LINKING ENTREPRENEURIAL ORIENTATION TO FIRM PERFORMANCE IN A POST-SOCIALIST MARKET CONTEXT: THE MODERATING ROLE OF ENVIRONMENT AND AGE

MASTER THESIS EXPOSÉ

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ABSTRACT

Title: Linking entrepreneurial orientation to firm performance in post-socialist market context: the moderating role of environment and age

Keywords: strategic management, entrepreneurial orientation, business performance, environmental dynamism, environmental hostility, age as a moderator

Background: Nowadays, corporate entities obsessively chase “new entries” and “blue oceans” (Mauborgne & Chan, 2005) to gain competitive advantage and positive financial indicators. The tendencies evince an optimist impact of entrepreneurial orientation on business performance, namely on financial and non-financial measures. Beyond the aforementioned relationship, there are permanently presented impulses effecting the business environment, in which the companies operate such as environmental and organizational factors.

Purpose: The research outcome of this study aims to get a better understanding of the effect of entrepreneurial orientation on business performance in a post-socialist context. Different moderators are introduced into the bivariate relationship in order to get a deeper knowledge about the chosen market. The market of the United States is overwhelmingly was studied retrospectively, with this study we aim to penetrate into a so far untouched country of Europe, namely Hungary. The reason behind why the referred country was selected is further explained in the description.

Methodology: A mixed, hybrid technique applied to collect the desired data, which investigated further with statistical methods to detect the factors’ interrelationship. Qualitative technique carries out the core of the study, supplemented with in-depth, face-to-face qualitative interviews to gain more insights from CEOs and upper managers. Laid down control variables are lacking from the sample criteria in order to obtain a superior representative database.
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LIST OF ABBREVIATIONS

EO – Entrepreneurial Orientation
U.S. – United States
SBU – Strategic Business Unit
R&D – Research and Development
FDI – Foreign Direct Investment
ROI – Return On Investment
ROE – Return On Equity
SME – Small and Medium-sized Enterprises
C-level – Chief - level

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Figure 1: Circumscribing the domain of business performance
INTRODUCTION AND BACKGROUND

Entrepreneurial orientation (EO) magnetized numerous studies retrospectively, a fortiori in the recent past. Today’s dynamic and turbulent nature of business environment constantly shortens model and product life cycles and forces companies to apply new strategies. Consequently, “the future profit streams from existing operations are uncertain” and firms have to employ adaptability and engage in rejuvenation to survive (Wiklund & Shepherd, 2005, p. 72). Entrepreneurship activities according to Covin and Slevin (1981) are responsible for the improvement of man’s standard of living and the development of economic welfare. A substantial body of EO literature provides evidence that firms engaged with entrepreneurial guidance outperform their more conservative counterparts (Anderson, Kreisen, Kuratko, Hornsby, & Eshima, 2015).

Schumpeter’s (1976) "gale of creative destruction" employed by entrepreneurship, which commits oneself to an explicit ongoing phenomena in our global economy. Corporate entities are constantly persecuting new opportunities, products and business models in order to establish superiority above their competitive environment. This simultaneous progress permanently replaces existing models and processes with “new entries”, haunting for the perfect design and a more profitable outcome, making destructive and simultaneous innovativeness closely related to entrepreneurship. A “new entry” incorporates any innovative action undertaken by an individual, strategic business unit (SBU) or on a corporate level (Lumpkin & Dess, 1996). Those actions are responsible for the constant changes and distortions of existing market segments and opening up new “blue oceans”. EO redounds “new entries” and venture boldness in a domestic and cross-national context, where innovativeness and risk-taking represents the core of those action. Certain authors (e.g., Knight, 1997; Thomas & Mueller, 2000) indicated that dimensions of EO may vary across countries, thus through cultures (Rauch, Wiklund, Lumpkin & Frese, 2009). We presuppose that an innovative ad-hoc managerial decision within a hostile and turbulent business environment might magnetize stakeholder’s accolade in a
country where uncertainty avoidance is low, such as Sweden, while in Japan it may get punished and perceived as an absolute un-respectful and negative action.

