



THE IMPACT OF CHOSEN STRATEGIC OPTIONS ON THE OVERALL PROFITABILITY OF THE NEWCONNECT STOCK MARKET COMPANIES. THE EVIDENCE FROM IT SECTOR

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Abstract: The paper presents the verification of hypotheses relating to the significance of the impact of the selection of a specific strategic option on the economic context of the operation of modern enterprises. According to source literature, selecting a specific development path is of fundamental importance for the economic effects of the conducted activity. Managers, while formulating a development strategy, affect, according to theoretical assumptions, the overall profitability level of managed enterprises. The objective of the paper is to verify the hypotheses concerning the selection of a specific strategic option of the surveyed enterprises in relation to economic effects achieved by them – in a defined scope concerning the overall profitability ratio.

Keywords: strategy, development options, profitability, strategic choice

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Introduction

The decision-making process concerning a specific strategic option leads to the selection of a particular alternative, which is the basis for success or failure of each enterprise operating in turbulent, competitive and significantly globalizing markets (Shepherd, Rudd 2014; Wollmann, Steiner 2017). For this reason, the selection and then implementation of the selected strategic option in the established context of modern markets may often determine the survival and the ability to succeed by modern economic entities. Therefore, the quality of decisions relating to the selection of a specific strategy, a particular development path is of fundamental importance and decisions taken by managers have a critical impact on the operation of the organization.

The objective of the paper is to verify the hypotheses concerning the selection of a specific strategic option of the surveyed enterprises in relation to economic effects achieved by them – in a defined scope concerning the overall profitability ratio (ROE, ROA, ROI). The author's research was to investigate the impact of the strategic option chosen on the profitability ratio of surveyed NewConnect Stock Market Companies.

The process of selecting a strategic option

The decision-making process is recognizing and defining the essence of the decision-making situation, identifying alternative opportunities, selecting the best alternative and subsequently implementing in the organization (Griffin 2017; Takemura 2014). This process is also associated with the choice of a specific strategic option, which leads to certain effects. However, such decisions are taken with incomplete knowledge concerning the external situation, which obviously affects their effects (Bednarova et al. 2018, p. 60). Incompleteness of knowledge and fragmentation of information results in the fact that the decision-maker, while taking a decision, is not able to define how the future will affect company's operations. "At the micro-economic level, to analyze the behavior of entities, such as a consumer or a company, optimizing procedures are used with limiting conditions, which usually leads to explicit decisions, as long as the entity operates in the world of certainty (which, as we know, is a standard neoclassical assumption). If we adopt a more realistic assumption on uncertainty, at that time, company's decisions become blurry and ambiguous. The behavior of the entity at that time depends on the type of information constraints of the economic environment, willingness to take risk by the entity, amount of transaction costs, customs and social standards, formal and legal rules of the game, expectations of the entity concerning the behavior of other actors of the economic game, the way they take into account the passage of time and effects of irreversibility of the decisions taken" (Garbicz 2011).

In this context, the selection of a strategic option will be strongly correlated with the possibility of achieving economic gain or loss. The quality of the result of the selected option will depend on the authentication of the environment states and the characteristics (values) of the decision itself by the decision-maker. The decision-maker would like to choose a strategic option which is optimal for the specific (projected) state of the environment; however, assuming its uncertainty and volatility, the decision-maker would rather choose a strategic option which is burdened with the lowest risk concerning the smallest possible loss supposed. In turn, "the oldest rule for selection of an optimal decision in the conditions of uncertainty (whose idea just consists in bringing the model of decision-making in the conditions of uncertainty to a similar deterministic model) is the principle of maximizing the expected benefits (Skowron-Grabowska, Mesjasz-Lech 2016, p. 24). It consists in the fact that each possible decision is assigned the benefit equal to the expected benefit and then we select the decision which provides the maximum benefit expected" (Kochenderfer 2015; Sadowski 1977).

