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Exploration vs. Exploitation: How Innovation Strategies Impact Firm Performance and Competitive Advantage

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Abstract. *In today's economy, companies face the challenge of turbulent environments, which are characterized by rapid change, uncertainty, and unpredictability. Thus, for companies, these environments can be a double-edged sword because they can be responsible for rapid development opportunities and threats that can lead to organizational obsolesce. Businesses can lose their competitive advantage rapidly if they do not adapt to environmental changes, therefore, companies need to reinvent themselves by either exploiting available capacity or exploring new capabilities.*

Innovative activities are beneficial for improving organizational vitality, but it is not clear how can be designed an effective innovation strategy and a system, that can respond to environmental changes both externally and internally. Ambidextrous innovation can be a relevant solution to this problem because it gives companies the opportunity to counteract the loss of competitive advantage by using a mix of innovative exploratory strategy and innovative exploitative strategy. Nowadays, ambidextrous innovation theory has been widely adopted by researchers to explain how is formed the mechanism of organizational performance and competitive advantage. According to researchers, this can be achieved by efficiently combining available, tangible, and intangible resources in the production and marketing of goods and services.

The paper aims to clarify some aspects less addressed in the literature and to highlight the importance of innovative managerial strategies for using intangible resources to increase sustainable competitive advantage and company value, in terms of theoretical and empirical studies, conducted at national and international level. Thus, the author proposes a theoretical research model based on the premise that both the sustainable competitive advantage and the market value of a company can be influenced by the way intangible resources are used in innovative exploitation and exploratory strategies.

Keywords: (1) Innovative exploitation strategy; (2) Innovative exploratory strategy; (3) Intangible resources; (4) Sustainable competitive advantage; (5) Company value; (6) Technological turbulences; (7) Market turbulence.

Introduction

In recent years, innovation capacity has been found to be responsible for strengthening the competitiveness and productivity of companies (Vanhaverbeke et al., 2007; Bekkers et al., 2011; Baregheh et al., 2012). For companies operating in today's economy, a real challenge is to get the competitive advantage by combining different types of innovations. Thus, the ability of a firm to simultaneously implement radical innovation and incremental innovation is called organizational ambidexterity (O'Reilly & Tushman, 1996; Li et al., 2008; Raisch et al., 2009; Simsek et al., 2009; Prange & Schlegelmilch, 2010; Mattes & Ohr, 2013a, 2013b, 2013c) and refers to the notion of exploration and exploitation (March, 1991) which gradually emerged as a fundamental theme in the research of organizational learning (Levinthal & March, 1993; Vera & Crossan, 2004) innovation (Danneels, 2002; Jansen et al., 2006; Lee et al., 2003; Rothaermel & Deeds, 2004), and entrepreneurship (Jiang & Zhao, 2006; Shane & Venkataraman, 2000).

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The literature has suggested that firms need to be ambidextrous (Gibson & Birkinshaw, 2004; He & Wong, 2004) so that exploratory and exploitative innovations can be implemented simultaneously (Benner & Tushman, 2003; Tushman & O'Reilly, 1996). Companies need, on the one hand, to gain new knowledge, develop new products and create new market segments by engaging in exploratory innovations, and on the other hand, they need to build on existing knowledge and expand existing products and services to existing customers (Benner & Tushman, 2003).

How the two types of innovations fit together internally and externally has been the main theme in researching the implications of exploratory and exploitation innovation on company value and competitive advantage. The literature argues that there is a match between exploratory innovation and exploitation innovation (He & Wong, 2004; Menguc & Auh, 2008), as well as a match between the two types of innovation and context variables, including business strategies and external environment (Auh & Menguc, 2005; Jansen et al., 2006; Menguc & Auh, 2008).

