value = 0.0007, Φ Yule = 0.22)

Family reasons were the location determinant for 30% of family companies and for 13% of non-family companies.

It can thus be stated that the hypothesis H 1: in family enterprises, the place of the owners' residence has bigger influence on the location decisions, compared to non-family businesses and the hypothesis H 2: The needs of the family influence the location decisions in family enterprises have been confirmed.

In the case of hypothesis H 3: The owners of non-family enterprises, compared to family business owners, more often consider the cost factors when making a location decision one statistically significant interdependency was found.

The nature of the company and relatively low costs of investment outlays as a determinant of the company's location (p-value = 0.083, Φ Yule = 0.11)

Relatively low costs of investment outlays was indicated as a location determinant by 14% of family companies and by 7% of non-family ones, and as such, hypothesis 3 has been negatively verified.

The examinations of the cost factors (low price of land / real estate, easy access to cheap labor force, low operating costs associated with transport of the products / raw material) carried out using the chi square test did not allow rejection of the hypothesis about the lack of a dependency, or the amount of data in some categories was too low for the result to be precise.

In addition, a comparative analysis of the location factors for family and non-family entities showed the following statistical interdependencies:

The demand factors

- The nature of the company and expectation of a high demand as the company's location determinant (p-value = 0.080, Φ Yule = 0.11)

Expectation of a high demand was a location determinant for 20% of family companies and for 12% of non-family ones.

- The age of the company and expectation of a high demand as a determinant of the company's location (p-value = 0.082, V-Cramera = 0.18)

Expectation of a high demand was a location determinant for 4% of young companies (1-5 years old). For older companies, the percentage was 18%, for the companies aged 6-15 and 12% for those over 15 years old.

The nature of the company and a small distance from the main recipient / buyer as a determinant of the company's location (p -value = 0.024, Φ Yule = 0.14)

Small distance from the main recipient / buyer was a location determinant for 20% of family companies and 10% for non-family ones.

The factors related to infrastructure

- The company's nature and favorable transport / communication conditions as the company's location determinant (p -value = 0.021, Φ Yule = 0.15)

Among the family companies 32% indicated favorable communication conditions as a location determinant. For non-family companies this percentage was 19%.

Other factors

- The nature of the company and proximity of the Tricity as the company's location determinant (p -value = 0.003, Φ Yule = 0.19)

Proximity of the Tricity was a location determinant for 43% of family companies and 25% for non-family ones.

- The nature of the company and the results of the research as a determinant of the company's location (p -value = 0.004, Φ Yule = 0.20)

10% of family companies indicated the results of the conducted research as a location determinant. For non-family companies this percentage was 1%.

Investigation of other location factors carried out using the chi square test did not allow rejection of the hypothesis about the lack of a dependency, or the amount of the data in some categories was too small for the result to be precise.

Conclusion

The companies' financial results are formed by both the processes occurring inside the enterprise as well as by what happens in its closer and distant surroundings. Therefore, decisions about the place of business activity have strategic significance for the company's functioning and its development. Summing up the considerations in the part of the article describing location theories, it can be stated, that in the process of making a decision regarding the location of a business activity, there are many factors influencing the final decision. These factors are both economic (classic and neoclassic theories of location) and non-economic (behavioral theory). Location theories, however, do not take into account the company's character (family / non-family) as a factor possibly influencing the location decisions. In family enterprises, the family's interest and the interest of the company are dependent on each other, therefore, it

seems that while making a location decision, the decision-makers consider not only the cost factors, but the conditions of life, the quality of the public space, the quality of education and of the health services – the factors significant for the decision-maker's family.

The presented research results have confirmed, that family enterprises more often are located in the place of the owners' permanent residence or residence, than in the case of non-family enterprises. This may be due to the concentration of ownership and management in family companies. Apart from that, in this group of enterprises, family reasons more often were decisive for the choice of location, which reflects the family's impact on the strategic decisions in an enterprise. Large significance of the company's location, in terms of its proximity to the Tricity, higher for family businesses than for non-family ones, can also result from family reasons. Proximity of the Tricity means good access to education, on all levels, ample possibilities of personal development for the family members (cultural and sport institutions).

Concluding, it can be stated that the surveyed family enterprises, in large part, made location decisions according to the behavioral theory, which assumes the so-called satisfactory behavior of the decision-maker, accentuating the non-economic factors in the decision-making process.

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