In this context – in "the theory of limited rationality, the principle of maximization, occurring while considering different types of analytical rationality, is replaced by the principle of satisfaction (Csiszárík-Kocsir 2017, p. 86). In accordance with the principle of satisfaction, the decision-maker, before making a choice, formulates the ranges of assessment satisfying them (pay-off), restricted by the so-called levels of reservation and aspiration, and subsequently stops at the first option considered whose assessment (pay-off) meets these constraints. In this way,

the need to indicate the auxiliary functions used for maximization and also to compare disproportionate criteria is eliminated (Ślusarczyk et al. 2017, p. 128). The use of such a model makes sense when traditional maximizing models fail” (Mandelbaum, Mazza, Burchell 2012; Szapiro 1993).

Therefore, the process of selecting a strategic option is an activity associated with the choice of one specific option (or their combination) from a particular set.

Choosing a strategic option in the enterprise is the need to get to know and explore opportunities related to the essence of strategic options and to determine methodological aspects of their formulation and selection (Lisiński, Szarucki 2011).

Decision-making is an element of planning in the organization. In this context, decision-making is designing and selecting the way of operation to solve the specific organizational problem. Each activity can be considered as a sequence of decision-making which can be understood as making a non-random selection in the course of operation. Decision-making is selecting a particular line of action. The implementation of the adopted strategic option requires compliance with the principles necessary to achieve the cost-effectiveness of the implemented actions (Smoleń 2012):

- the principle of economy, which is also known as the principle of rational management. The tool for the implementation of this principle is economic calculation, i.e., a specific meter of costs and benefits of economic activity. This principle is based on the use of resources made available in due time, in appropriate quantity and quality and at the best price. The principle of economy helps to precisely define the objectives, tasks, and configuration of resources necessary for their realization (implementation). While following the rules of this principle, there is formulated the optimal result of the activity in the existing (given) conditions with the determined exploitation (wear) of resources necessary to implement the assumed goals. It is closely linked with the assumed obtaining of relevant results assuming the spending of the lowest expenditures needed for their proper implementation. “As a consequence of such transformation of the nature of the political economy, it stops being an empirical science, relating to some real phenomena and becomes a formal “logic of choice” in which the test for the accuracy of statements, like in logic and mathematics, is only the consistency with the adopted axioms. Such “logic of choice” matched with the actual human economic activity is empirically true as long as the activity is the way of conduct compliant with the principle of economy” (Lange 1959).
- the principle of economic calculation, which forces managers to carry out the so-called optimization calculation, which precedes decision-making. Optimization calculation in the process of building value to determine the level of product quality which is the most beneficial for the enterprise. This benefit is manifested in profit maximization in the long term as well as in current profitability. The principle of economic calculation provides for some economic effects and creates specific solutions from the point of view of the goals and the

mission. This principle respects the search for achieving the best possible relationship between the results achieved and the resources involved.

- the principle of entrepreneurship, i.e., readiness to solve problems, exploit new opportunities, technologies, the ability to adapt to the changing environment, search for and grasp opportunities in order to meet the growing competition. This principle is aimed at posing new challenges enabling the most effective operation of the enterprise. It is a part of the company's development strategy, and it is to improve the market position and create better conditions for development. It includes long-term activities constituting a wide range of qualitative and structural changes in the enterprise. Following this principle should lead to the achievement of the assumed goals and intended results.

In this respect, effectiveness also entails desirability and efficiency of the actions taken. Teleological and systemic approaches can be distinguished. The first one is based on the assumption that the enterprise is created and appointed to achieve specific goals. In turn, the other one is based on the idea correlating efficiency with specific skills in the field of overcoming uncertainty coming from the environment, and also skills and competences of modeling the conditions and states of the environment so that they are favorable for the enterprise (Matwiejczuk 2006). The selection of a strategic option is, in this context, the most important task posed to managers regarding its type (Stys 2001).