In theory, exploratory innovation exemplifies the search, risk-taking, flexibility, and discovery that contribute to the creation of new products, while exploitative innovation exemplifies the refinement, efficiency, selection, and execution that enhance existing products (Chen et al., 2018; Hughes, 2018; March, 1991; Soto-Acosta et al., 2018; Zhou et al., 2016). Exploratory innovation helps organizations improve their core competencies for long-term growth, while exploitative innovation ensures short-term efficiency (Constant et al., 2020; Kollmann & Stockman, 2014; Uotila, 2018). Both exploratory and exploitative innovations are necessary for the survival and success of organizations, as they must simultaneously explore new opportunities and exploit existing skills in turbulent environments (Uotila, 2018).

However, achieving an ambidextrous (balanced) approach between exploitative innovations and exploratory innovations is not available to any company, as both types of activities require which are limited, and this aspect forces them to decide to what extent they will use these strategies, in short, companies are forced to compromise between the two types of innovations (Greve, 2007).

Literature review

The effect of the interaction between exploitation and exploration innovations: Impact on company performance

About innovation has been said to be crucial to an organization's success while about individual creativity and innovation have been said to be the key to innovation at the organizational level (DiLiello & Houghton, 2006; Shanker et al., 2017).

Innovation has been defined as "*the process of creating a new system or modifying an existing system within a company*" (Amit & Zott, 2010) or "*discovering a fundamentally different business model within an existing business*" (Markides, 2006). The ability to innovate is considered an asset that (1) allows companies to sustain their competitive advantages and (2) contributes to the implementation of the entire strategy. At the same time, it allows companies to quickly introduce new products and adopt new systems, therefore, it is an important factor in defending against existing competition.

According to the literature, innovations can be classified in two groups: (1) the novelty of technologies and products that companies place on the market ahead of the competition (exploratory innovation) and (2) the novelty of technologies and products that companies bring to market but are already available to customers from the competition (exploitation innovation)

According to Benner and Tushman (2002), companies' exploratory innovations require the development of new knowledge, as they can help to find new opportunities and capabilities that will contribute to long-term survival, thus in the end these companies will try to develop new processes, products or markets. (Lumpkin & Dess, 1996)

Benner and Tushman (2003) also state that the purpose of business innovation is to create or develop competitive advantage by making the most efficient use of a company's resources, knowledge, and skills, because both exploratory and exploitative innovations can have a positive impact on the company (Li et al., 2008) as these strategies are intertwined throughout the life cycle of the company (March, 1991). For example, a company has a high level of exploratory innovation in a certain field but has a low level of exploitative innovation in a complementary field.

Abernathy and Utterback (1978), through the technology life cycle theory, argue that the two types of strategies do not intersect, they start from the premise that exploratory innovation is the one that can create radical innovations, both technologically and in terms of existing processes, and then exploitative innovation through incremental development can bring substantial performance benefits for the companies.

On the other hand, Gupta et al. (2006) state that firms can implement both exploratory and exploitative strategies at very high levels, without having to compromise, as they may be complementary and not necessarily competitive, in which case they do not have to compete for company resources.

Exploitation strategy is important for any company as through this strategy they can introduce services or products that are new for the company but already exist on the market from other companies. On the other hand, through exploratory innovation, companies are introducing products and services that are complete new for the market, so no other company has similar products able to compete with them, thus through this strategy, companies can attract new customers or develop new distribution channels (Markides & Charitou, 2004)

March (1991) and Jansen et al. (2005) believe that the long-term success of a company in a highly competitive market depends very much on the use and combination of the two innovation strategies. Their optimal use is known as ambidexterity, and can lead to superior performance in companies that have an ambidextrous approach, aspects supported by studies in the field (Gibson & Birkinshaw, 2004)