After a comprehensive literature review on EO, we found that post-socialist, transforming economies attracted significantly less attention from authors and researchers in the past. There is an overwhelming literature on developed economies, such as the United States, while other large-scale markets such as Europe, have remained partly unexplored (Hermann, Alexander, & Matthias, 2010; Zulauf et. al., 2015; Peshkova, Urkmez & Wagner, 2015). Ha-Brookshire (2009) noted firm entrepreneurship “has long been shown to play a significant role in firms’ competitiveness, revitalization, and superior performance” not just in developed economies, but also in transitional economies (p. 131). Markotte (2011) argued that; “to researchers and policymakers, the comparative assessment of individual and organizational entrepreneurial activity may be more revealing than the country rankings based solely on venture creation or business ownership. These rankings have been notably used to monitor or predict the economic performance of countries” (p. 194). Analysts, policymakers and occasionally researchers have the tendency and willingness to make entrepreneurial intensity equal with economic growth, as for example the Commission of the European Communities (2004).

Laukkanen, Nagy, Hirvonen, Reijonen & Pasanen (2013) conducted a research on the role of strategic orientation on business growth between Hungary and Finland. Emphasizing how earning orientation, entrepreneurial orientation, market orientation, and brand orientation effect business performance in an SME context. Danis and Shipilov (2002) concentrated on entrepreneurial development in the context of post-socialist economies analyzing Hungary and Ukraine. They involved systematic, historical, cultural, economic and societal factors alongside with government policies, and measured the influence of those on entrepreneurial ventures. Although, the aforementioned, and other studies slightly have involved the field of entrepreneurship, however, investigating the EO – performance relationship only in Hungary is still untouched by any literature.
According to Global Entrepreneurship Monitor (GEM, 2014) the entrepreneurial activity in Hungary is lower than the economic level would indicate. The study shows high standards of entrepreneurial intention, which may serve as a catalyst for entrepreneurship and corresponding economic activities. On the other hand, Slevin and Terjesen (2011) found there are differences in entrepreneurship perception favorability of country populations, distinguishing between highly favorable (e.g. Ireland and United States) and less favorable (e.g. Hungary and Japan). Hungary’s post-social, transitional market nature and the drawn up contradictions among studies suggest further researches are needed to understand more deeply these markets, and how the turbulent environment effects the entrepreneurial actions. We truly believe this study will boost future researches in Central and Eastern Europe, respectively to the upward trend of foreign direct investment (FDI), outsourcing, and venture investment in emerging and developing markets. In addition, this study further develops the conceptual and a posteriori framework of scholar literature and provides another research literature to meta-analyses towards a universally understood body.

THEORETICAL BACKGROUND AND RESEARCH QUESTIONS

We employ circumspective attempt to differentiate between entrepreneurship and EO (Miller, 2011). Bourgeois’ (1980) strategic management literature distinguishes between content and process of entrepreneurship; in the early stages entrepreneurship was adequate with “going into business” and “what kind of business shall we launch?” Alongside with the field development of strategic management, emphasis reallocated to entrepreneurial processes embracing risk taking, experimenting with existing and future technologies and adopting propensity to seize new opportunities (Bourgeois, 1980; Lumpkin & Dess, 1996). The cardinal distinctive point between the two concepts is hidden in the decoupling of “what” from “how” (Miller, 2011). Lumpkin and Dess (1996) noted a corresponding distinction, as EO represents an entrepreneurial process that implies how a new-borne venture is undertaken. On the other hand side entrepreneurship refers to the substance of the process itself, highlighting the decision by addressing
attention to what is undertaken. Miller (1983) suggested a firm has an entrepreneurial orientation if the entity “engages in product market innovation, undertakes somewhat risky ventures, and is first to come up with proactive innovations, beating competitors to the punch” (p. 771). From the aforementioned statement we arrive accordingly to “innovativeness”, “risk taking” and “proactiveness” used by Lumpkin and Dess to characterize and test the fundament of EO.