A classic strategic option. Growth strategies

Referring to the classic theory of growth strategy, it can be noted that there are four specific strategic options relating to the directions of ventures in the product-market domain. It is the strategy of market penetration, market development, product development and diversification (Drażek, Niemczynowicz 2003). The traditional matrix by I. Ansoff is the system of present and future (new) markets and products. Four correlations determine the possible choice of strategy types. The first option is a market penetration strategy, i.e., searching for opportunities to increase sales of the existing products in the existing market. The strategy of market development consists in finding new markets for sales of the existing products. The third is a product development strategy, i.e., the introduction of new products into the existing markets. The most difficult strategic option is diversification, i.e., taking up a new activity by the company both in terms of the product and the market it is intended for (Ansoff 1965).

The classic strategy of market penetration (according to H.I. Ansoff's approach) "focuses on strengthening the position in the existing market and intensifying the sales of the existing product. It takes place through a flexible pricing policy, price reduction, improvement in the quality of services, sales activation, selection of the most favorable distribution channel and intensification of promotional activities" (Żukowska 2010).

In turn, in the case of the market development strategy, the company development results from offering the existing products and services to new customers. The company enters new markets; therefore, it is necessary to make

changes in the structure of target segments. In this context, the most frequent strategy is the reconfiguration of elements of the marketing message for the needs of the new target market of the company. “[...] The strategy of market development means entering geographically new markets through concentric expansion (transition from the local market through the regional one to the international and global market), selective expansion (assessment of markets and entering geographical areas where it is possible to obtain higher profits), insular expansion (the combination of the above two ways)” (Michalik, Pilarczyk, Mruk 2009).

The strategy of product development consists in investing in products and introducing product modifications and innovations. Such a strategic option assumes the concentration on expansion and diversification of the product (a range of products).

The diversification strategy consists in entering new markets with new products. Given the fact that the costs needed to simultaneously invest in new sectors and overcome the barriers to entry into new geographical markets are enormous, only large international corporations use this strategy.

The selection of a strategic option and the effect of the economic activity of the enterprise. Verification of the hypothesis

Decision-making is the least noticeable side of the policy conducted by the company; however, due to the decision-making mechanism, the ideas and visions of development change into strategic operations.

“Irrespective of what role is taken by the entrepreneur, their activities are always focused on searching for better solutions of problems arising on the way of the company’s expansion. Entrepreneurship is a type of alertness, which enables the identification of opportunities, i.e., an opportunity to expand the range of operations, to increase or maintain revenues, to access cheaper sources of production factors, scientific and technical information. Exploiting such opportunities may become the basis for success. On the other hand, entrepreneurship is also expressed in the identification of feasibility – since not always all the ideas or new solutions have the features of feasibility in the company. The role of the entrepreneur becomes, therefore, to recognize if new ideas have a chance to be implemented at the particular moment in current conditions. Knowledge and experience accumulated in entrepreneurs is the basis for searching for new ways of solving old and new problems” (Gruszevska 2010).

While referring to the objective of the paper assumed at the beginning – the following research hypothesis was formulated – the selection of the specific strategic option from the classic set of options of growth (development) strategies has an impact on the overall profitability level of the surveyed enterprises. The research included 36 companies belonging to the IT sector, present in the NewConnect market (the market mentioned was established with a view to dynamic companies in the case of whom capital injection will open up an opportunity to use the potential existing in innovativeness and thus provides an

opportunity for development rewarded with the promotion to a group of large and valuable Polish companies). Due to the specificity of issuers, the NewConnect market offers more liberal formal requirements and information obligations and consequently cheaper capital raising. NewConnect is also to constitute the beginning of the stock exchange career for enterprises listed therein) with the status of the organized market, which is guided by the Warsaw Stock Exchange outside the regulated market, in the form of the alternative trading system. In order to determine the selected option of development, the discourse analysis was carried out using the methodology of the content analysis of information documents as a technique allowing the location of explicit information on the development strategy of the company in the four-field matrix by *H.I. Ansoff* (see: *Table 1*).

Table 1. Identification of specific strategic options of the surveyed companies

Traditional strategic options in market-product terms	Number of enterprises distinguishing the specific strategic option
Strategy of penetration	21
Strategy of product development	23
Strategy of market development	23
Strategy of diversification	7

Source: Own study

In order to verify the formulated hypothesis as the analytical method, a series of linear regression analyses was used (Nowodziński 2013) (see: *Table 2*).