Most researchers argue that firms should be ambidextrous in coordinating the development of exploratory innovation and exploitation innovation and try to strike a balance between the two (Benner & Tushman, 2003; He & Wong, 2004; Levinthal & March, 1993). Levinthal and March (1993) argued that firms must obtain sufficient short-term financial income and maintain their long-term competitive ability. When the exploration activity excessively exceeds the exploitation activity, the company may be in a situation of wasting its resources (increasing costs and decreasing revenues), and if the exploitation activity excessively exceeds the exploration activity, the company may be deprived of energy in long-term growth (stiffness, lack of vision). Knott (2002) found a complementary relationship between exploratory innovation and exploitation innovation in his case study. He and Wong's (2004) showed that the internal matching of exploratory innovation and exploitation innovation has a positive effect on firm performance. Because organizational knowledge and resources can be leveraged through both exploratory innovation and exploitation (Cao et al., 2009), we can conclude that they complement each other and can lead to improved company performance. Thus, we propose the following:

- *H1 – Innovative exploitation strategies have a significant positive impact on a company's sustainable competitive advantage.*
- *H2 – Innovative exploratory strategies have a significant positive impact on a company's sustainable competitive advantage.*
- *H3 – Integrating intangible resources into the innovative exploitation strategies has a significant positive impact on increasing the value of a company.*
- *H4 – Integrating intangible resources into the innovative exploratory strategy has a significant positive impact on increasing the value of a company to a company.*

Exploitation innovation and Exploratory innovation vs. External environment

In the literature, researchers have found that the relationship between innovation and performance can be moderated by the external environment (Miller & Friesen, 1983). According to Levinthal and March, (1993) in the relationship between innovation and performance there are two main variables of environmental moderation, namely: (1) environmental dynamism and (2) environmental competitiveness (Lewin et al., 1999).

The first variable refers to the rate of change and the degree of environmental instability (Dess & Beard, 1984) and the second variable refers to the fact that external environments are characterized by intense competition (Matusik & Hill, 1998). In less competitive environments, companies, to obtain their expected profits, can still rely on existing business systems.

Thus, it can be said that low-cost, low-risk, high-yielding, exploitative innovation can be more beneficial to improve a company's performance. As competition increases, innovation through exploitation can no longer give companies an adequate competitive advantage but can reduce the growth rate of companies. Therefore, they will have to resort to higher risk activities to be able to compete. Thus, companies need to focus on exploratory innovation and gain a competitive advantage through creative planning to rise above the competition, otherwise they will struggle to survive in an increasingly competitive environment (Zahra, 1993)

The changes that are being made more and more often, both in terms of technology and in terms of consumer preferences, are characteristics of the dynamic environment in our current society, and often all these changes tend to make the products and current services appear outdated (Jansen et al., 2005). Firms need to introduce exploratory innovation so that they can move away from existing competitive circumstances and find premium market segments of emerging markets to grow and survive (Lumpkin & Dess, 2001). Exploitation innovation limits companies to remain anchored in routine activities, making it difficult to adapt to dynamic environments, thus increasing the risk of them becoming technically and morally obsolete.

A dynamic environment, which is subject to rapid change and high uncertainty, such as a double-edged sword, feeds and prevents the aging of an organization at the same time (Wang et al., 2021). First, it provides new opportunities for organizations to move beyond the old operational boundaries. Risk-embracing firms can enter new markets by introducing new technologies, products, and services (Battilana & Casciaro, 2013; Chen et al., 2018; Prajogo & McDermott, 2014; Wang et al., 2021). On the other hand, it poses huge risks for firms to suddenly face danger when they are either too adventurous or too conservative (Dai et al., 2013; Habersang et al., 2019), so it is a critical factor that firms need to consider when making strategic innovation decisions (Santos et al., 2020; Wang et al., 2021).

Among the various environmental factors, the technological and market turbulences received the most attention (Turulja & Bajgoric, 2019). They have been repeatedly adopted as baseline variables in previous empirical studies (Chung & Low, 2017; Hartono & Sheng, 2016;

Ma et al., 2018; Zhou et al., 2019). Technological turbulence reflects rapid changes in industrial technologies that accelerate the aging of processes, products, and services (Gomezel & Aleksic, 2020; Hanvanich et al., 2006; Kandemir et al., 2006). In turbulent technology environments, firms are required to update technologies more quickly and shorten the product life cycle (Droge et al., 2008). Market turbulence is a change in customer preferences over time (Calantone et al., 2003; Hanvanich et al., 2006; Le Mens et al., 2015). In turbulent markets, companies need to accurately predict new customer requirements and respond quickly to market changes (Wang & Fang, 2012) by providing timely and diverse products.