**Defining Entrepreneurial Orientation**

In this study we adopt Miller’s (1983) three-dimension construct in order to measure the corporate entities’ EO. The psychometric characteristics of EO scale divide authors into two groups regarding whether it is a reflective indicator (unidimensional measure) (e.g., Covin & Slevin, 1989; Miller, 1983; Wiklund & Shepherd, 2005) or a formative indicator (multidimensional measure) (e.g., Lumpkin & Dess, 1996, 2001; Wagner, Wetzels & Winklhofer, 2005). Miller (1983) defined his three-dimension EO scale a basic, unidimensional strategic orientation:

“In general, theorists would not call a firm entrepreneurial if it changed its technology or product-line ('innovated' according to our terminology) simply by directly imitating competitors while refusing to take any risks. Some proactiveness would be essential as well. By the same token, risk-taking firms that are highly leveraged financially are not necessarily entrepreneurial. They must also engage in product market or technological innovation“ (p. 780).

We adopt a similar method, excluding the other two possible dimensions of EO: competitive aggressiveness and autonomy. Studies have argued (e.g., Covin & Slevin, 1989, 1991; Covin & Covin, 1990) that if competitive aggressiveness and proactiveness are distinct, independent concepts suggest that proactive organizations compete with competitors on the market. Based on Miller’s (1983) three-dimension strategic posture scale, Covin and Slevin (1989) described the factors in the following way:
“An entrepreneurial strategic posture is characterized by frequent and extensive technological and product innovation, an aggressive competitive orientation, and a strong risk-taking propensity by top management” (p. 79).

The overwhelming majority of literature measuring EO use autonomy as the extent to which freedom is granted to individuals, teams and SBUs inside a corporate culture to boost productive brainstorming sessions and to generate promising ideas to foster entrepreneurship occur. Organizational autonomy is often hallmarked by a two-step process involving a project definition undertaken by one or several organizational members or teams, and a project impetus carried out by individuals or champions who sustain the autonomous effort (Lumpkin & Dess, 1996). Our research study places business organizations as entities under the spotlight, so we adopt Miller’s (1983) three-dimension strategic posture scale to measure EO. Therefore a scale will be developed in order to measure strategic posture on these three dimensions according to Covin and Slevin’s (1989), Miller’s (1983) scales and Khandwalla’s (1977) “ENTRESCALE”.

**Concept of Business Performance**

Business performance improvement is the heart of strategic management suggesting that the relationship between EO and performance is within an inch inseparable serving as a supreme benchmark of EO researches. Not just in longitudinal, but within chronologically ad-hoc studies, business performance serves as a “time test of any strategy” and utilized as the foremost measure of success (Venkatraman & Ramanujam, 1986). To define business performance, we adapt Venkatraman and Ramanujam’s (1986) domain model (Figure 1) that “reflects the perspective of strategic management” in which business performance is “the subset of the overall concept of organizational effectiveness” (p. 803). We employ two additional dimensions inside the financial performance core to deepen the model and in parallel to bring it closer to the study.
To measure EO’s impact on business performance, the “question is whether the treatment of business performance should be differentiated from the overall discussion on organizational effectiveness” (Venkatraman & Ramanujam, 1986, p. 802). According to Venkatraman and Ramanujam (1986) it is a subset of the overall concept organizational effectiveness, while business performance is augmented by organizational effectiveness (Figure 1):

Figure 1: Circumscribing the domain of business performance

Modified from: Venkatraman and Ramanujam, 1986

The narrowest two circles inside the ‘domain of financial performance’ are representing two of the three most commonly used financial dimensions among all of them, namely ‘growth’ and ‘profitability’ (Murphy, Trailer & Hill, 1996). The next circle as the core of the model, on which the other two augmented layers build on, is the financial
performance of organizations reflecting the accomplishment of economic goals. Sales growth, return on investment (ROI), return on equity (ROE) would be typical indicators of such a measure. The second layer of the model incorporates operational (non-financial) performance in addition to the financial core. Under this framework manufacturing value-added, market share position and other technological measures would be representative. The aforementioned two indicators are encompassed into a complex domain tracking organizational effectiveness as an entity (Venkatraman & Ramanujam, 1986). On theoretical ground the relationship between EO and performance called in question particularly with financial performance, whereas economic indicators are the most sensitive to strategic planning and implementation of firms (Rauch et al., 2009). Rauch et al. (2009) argue the straightforwardness of operational (non-financial) performance as an EO indicator due to tenuous direct effect: “If non-financial goals are of prime importance, the uncertainty associated with the bold initiatives and risk taking implied by an EO could potentially lead to agony, sleepless nights, and less satisfaction. However, satisfaction may increase because of better financial performance.”...“Therefore, it appears reasonable to assume that the relationship should be higher for EO and financial performance than for EO and nonfinancial performance” (p. 10).