Table 2. The impact of the strategy selection on the overall profitability level of the surveyed companies

Model	Non-standardized coefficients		Standardized coefficients	t	significance
	B	Standard error	Beta		
(Intercept)	1.087	3.294		.330	.744
Penetration strategy	.177	.233	.158	.758	.454
Product development strategy	.062	.277	.051	.224	.824
Strategy of market development	.329	.311	.248	1.059	.298
Strategy of diversification	.097	.305	.071	.318	.752

Dependent variable: profitability in total

Source: Own study

The analysis of the presented hypothesis concerning the impact of the selection of a specific strategy on the overall profitability level of the surveyed enterprises did not indicate the impact of the selection of a specific strategic option on the overall profitability level $F(4.31) = 0.43$; $p = 0.786$. Therefore, the test did not confirm the formulated hypothesis among the enterprises of the surveyed sample.

Conclusions

The main aim of this study was to determine the overall profitability level of a company and to investigate the correlations between performance outcomes and selection of a specific strategy in the context of the traditional H.I. Ansoff's strategy formulation matrix. The traditional Ansoff's matrix is a useful tool for detecting the possibilities of intensive company development. First of all, the company strategy can be based on currently manufactured products to develop on the previously serviced markets (market penetration strategy). This one is based on intensifying activities in the field of sales through, e.g., densification of the distribution network, strengthening promotions, increasing unit packages – as well as increasing market share or increasing the scope of the use of product. Then, the possibility of finding or developing new markets for currently sold products (market development) is explored. Applying this strategy means both geographical expansion as well as generating new segments for an existing product. Next, the possibility of preparing new products that potentially would find interest in current markets (product development) is analyzed. The company uses this strategy by, e.g., extension of product features, programming new application possibilities of the product, better adaptation of the product to diversified market segments, improvement of the product's function. Finally, the company considers the possibilities of developing new products and offering them on new markets (diversification). Diversification can be made by the company by purchasing licenses, know-how, and finally by acquiring other companies or by mergers with them. Diversification can take place in three directions: vertical diversification, concentric diversification, and parallel diversification.

Limitations and suggestions for future research

In this study, research was conducted to classify companies concerning four generic strategies. Decisions taken by managers are inherently burdened with considerable uncertainty associated with the natural conditions of the decision-making process. As a result, future studies should be conducted – the test group will be considerably broadened.

References

1. Bednarova L., Chovancová J., Pacana A., Ulewicz R. (2018), *The Analysis of Success Factors in Terms of Adaptation of Expatriates to Work in International Organizations*, "Polish Journal of Management Studies", Vol. 17, No. 1, DOI: 10.17512/pjms.2018.17.1.05.
2. Csiszárík-Kocsir Á. (2017), *What Makes a Successful Project? – The Role of Project Participants According to the Opinion of the Hungarian Companies*, "Zeszyty Naukowe Politechniki Częstochowskiej. Zarządzanie", nr 27, t. 1. DOI: 10.17512/znpcz.2017.3.1.07.
3. Drażek Z., Niemczynowicz B. (2003), *Zarządzanie strategiczne przedsiębiorstwem*, PWE, Warszawa.
4. Garbicz M. (2011), *Spory wokół pryncypiów w ekonomii i kryzys regulacji*, "Studia i Prace Kolegium Zarządzania i Finansów SGH. Zeszyt Naukowy", nr 109.
5. Griffin R.W. (2017), *Podstawy zarządzania organizacjami*, Wydawnictwo Naukowe PWN, Warszawa.