The moderating effect of technological turbulence

Industrial technology is an important environmental factor that can influence the survival and development of companies (Sheng, 2017). According to the literature, innovative exploratory activities have been considered very important in turbulent environments, as it imposes adaptive requirements on organizations (Uotila, 2018).

There are researchers who say that rapid technological change can be a real threat to companies, as they may run the risk of becoming technically obsolete. Therefore, these companies choose to continually adopt new technologies and build new skills through exploratory innovation (Benner & Tushman, 2003). For example, nowadays emerging digital technologies are responsible for the technological turbulences brought to traditional companies, which causes them to transform and come up with proposals for new business models (Li et al., 2021; Zaheer et al., 2019).

Other researchers have argued that technological turbulences give companies the opportunity to outperform their competitors through exploratory, learning, and innovation activities (Dai et al., 2016; Pandit et al., 2018; Wang et al., 2021; Zahra, 1996). In addition, through high-intensity exploration activities in highly uncertain environments, companies could better address events that may lead to loss of competitive advantage (Bernal et al., 2019). Several studies have discussed the moderating role of technological turbulences. For example, Hung and Chou (2013) reported its moderating effect on the relationship between the acquisition of external technology and the company's performance.

The study reminds us that a firm that pursues an exploratory approach can compete more effectively in the marketplace for new products and services by recognizing and assimilating emerging technologies from the outside in a turbulent technological environment (Hung & Chou, 2013). Similarly, Tang et al. (2020) found that technological turbulences strengthen the positive relationship between foreign direct investment exploratory and the overall performance of firms. Consequently, we propose the following hypothesis:

- *H5 – Technological turbulence positively moderates the relationship between the innovative exploratory strategy and the sustainable competitive advantage of a company.*
- *H6 – Technological turbulence positively moderates the relationship between innovative exploratory strategy and increasing the value of a company.*

Several ambidexterity researchers have argued that "flexibility and change are associated with exploratory innovation activities, and stability and inertia are associated with innovative exploitation activities" (Lavie et al., 2010; Uotila, 2018). According to such a view, innovation through exploitation is considered more suitable for mature enterprises in stable industries (Fang et al., 2010; Uotila, 2018).

In an environment of high technological turbulance, companies engaged in exploiting activities can improve their current situation by continuously updating their existing products, but they can also remain stuck in the use of original technologies without being able to contribute to new technological discoveries (Auh & Menguc, 2005).

With the transformation of industrial technology, small improvements to existing products may not be enough to help companies meet customer requirements and help them maintain their market position, so companies may risk their competitive advantage becoming technically obsolete (Jansen et al., 2005).

Regarding the moderating effects, Tang et al. (2020) suggested that technological turbulences weaken the positive relationship between foreign direct investment and organizational performance and Droge et al. (2008) suggested that in the case of exploitative innovations, in turbulent technological conditions, the success will not be as great as in the case of exploratory innovations, and to achieve the same degree of success will require a greater effort (Miller et al., 1988). Accordingly, we propose the following hypothesis:

- *H7 – Technological turbulence positively moderates the relationship between the innovative operator-type strategy and the sustainable competitive advantage of a company.*
- *H 8 – Technological turbulence positively moderates the relationship between innovative operating strategy and increasing the value of a company.*

The moderating effect of market turbulence

The market in which a company operates is a factor that can influence the sustainable development of a company (Sheng, 2017). For companies operating in a stable market, characterized by a slow change in consumer demand, a stable price, and a long product life cycle (Calantone et al., 2003; Hanvanich et al., 2006), it will be very difficult to change consumers preferences, and to develop new markets by introducing new products from exploratory innovation activities (Benner & Tushman, 2003; Wei et al., 2011). In this situation, companies will have to prioritize exploitation over exploration (Uotila, 2018).