In accordance with Rauch et al. (2009) we apply financial performance as the supreme measure of EO’s impact on business strategy. Financial performance employed as a formative indicator (multidimensional measure), assuming EO – depending on the construct – might influence the financial statements distinctly. From the studies of Venkatraman and Ramanujam (1986), Murphy, Trailer and Hill (1996) and Hermann, Alexander and Matthias (2010) indicators will be applied to measure the impact of EO on financial performance.

Miller (1983) defined “a non-entrepreneurial firm is one that innovates very little, is highly risk averse, and initiates the moves of competitors instead of leading the way” (p. 771). EO’s positive impact on business performance is hypothesized since Zahra and Covin (1995) describe EO as a “potential means for revitalizing established companies” (p. 43), while Lumpkin and Dess (1996) define that “EO refers to processes, practices,
and decision-making activities that lead to a new entry” (p. 136). As stated before: business performance improvement is the heart of strategic management and “conceptual arguments suggest that EO leads to higher performance” (Rauch et al., 2004, p. 8). We hypothesize that firms with higher EO has a better performance.

**H1:** Firms with higher EO have a better performance, than the ones with lower EO

### Business environment

To measure the EO – performance construct, firstly, it is indispensable to define the dimensionality of each single variable. The application of the aforementioned construct and their attachment between the drawn up theoretical framework and its empirical utilization vary widely across the disposable literature. Basically, it is up to the author(s) in which direction the study develops and what sort of dependent, independent and control variables are formulated in order to extract the real-time correlations among.

The EO – financial performance is a bivariate relationship, however it can be improved with other key variables. Contingency theory holds the same ground, wherein a “congruence fit” among key variables positively impact the outcome. Introducing moderators into bivariate relationship reduces the possible research failures and leads to an advanced result and understanding of the interrelationship (Rauch et al., 2009). Zahra and Covin (1995) argue that “contextual influences affect the level of success achieved by firms” that practice EO (p. 48). Corporate entities have to adopt to distinct conditions depending on the industry, competitors and their environmental aggressiveness and to many moderating variables. Contextual influences are divided into two broad groups as we distinguish between “internal factors” (e.g., organizational structure) and “external factors” (e.g., industry life-cycle, competition, industry globalization) (Zahra & Covin, 1995). Dess and Beard decreased the “codification of six environment...to three: munificence (capacity), complexity (homogeneity-heterogeneity, concentration-dispersion), and dynamism (stability-instability, turbulence)” (p. 52). Basically, these
dimensions rely on two commonly held conceptualized environmental notions: “as a source of information” and “as a stock of resource” (Lumpkin & Dess, 2001, p. 436; Aldrich & Mindlin, 1978). Dynamism and complexity strictly relates to the uncertainty faced by the players of the industry, while munificence is a dependent on the mentioned factors to reach dissimilar resources (Lumpkin & Dess, 2001). We apply accordingly to Lumpkin & Dess and earlier researches two environmental construct; namely dynamism and hostility. “Dynamism relates to the rate of unpredictable change in the firm’s environment” (Lumpkin & Dess, 2001, p. 436), but it also undermines the general manager’s ability to predict the future of the given industry, alongside with their eroding impact deriving from their knowledge and experience (Lumpkin & Dess, 2001; Khandwalla, 1977). Since a dynamic environment brings unpredictable changes, and EO through its dimensions – innovativeness, proactiveness and risk-taking – involves opportunity seeking actions, engages in “creativity and experimentation” and takes “bold actions by venturing into the unknown” while “borrowing heavily and/or committing significant resources to ventures” (p. 9-10), we suggest that EO has a positive effect on performance in a dynamic environment (Rauch et al., 2009).

H2a: Dynamic environment has a positive moderating effect on the entrepreneurial orientation performance relationship.

H2b: Static environment has a negative moderating effect on the entrepreneurial orientation performance relationship.

To measure environmental dynamism we will rely on Miller’s (1987) work.