6. Gruszewska E. (2010), *Instytucjonalny wymiar przedsiębiorczości*, "Optimum. Studia Ekonomiczne", nr 3(47).
7. Kochenderfer M.J. (2015), *Decision Making Under Uncertainty: Theory and Application*, MIT Press, Cambridge.
8. Lange O. (1959), *Ekonomia polityczna*, Państwowe Wydawnictwo Naukowe, Warszawa.
9. Lisiński M., Szarucki M. (2011), *Teoretyczno-metodologiczne problemy formułowania i wyboru opcji strategicznych w przedsiębiorstwie*, "Zeszyty Naukowe Uniwersytetu Ekonomicznego w Poznaniu", nr 169.
10. Mandelbaum S.J., Mazza L., Burchell R.W. (2012), *Explorations in Planning Theory*, Transaction Publishers.
11. Matwiejczuk R. (2006), *Zarządzanie marketingowo-logistyczne. Wartość i efektywność*, C.H. Beck, Warszawa.
12. Michalik M., Pilarczyk B., Mruk H. (2009), *Marketing strategiczny na rynku farmaceutycznym*, Wolters Kluwer, Warszawa.
13. Nowodziński P. (2013), *Zarządzanie strategiczne współczesnym przedsiębiorstwem. Otoczenie a strategia*, Sekcja Wydawnictw Wydziału Zarządzania Politechniki Częstochowskiej, Częstochowa.
14. Sadowski W. (1977), *Decyzje i prognozy*, PWE, Warszawa.
15. Shepherd N.G., Rudd J.M. (2014), *Context in Strategic Decision-Making*, "International Journal of Management Reviews", Vol. 16/3.
16. Skowron-Grabowska B., Mesjasz-Lech A. (2016), *Konkurencyjne uwarunkowania zarządzania zasobami kadrowymi w przedsiębiorstwach w kontekście dostępu do rynku pracy*, "Przegląd Organizacji", nr 10.
17. Smoleń M. (2012), *Budowanie wartości przedsiębiorstwa w procesie restrukturyzacji*, [in:] Pukała R. (red.), *Zarządzanie podmiotami gospodarczymi i instytucjami. Wybrane zagadnienia*, Wydawnictwo Państwowej Wyższej Szkoły Techniczno-Ekonomicznej im. ks. Bronisława Markiewicza w Jarosławiu, Jarosław.
18. Stys A. (2001), *Opcja strategiczna w zarządzaniu marketingowym*, "Prace Naukowe Akademii Ekonomicznej im. Oskara Langego we Wrocławiu", nr 896.
19. Ślusarczyk B., Grondys K., Szymczyk K., Sukiennik K. (2017), *Crucial Conditions for Making Investments in the Częstochowa Region*, "Zeszyty Naukowe Politechniki Częstochowskiej. Zarządzanie", nr 27, t. 2. DOI: 10.17512/znpcz.2017.3.2.12.
20. Szapiro T. (1993), *Co decyduje o decyzji*, Wydawnictwo Naukowe PWN, Warszawa.
21. Takemura K. (2014), *Decision-Making Process*, Behavioral Decision Theory, Springer, Tokyo.
22. Wollmann D., Steiner M.T. (2017), *The Strategic Decision-Making as a Complex Adaptive System: A Conceptual Scientific Model*, "Complexity", Vol. 2017. DOI: 10.1155/2017/7954289.
23. Żukowska J. (2010), *Analiza strategii wzrostu*, [in:] Matejun M., Szczepańczyk M. (red.), *Aktualne problemy zarządzania małymi i średnimi przedsiębiorstwami*, Wydawnictwo Politechniki Łódzkiej, Łódź.

WPLYW WYBRANYCH OPCJI STRATEGICZNYCH NA POZIOM RENTOWNOŚCI SPÓŁEK NOTOWANYCH NA RYNKU NEWCONNECT NA PRZYKŁADZIE SEKTORA IT

Streszczenie: W artykule zaprezentowano weryfikację hipotez odnoszących się do istotności wpływu wyboru określonej opcji strategicznej na kontekst ekonomiczny funkcjonowania współczesnych przedsiębiorstw. Według studiów literaturowych wybór określonej ścieżki rozwojowej ma fundamentalne znaczenie dla efektów ekonomicznych prowadzonej działalności. Zarządzający, formułując strategię rozwoju, wpływają według założeń teoretycznych na ogólny poziom rentowności zarządzanych przedsiębiorstw.

Słowa kluczowe: strategia, opcje rozwojowe, rentowność, wybór strategiczny