On the other hand, when a company operates in a market of uncertainty, it will have to focus on exploratory innovation activities to be prepared to respond to unpredictable changes by developing new products or technologies (Wang et al., 2021). Thus, it can be said that markets characterized by uncertainty and the capacity for exploratory innovation, together, accelerate the dynamic evolution of companies (Wang & Wang, 2017).

Several studies have looked at the effects of market turbulence and exploratory innovation on organizational development. For example, Lant and Mezias (1992) argued that organizations tend to devote more resources to exploratory innovation activities to take advantage of survival opportunities that give them a competitive advantage in uncertain and turbulent market environments. Hung and Chou (2013) showed the positive effects that innovation activities, whether exploitative or exploratory, have on the development of competitive advantage or the performance of companies operating in conditions of high market turbulence. Thus, we propose the following hypothesis:

- *H9 – Market turbulence positively moderates the relationship between the innovative exploratory strategy and the sustainable competitive advantage of a company.*
- *H10 – Market turbulence positively moderates the relationship between the innovative exploratory strategy and the growth of a company's value.*

According to the profile of the traditional consumer, which is found in stable markets, it can be said that it tends to choose robust and functional products that are provided by recognized companies, therefore it will be very difficult for creative and innovative products to attract their attention (Child et al., 2017).

Exploitative innovation activities which aim to continuously improve the products in the portfolio, meet the needs of these traditional consumers (Cheng et al., 2019; Zhou & Tse, 2005). However, when the market becomes turbulent, companies can quickly lose their competitive advantage if they fail to search and monitor demand information widely, develop new products ahead of their competitors, and adapt to market changes (Dai et al. ., 2013), capabilities that are based more on exploratory innovation activities than on exploitative innovation activities, which are not justified when market turbulence causes companies to leave a market quickly or when their performance decreases rapidly (Wang et al., 2021).

Several studies can support the views presented above. For example, Droge et al. (2008) measured the positive relationship between exploitative innovation activities and the success of new products, and thus found that the relationship is weaker in markets with higher turbulence than in markets with lower turbulence. Harmancioglu et al. (2020) showed that the intensity of market competition (positively associated with market turbulence) negatively moderates the positive relationship between incremental innovation (representing operating innovation) and competitive advantage. Thus, we propose the following hypothesis:

- *H11 – Market turbulence negatively moderates the relationship between the innovative exploratory strategy and the sustainable competitive advantage of a company.*
- *H12 – Market turbulence negatively moderates the relationship between the innovative exploratory strategy and the growth of a company's value.*

Intangible resources, company value and sustainable competitive advantage

According to Ocak and Fındık (2019), companies now invest more in intangible resources than in tangible, as they play an effective role in sustaining a company's competitive advantage (Villalonga, 2009), and are not easy to imitate. Research and development as well as new technologies are critical investments that support a firm's future presence in the market, by reducing costs and increasing profits (Van Ark et al., 2009), so that the sustainable growth of a company can be considered a comprehensive mechanism for long-term sustainability assessment (Mukherjee & Sen, 2018)

According to Liang et al. (2010) organizational capacity has a very important role in improving IT performance, as it contributes to the development of new products and even to the change of organizational structure. Mudambi (2011), Demir and Tolga (2014) found that research and development activities positively affect the growth of companies. Moreover, Xu and Wang (2018) found that advertising stimulates research and development by increasing the reputation of companies' current products and services.

According to the literature, the income reported by a company can be influenced using different policies for the recognition of intangible resources (Lev & Zarowin, 1999; Canibano et al., 2000; Gelb & Siegel, 2000; Lev, 2003; Chiang & Mensah, 2004; Siegel & Borgia, 2007; Skinner, 2008; Oliveira et al., 2010; Han & Chuang, 2011; Alam et al., 2014). Reviewing the existing literature on intangible resources, Canibano et al. (2000) revealed that current investments in intangible resources, especially in research and development, are related to improving the company's future performance.