Hostility, which is often observed as the obverse of munificence, is “indicative of the scarcity and intensity of competition for environmental resources” (Lumpkin & Dess, 2001, p. 436; Covin & Slevin, 1989; Zahra & Covin, 1995). The intensity of competition in such circumstances is increased and the pressure is higher on business organizations in turn. In addition to that, there is “less slack of experimentation” for further and new strategies due to limited financial resources located for (Lumpkin & Dess, 2001). Hostile
environment contains less opportunity due to its saturated nature and more active competition (Covin & Slevin, 1989). Successful firms operating in such circumstances should provide something new for consumers and incorporate some newborn aspects of corporate management in order to stand out from the crowd. To achieve the foresaid egression, firms should have reasonable resources to re-invest in innovations and proactivity – which in case of additional success – may be further re-invested as a cycle. Covin and Slevin (1989) state “successful firms in hostile environments will gear their competitive efforts to prevailing conditions by aggressively trying to gain or maintain a competitive advantage” (p. 77). To reach such an advantage we hypothesize it results from innovative, proactive and risk-taking actions of entrepreneurial firms, than the non-entrepreneurial, passive and reactive firms (Covin & Slevin, 1989).

**H3a:** Hostile environment has a positive moderating effect on the entrepreneurial orientation performance relationship.

In benign environment business organizations are faced with much less intense circumstances, greater level of munificence and rationally they are not forced towards pulling uncertain steps and resource-consuming endeavors (Covin & Slevin, 1989). “Thus, while an entrepreneurial posture may just as easily result in a sustainable competitive advantage in a benign environment as in a hostile environment, such a posture may not be essential for superior performance, and could possibly represent an unwarranted risk” (p. 77) and might backlash the firm engaging with EO (Covin & Slevin, 1989). We hypothesize that EO in a benign environment could hit back the company, since it is an unnecessary risk to endeavor to reach competitive advantage and superior business performance.

**H3b:** Benign environment has a negative moderating effect on the entrepreneurial orientation performance relationship.

To measure environmental hostility we will adopt Khandwalla’s (1977) and Miller’s (1987) studies.
**Firm age as an exogenous variable**

Usually studies use firm age and size as a control variable, but in our case we want to investigate if firm age has any implication on the EO – performance relationship. On a generalized scale and in favorable conditions a firm grows with time in size and revenue. Following the concept, alongside with the employee number increase the upper management’s direct impact on the organizational entrepreneurial set might decrease accordingly. Since the top of the corporate hierarchy makes the prime decisions, we hypothesize that with the growth of corporate size, the EO of the firm will decrease in parallel. Considering the limited resource and network capabilities of micro firms and SMEs, companies face a higher uncertainty towards external environment, than large firms. Thus the EO – especially innovativeness and risk-taking – tends to be higher in order to obtain not just ongoing evolution, but stagnation in economic indications (Ha-Brookshire, 2009). Highlighting a chronological axis of a firm’s birth towards the present would start with a start-up with one or few founders and grow by the lapse of time. Based on the sketched theoretical framework, we hypothesize that the age of a corporate entity would have a moderating effect on the EO, thus the business performance.

**H4a:** Higher firm age has a negative moderating effect on entrepreneurial orientation performance relationship.

**H4b:** Lower firm age has a positive moderating effect on entrepreneurial orientation performance relationship.

To measure firm age we will adopt Loderer and Waelch’s (2010) study, while Amadeus database is also at hand, which encompasses comparable financial information for public and private firms across Europe.
## LITERATURE REVIEW

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<tr>
<th>#</th>
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- Relationship among EO, financial and non-financial measures  
- Measurement of performance  
- Implications on EO-performance and culture correlation |
| 2   | Clarifying the entrepreneurial orientation construct and linking it to performance | Lumpkin G. T.; Dess G. G. | 1996 | Article *Academy of Management Review*, 21(1), pp. 135-172 | - Clarifying EO construct  
- Alternative models for measuring EO-performance relationship |
| 3   | The structure of organizations                                         | Mintzberg, H.              | 1979 | Book Prentice Hall                            | - Organization structuring and grouping                                      |
| 4   | Capitalism, socialism and democracy                                    | Schumpeter, J. A.          | 1976 | Book George Allen & Unwin Ltd.                | - The bible of strategic management and entrepreneurship study  
- Clarifying basic and fundamental concepts |
- Dimensionality questions |
| 6   | The correlates of entrepreneurship in three types of firms             | Miller, D.                 | 1983 | Article *Management Science*, 29(7), pp. 770-791 | - Chief determinants of entrepreneurship, the process by which organizations renew themselves and their markets by pioneering, innovation, and risk taking |
- Distinction between initiatives and ‘new entry’  
- Basic guidelines for quantitative research in our field |
- Statistical analysis methods: main-effect -, contingency -, configuration approach |
<p>| 10  | The design of organizations                                            | Khandwalla, P. N.          | 1977 | Book Harcourt Brace Jovanovich, Inc.          | - One of the most important studies on organizational design                |</p>
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| 11| Linking two dimensions of entrepreneurial orientation to firm performance: the moderating role of environment and industry life cycle | Lumpkin, G. T. & Dess, G.         | 2001 | *Journal of Business Venturing*, 16(5), pp. 429-451 | - The study concentrates on only competitive aggressiveness and proactiveness  
- Investigates how these two approaches are related to each other |
- Three-way interaction model |
| 15| Reconceptualizing entrepreneurial orientation                         | Anderson et al.                  | 2015 | *Strategic Management Journal*, 36(10), pp. 1579–1596 | - Focusing on the question of whether EO is an attitudinal construct, a behavioral construct, or both |
| 16| A conceptual model of entrepreneurship as firm behavior               | Covin, J. G. & Slevin, D. P.     | 1991 | *Entrepreneurship: Theory & Practice*, 16(1), pp. 7-25 | - Defining entrepreneurship as a conceptual model on organization-level phenomena |
| 17| Does the firm size matter on firm entrepreneurship and performance?: US apparel import intermediary case | Ha-Brookshire, J. E.             | 2009 | *Journal of Small Business and Enterprise Development*, 16(1), pp. 132-146 | - This paper investigates whether the relationship between firm entrepreneurship and performance is dependent on firm size within a small and medium-size enterprise (SME) |
### Articles, Journals and books on (business) performance

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| 20     | The effect of strategic orientations on business performance in SMEs: A multigroup analysis comparing Hungary and Finland | Laukkanen, T.; Nagy, G.; Hirvonen, S.; Reijonen, H. & Pasanen, M             | 2013 | Article                  | - One of the studies found on Hungary which touches partly EO  
- Part of the work: collecting all studies on Hungary                                                                                  |
| 21     | A comparison of entrepreneurship development in two post-communist countries: the cases of Hungary and Ukraine | Danis, M. & Shipov V.                                                        | 2002 | Article                  | - One of the studies found on Hungary which touches partly EO  
- Part of the work: collecting all studies on Hungary                                                                                  |
| 22     | Entrepreneurial orientation: Reviewing three papers and implications for further theoretical and methodological development | Slevin, P. & Terjesen, A.                                                    | 2011 | Article                  | - It evaluates the contributions to entrepreneurial orientation (EO) in three articles: Wales, Monsen, and McKelvie; Wiklund and Shepherd; and Morris, Webb, and Franklin, commenting on key findings and their implications for further development of EO. |

| Articles, Journals and books on business environment

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| 23     | Measuring performance in entrepreneurship research                     | Murphy, G. B.; Trailer, J. W. & Hill, R. C.                                  | 1996 | Article                  | - Dimensionality of performance  
- Meta- analysis of EO literature on business performance indicators                                                                         |
| 24     | Measurement of business economic performance: an examination of method convergence | Venkatraman, N. & Ramanujam V.                                               | 1987 | Article                  | - Explicitly evaluates the degree of convergence across statistical models measuring performance                                             |
| 25     | Measurement of business performance in strategy research: a comparison of approaches | Venkatraman N. & Ramanujam V.,                                               | 1986 | Article                  | - 10 different approaches to measure business performance                                                                                 |
| 26     | Strategy and environment: a conceptual integration                    | Bourgeois, L. J.                                                             | 1980 | Article                  | - Relationship between strategy and environment  
- We apply it in order to crystallize the difference between entrepreneurship and EO                                                            |
| 28     | Strategic management of small firms in hostile and benign environment | Covin J. G. & Slevin D. P.                                                   | 1989 | Article                  | - Environmental hostility’s impact on corporate performance  
- Dimensionality of EO through a strategic posture approach                                                                                  |
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<tr>
<td>30</td>
<td>The development and testing of organization-level entrepreneurship scale</td>
<td>Covin, J. G. &amp; Slevin, D. P.</td>
<td>1981</td>
<td>Article</td>
<td>- Designed instruments (scales) to measures organization-level entrepreneurial behavior</td>
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<td>32</td>
<td>The structural and environmental correlates of business strategy</td>
<td>Miller, D.</td>
<td>1987</td>
<td>Article <em>Strategic Management Journal</em>, 8(1), pp. 55-76</td>
<td>- Environmental scales are adopted and/or modified from this study - Examines several environmental dimensions</td>
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**Articles, Journals and books on statistical methods**