The growing gap between a company's market value and its book value has diminished the relevance of accounting information, drawing the attention of many researchers to investigate the unseen value of financial statements (Lev & Zarowin, 1999; Lev, 2001; Swanson & Singer, 2002; Lev & Radhakrishnan, 2003). However, Lev (2001) indicated that almost 80% of the firm's market value was not disclosed in the financial statements. Recognition of intangible resources at real value has become a major issue, both financially and managerially. At present, the economy is mainly based on intangible resources and therefore must be recognized in the financial statements of companies, so that shareholders and investors have a clearer picture of the value of the company.

During the development of the field of intangible resources research, various authors have tried to identify those components of intangible resources that contribute the most to the growth and financial performance of a company. There seems to be a general agreement that in today's digital economy, businesses are increasingly relying on investment in intangible resources to grow their business. Corrado et al. (2005, 2009) proposed a classification of growth sources by types of intangible expenses, namely computerized information (software and databases), innovative properties (R&D, mineral exploration, copyright and licensing costs, and other expenses that do not lead to patents or copyrights) and economic skills (brand, company-specific human capital development and organizational structure costs). In addition, Corrado and Hulten (2010) stated that there is a direct link between innovation activity, sustainable growth and the expenditure of a company with intangible resources. These claims have been reinforced by recent studies.

Ocak and Fındık (2019) demonstrated the existence of a positive relationship between intangible resources, sustainable growth, and the value of the company in listed companies in Turkey, based on the sustainable growth rate algorithm. Xu and Wang (2018) also demonstrated the direct impact of intangible resources on the financial performance and sustainable growth of companies operating in the Korean manufacturing sector by applying both the VAIC TM model and the sustainable growth rate model.

Another issue that has been discussed in the literature (Andreeva & Garanina, 2016) is the difference between developed and emerging economies, as well as the lack of sufficient research in the end, when it comes to the influence of intangible resource components on company growth. Researchers point out that the pattern of research and development in emerging markets deviates significantly from that of developed economies (Lee & Choi 2015; Zhu & Huang, 2012).

In this regard, Lee and Choi (2015) found a positive effect on the intensity of research and development in the pharmaceutical industry, and Zhu and Huang (2012) found that the financial performance of listed Chinese IT firms increases with the intensity of investment in research and development. In contrast, empirical evidence from a sample of Taiwanese manufacturing firms shows a negative relationship between research and development and profitability (Yang et al., 2010). Ionita and Dinu (2021) reached a similar conclusion when they analyzed the effects of sub-components of intangible assets on firm value and the sustainable growth of firms listed on the Regulated Market of the Bucharest Stock Exchange. They found that innovative property (R&D and Patents) and IT Programs had no effect on sustainable growth rates for the companies listed at Bucharest Stock Exchange. The findings also indicate that Patents had no influence on company value while R&D have a negative impact on it.

According to the literature review, most studies show a positive relationship between the intangible resources and market value of a company, financial performance and / or growth of the company. Thus, we propose the following:

H 13 – Intangible resources, used in innovative exploratory strategies, tend to have a significant positive impact on the growth of a company's value and its sustainable competitive advantage.
H 14 – Intangible resources, used in innovative exploitative strategies, tend to have a significant positive impact on the growth of a company's value and its sustainable competitive advantage.

Methodology

Based on the literature and the hypotheses demonstrated during this paper, the author created a theoretical research model based on the premise that both the sustainable competitive advantage and the market value of a company can be influenced by how intangible assets are used in innovative exploitative and exploratory strategies. (Buccieri et al., 2020; Jin et al., 2016; Zhang et al., 2020; Makrominas, 2017; Tahat et al., 2017).

The main constructs of the research model are represented by: (1) Innovative exploitation strategy; (2) Innovative exploratory strategy; (3) Intangible resources; (4) Sustainable competitive advantage; (5) The value of the company, and the secondary constructs are represented by (6) Technological turbulences; (7) Market turbulences.