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<td>33</td>
<td>The concept of fit in strategy research: toward verbal and statistical correspondence</td>
<td>Venkatraman, N.</td>
<td>1989</td>
<td>Article <em>Academy of Management Review</em>, 14(3), pp. 423-444</td>
<td>- Develops a conceptual framework and identifies six perspectives of fit-fit as moderation, fit as mediation, fit as matching, fit as gestalts, fit as profile deviation, and fit as co-variation - each implying distinct theoretical meanings and requiring the use of specific analytical schemes</td>
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**Online sources**

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<td>Amadeus database</td>
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<td>To understand company sizes (SMEs)</td>
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<td>- Analysing entrepreneurship activities inside the EU</td>
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METHODOLOGY, RESEARCH DESIGN AND SAMPLING

Method of research: Hybrid technique

The research design of this study will embody two widely used techniques: a quantitative survey-exploratory method via online survey and qualitative in-depth face-to-face interviews.

The survey will target the top of the hierarchy of the corporate entities, since C-level (Chief-level; referred to the highest management executives) executives and upper management have the most reliable line of sight on the given firm. It will ask them to indicate on 7-level Likert-scale their corporate entities’ EO – innovativeness, proactiveness, risk-taking – the hostility and dynamism of the business environment in which they operate. Age will be measured through pre-set interval possibilities, but these should be reachable through the Amadeus database.

- To indicate EO: ENTRESCALE (Khandwalla, 1977), Covin and Slevin’s (1989), Miller’s (1983) studies’ applied scales
- To indicate financial performance: Venkatraman and Ramanujam (1986); Murphy, Trailer and Hill (1996); Hermann, Alexander and Matthias (2010) studies are applied
- To indicate environmental dynamism: Miller’s (1987) work
- To indicate environmental hostility: ENTREScale (Khandwalla, 1977) and Miller’s (1987) work
- To indicate age:

To extract confidential financial indicators from an online-based survey, even if anonymity to the respondents is granted and financial measures are treated confidentially, might be cumbersome. Thus, if needed we will gain the financial indicators from Amadeus database and adopt them accordingly to the pre-set measurement scales used in the online survey. In summary, primary data collection will be implemented through
online surveys and qualitative face-to-face interviews targeting firm C-level and upper management. Secondary (archival) financial indicators will be extracted from the Amadeus database, but only if necessary. Finally, after collecting the data from enterprises PLS statistical software will be used in order to gain the moderating (main-effect) and contingency effect of independent variables (EO, environmental hostility, environmental dynamism and firm age) on the dependent variable (financial performance).

**Instrument(s):** Software used for online survey – **Sphinx**

**Archival data:** Database used to gain e-mail addresses of firms and financial information about public and private companies from Hungary if needed – **Amadeus database**

**Statistical software:** **PLS**

Quantitative questionnaires combined with qualitative research technique due to two main reasons. Firstly, to acquire insights from upper managers to support the online collected data through the survey. Market insights are expected from professionals from higher positions to obtain a better understanding, and to perceive EO’s importance and feasibility as strategic orientation in this specific economy. Secondly, to assist the quantitative research, because the possibility of not reaching the prescribed threshold of respondents is higher than average due to the target group’s professional position. In-depth, face-to-face interviews will be conducted in order to reach the desired data.

**Sampling and control variables**

Company size stands for the control variable of the study in order to filter the sample. We use the most common measure for company size, which is in a statistical context, is the number of persons employed (eurostat). SMEs are defined as follows:

- Micro enterprises: fewer than 10 persons employed
- Small enterprises: 10 to 49 persons employed
• Medium-sized enterprises: 50 to 249 persons employed.

“The number of persons employed should not be confused with employees or full-time equivalents; ‘persons employed’ includes employees but also working proprietors, partners working regularly in the enterprise and unpaid family workers” (eurostat).

The study will be carried out in Hungary, targeting SMEs (employee number under 250), which is at the moment (22/09/2016) according to the Amadeus database are numerically 3511 firms (Amadeus database). The population size is 4338 (Amadeus database), and based on the sample size calculation 384 respondents is the threshold to reach.

Applied statistical model

Main-effect or also called universal approach is applied to measure the independent variable’s direct effect on the dependent variable (financial performance). In this model the independent variable doesn’t interact with any other, the influence is direct on the dependent variable, wherein it implies that the model or construct is valid under all circumstances (Hermann, Alexander & Matthias, 2010).

Secondly, the applied contingency approach makes a step further, assuming “that the extent and direction of an independent variable’s impact on a dependent variable will vary under certain circumstances” (Hermann, Alexander & Matthias, 2010, p. 186; Wiklund & Shepherd, 2005). It employs a moderator into bivariate relationship to understand more the relationship between the direct two variables.

WORK PLAN

<table>
<thead>
<tr>
<th>#</th>
<th>Time</th>
<th>Task</th>
<th>Phases</th>
<th>Completion</th>
</tr>
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</table>
| 1 | 01/09/15 – 22/09/15 | Exposé | • Finding a thesis topic  
• Development of the topic and finding the focus of study  
• Literature review | Completed  |
<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Task</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>23/09/15 – 22/10/15</td>
<td>Research design, Final exposé</td>
<td>Handing in first exposé</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Partially done</td>
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<td>3</td>
<td>23/10/15 – 25/10/15</td>
<td>Statistical methodology</td>
<td>Hand in the final exposé, Design of quantitative survey and qualitative questionnaire, Acknowledge the usage of Amadues database, Elaboration of statistical methods</td>
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<td>26/10/15 – 31/10/15</td>
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<td>4</td>
<td>01/11/15 – 14/11/15</td>
<td>Launch of survey, Field research (qualitative)</td>
<td>Getting familiar with PLS software</td>
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<td>To follow</td>
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<td>5</td>
<td>15/11/15 – 28/11/15</td>
<td>Analysis 1</td>
<td>Analyzing interviews, Writing theoretical background, Write methodology</td>
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<td>29/11/15 – 30/11/15</td>
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<td>6</td>
<td>01/12/15 – 20/11/15</td>
<td>Analysis 2, Final thesis</td>
<td>Analyzing surveys, Conduct analysis, Final thesis</td>
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<tr>
<td>21/12/15 – 31/12/15</td>
<td>BUFFER</td>
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</tr>
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**OVERVIEW OF CHAPTERS**

Abstract

1. Introduction

   A: Research context and objective

   B: Structure of the study
2. Theoretical framework
   A: Contingency theory applied
   B: Entrepreneurship and entrepreneurial orientation: two distinct concepts
   C: Entrepreneurial orientation
      Innovativeness
      Proactiveness
      Risk-taking
      Competitive aggressiveness
      Autonomy
   D: Business performance
   E: Contextualizing business environment
      Internal factors
      External factors
   F: Entrepreneurial orientation – performance relationship
   G: Effect of environment on EO – performance relationship

3. Research question and hypotheses
   A: Problem statement
      Research gap
   B: Research question
   C: Hypotheses
   D: Conceptual framework

4. Methodology and research design
   A: Research design
      Quantitative survey
      Qualitative interviews
   B: Survey and interview protocol
   C: Data collection
      Primary sources
      Secondary, archival sources
D: Synthesis of data
E: Statistical method applied

5. Analysis of results
   A: Description of the variables
      Dependent variable
      Independent variables
   B: Analysis

6. Discussion and conclusion
   A: Conclusion
      Is the researched market different?
   B: Limitations
   C: Managerial implication
   D: Suggestions for future researches

7. Bibliography

8. Appendix
REFERENCES


Schumpeter, J. A. (1976), *Capitalism, socialism and democracy*, George Allen & Unwin