The research model proposes as independent variables: (1) Integration of intangible resources within the exploitation innovative strategy and (2) Integration of intangible resources within the exploratory innovative strategy. As dependent variables are proposed: (1) Sustainable competitive advantage and (2) Company value and as moderating variables are proposed: (1) Technological turbulences and (2) Market turbulences.

Recent research has documented that large, profitable firms have more opportunities for sustainable growth, so these structural characteristics of firms can be crucial for investments in intangible assets. Thus, the following control variables are proposed in the research model: (1) The size of the company; (2) Financial leverage; (3) Financial performance; (4) Number of employees; (5) Industry.

In order to obtain a comprehensive view of the research model and to carry out an in-depth analysis, it is necessary to collect primary and secondary data. Therefore, propose that the primary data to be collected by applying questionnaires and collecting data in the form of observations, from companies listed on the Bucharest Stock Exchange. Thus, the primary data will be combined with the secondary data that will come from the available specialized literature. By combining these disparate data sources, the research topic will be able to be analyzed through several perspectives, and the quality of the data will be able to be significantly improved.

It is important to note that under the proposed model, the sustainable competitive advantage will be operationalized through sustainable growth rate (SGR) that indicates (1) the financial optimal growth of a company, based on its own resources without using external financing (Higgins, 1977) and (2) the maximum growth rate that can be achieved without external financing, debt or equity (Van Horne, 1987). Formulas derived from the models established by Higgins (1977) and Van Horne (1987) have recently been used by various researchers to calculate sustainable competitive advantage (Huang & Liu, 2009; Xu & Wang, 2018; Ocak & Findik, 2019).

The author proposes the following formula to test the data collected through observations, from companies listed on the Bucharest Stock Exchange:

(1) *SGR i,t or SGR2 i,t. or FV i,t = β1 R&D i,t + β2 Patent i,t + β3 IT Programs i,t + β4 Brand i,t + β5 Shares in subsidiaries i,t + β6 Loans to grups i,t + β7 Shares in other entities i,t + β8 Financial securities i,t + β9 Other loans i,t + β10 Employee number i,t + β11 Firm performance i,t + β12 Firm size i,t + β13 Leverage i,t*

The relationship between the proposed hypotheses and the constructions considered is presented in the figure below, where the theoretical research model proposed in this paper is presented.

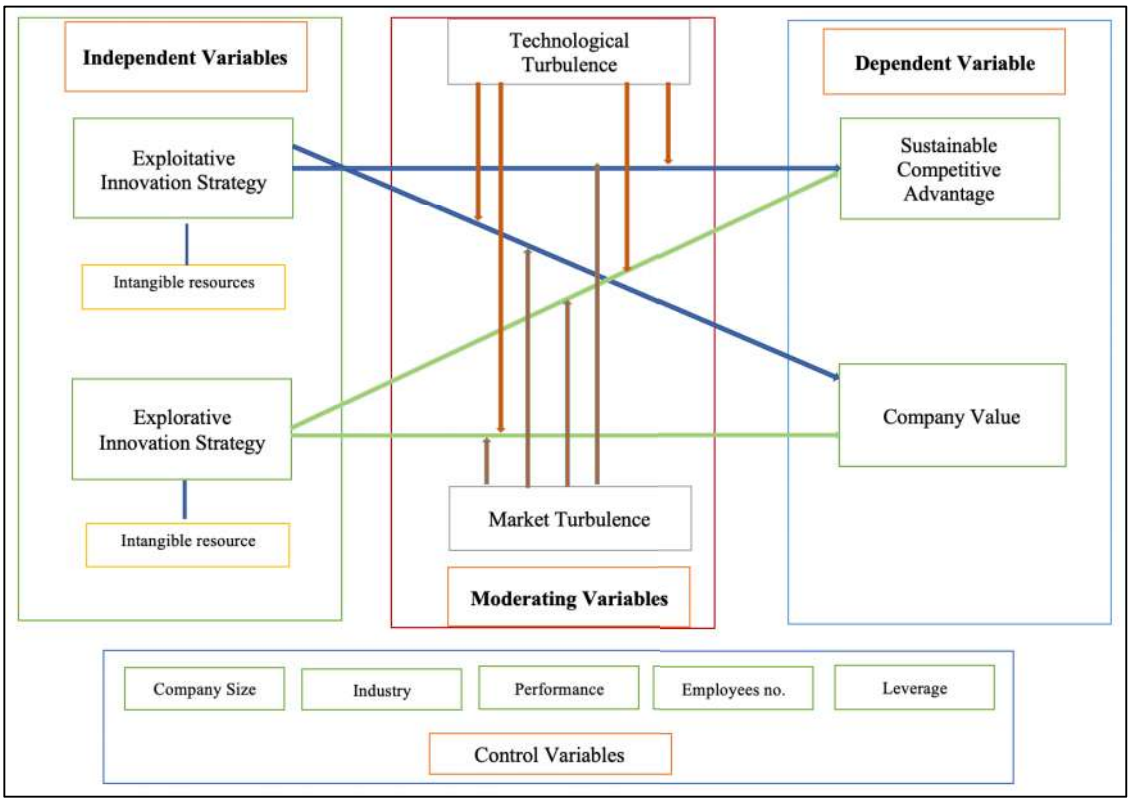


Figure 1. Proposed theoretical research model

Source: the author.

Conclusion

This paper contributes to the research literature in several ways. First, drawing on the existing research literature, the authors confirm that that both the sustainable competitive advantage and the market value of a company can be influenced by how intangible assets are used in innovative exploitative and exploratory strategies. This supports the need to further explore indicators that influence the relationship between innovative exploitative and exploratory strategies and company value and its competitive advantage.

Second, it was found that organizational ambidexterity, meaning simultaneous implementation of radical and incremental activities, is considered to reduce the length of time required and contribute to firm competitive advantage and the sustainability of a firm. The results

of this study revealed that although innovative exploitative and exploratory strategies are considered as contributing to firm competitive advantage, empirical evidence to support this relation on emerging markets such as Romania is lacking. These results are consistent with the necessity to explore the way in which innovative exploitative and exploratory strategies contributes to firm competitive advantage for the companies that activate on emerging markets such as Romania.

Finally, this paper clarifies the relationship between intangible resources, innovative exploitative and exploratory strategies, market and technological turbulence and sustainable competitive advantage and company market value. This issue remains crucial for further theoretical development of the concepts presented in this paper. Also, theoretical findings suggest that innovative exploitative and exploratory strategies play an important role in developing a sustainable competitive advantage an increasing company market value. As this is a theoretically based study, further development of the preposition is crucial to empirically test the relationship between intangible resources, innovative exploitative and exploratory strategies, market and technological turbulence and sustainable competitive advantage and company market value for companies that activate on emerging markets such as Romania.

According to the literature (Andreeva & Garanina, 2016) there are big differences between developed and emerging economies as well as insufficient research in the end, when it comes to the influence of intangible resource components on company growth. In this context, it should be mentioned that few studies in Romania address the issue of the influence of intangible resources on the company's performance and market value. Researchers point out that the pattern of research and development in emerging markets deviates significantly from that of developed economies (Lee & Choi 2015; Zhu & Huang, 2012).

Although there has been a growing interest in studies analyzing the impact of intangible resources on the performance of companies, the analysis of the literature shows that there is a lack of such studies in specific emerging markets. Moreover, it has been found that existing studies pay little attention to differences between countries, and many authors focus on investigating the relationship between intangible resources and firm performance in the context of developed countries, which can be explained by the fact that most authors come from developed countries such as the USA, Japan, and Germany. It has also been argued that generalizing the use of the same approach to developed and emerging countries cannot guarantee representative results, as there are different characteristics of the innovation activity in which firms engage (Boiko, 2021)

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