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Kovacs, David; Zulauf, Katrin; Ürkmez, Taylan et al.

## Article

### Linking entrepreneurial orientation to firm performance in a post-socialist market context : the case of Hungary

Management dynamics in the knowledge economy

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*Reference:* Kovacs, David/Zulauf, Katrin et. al. (2016). Linking entrepreneurial orientation to firm performance in a post-socialist market context : the case of Hungary. In: Management dynamics in the knowledge economy 4 (4), S. 571 - 589.

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#### Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics  
Düsternbrooker Weg 120  
24105 Kiel (Germany)  
E-Mail: [rights\[at\]zbw.eu](mailto:rights[at]zbw.eu)  
<https://www.zbw.eu/econis-archiv/>

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## **Linking Entrepreneurial Orientation to Firm Performance in a Post-Socialist Market Context: the Case of Hungary**

**David KOVACS**

*University of Kassel*  
1 Moenchebergstr St., Kassel, 34125, Germany  
kovacsdavid009@gmail.com

**Katrin ZULAUF**

*University of Kassel*  
1 Moenchebergstr St., Kassel, 34125, Germany  
zulauf@wirtschaft.uni-kassel.de

**Taylan ÜRKMEZ**

*University of Kassel*  
1 Moenchebergstr St., Kassel, 34125, Germany  
uerkmez@wirtschaft.uni-kassel.de

**Dominik BROCKHAUS**

*University of Kassel*  
1 Moenchebergstr St., Kassel, 34125, Germany  
brockhaus@wirtschaft.uni-kassel.de

**Ralf WAGNER**

*University of Kassel*  
1 Moenchebergstr St., Kassel, 34125, Germany  
rwagner@wirtschaft.uni-kassel.de

**Abstract.** *Entrepreneurial orientation provoked the interest of numerous scholars as well as political and administrative decision-makers. Both start-ups and already established corporate entities are increasingly persecuting new opportunities, products, and business models in order to establish superiority above their competitive environment. The tendencies evince an optimistic impact of entrepreneurial orientation on business performance, namely on financial performance. Beyond the aforementioned relationship, there are impulses such as environmental and organizational factors, which are affecting the businesses. The results of this study provide evidence of the effect of entrepreneurial orientation on business performance in a post-socialist context. We test the impact of three moderators on this bivariate relationship. In contrast to the substantial body of literature for Western markets, we contribute to minimizing the considerable gap of research in post-socialist economies. Entrepreneurial orientation as an organizational behavior may affect the financial performance of businesses differently in distinct market contexts. Both, internal and external factors are crucial to identifying, analyze and monitor, to achieve superior performance and to overcome competitors. This study builds upon a stratified sampling survey of Hungarian company owners and managers from the Amadeus database. The study uses a*

*deductive approach. For the analysis, we rely on structural equation modeling using the PLS algorithm. Our study contributes to the existing literature by means of confirming the entrepreneurial orientation to firm performance relationship for Hungary. In this context, we test the moderating effects of environmental dynamism, environmental hostility as environmental factors and firm age as an organizational factor. Environmental hostility is closely related to an unfavorable environment, deriving from rapid and radical changes in the industry, which are typical for post-soviet economies. In such dynamic environment, destructive innovations of the industrial actors appear more often as the economy switches to an open competition, capitalist market. The results confirm that the internal and external factors have no significant influence on the entrepreneurial orientation to financial performance direct relationship.*

**Keywords:** *entrepreneurial orientation, environmental dynamism, environmental hostility, financial performance, firm age, post-socialist economy.*

## Introduction

Entrepreneurship is essential to improve wealth and the economic welfare (Covin & Slevin, 1986; Zulauf et al., 2015). A substantial body of Entrepreneurial Orientation (EO) literature provides evidence that firms engaged with entrepreneurial guidance outperform their more conservative competitors (Anderson, Kreisen, Kuratko, Hornsby, & Eshima, 2015).

Schumpeter's gale of creative destruction commits entrepreneurs to explicit ongoing phenomena in our global economy. The change makers with higher EO distinguish themselves by a higher likelihood of grasping new opportunities, products, and business models. A new entry in the market incorporates any innovative action undertaken by an individual, strategic business unit or on a corporate level (Lumpkin & Dess, 1996). Those actions are responsible for the constant changes and distortions of existing market segments and open up new opportunities. EO redounds upon new entries and venture boldness in domestic and cross-national contexts (Schuster, Falkenreck & Wagner, 2015), where innovativeness and risk-taking represent the core of that action. Some scholars (i.e. Knight, 1997; Thomas & Mueller, 2000; Rauch, Wiklund, Lumpkin & Frese, 2009) indicate that dimensions of EO—independently from its dimensionality—may vary across countries, thus through cultures. Consolidating the results of previous research, we assume that an innovative ad-hoc managerial decision within a hostile and turbulent business environment might attract stakeholder's approval in a country where uncertainty avoidance is low, such as Sweden, while in Japan it may be punished and perceived as an absolute un-respectful and negative action.

Our main contribution is evaluating the impact of moderating context effects on the relationship of EO and financial performance (FP) in Hungary. The remainder of the study is structured as follows. First, we provide an overview of the relevant literature of entrepreneurial orientation in transition economies. The following section describes the research hypotheses development. The third section consists of the study design and data description. Section four demonstrates the effects of entrepreneurial orientation on firm performance. The final section concludes.

### **Entrepreneurial orientation in transition economies**

Entrepreneurial firms are organizations operating with an entrepreneurial perspective at the strategic decision-making level in which specific organizational behavior patterns are presented. Moreover, those particular patterns occur on all levels, they stand for the philosophy, strategic orientation and followed management practice on top management level (Covin & Slevin, 1991).

Simultaneous development progress permanently replaces existing models and processes with “new entries”, seeking 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). A closely related construct - but on the individual level - is Entrepreneurial Alertness (EA). EA is defined as a perceptual and cognitive processing skillset that embraces a magnified, direct opportunity identification action on the level of entrepreneurs (Gaglio & Katz, 2001). Alert individuals are not only capable of identifying and spotting new entries but also contextualizing in order to harness and exploit them into a venture-creating process (Kirzner, 1979). It is central for entrepreneurship to act upon a freshly identified opportunity and overturn that hanging possibility into a meaningful action (Alvarez & Barney, 2007; Zahra, 2008). Precedent literature has placed EA as a prior cognitive mindset towards strategic entrepreneurial orientation (Chaston & Sadler-Smith, 2012; Lumpkin & Dess, 2001; Valliere, 2013; Webb et al., 2011).

Measuring EO on a strategic and conceptual firm level, as the measurement unit, helps to diagnose a more holistic and stable relationship between EO and organization performance on a macro-level (Covin & Slevin, 1991). In this study, EO construct is defined alike Miller’s model (1983), where it has three distinct dimensions as innovativeness, risk-taking, and proactiveness.

Furthermore, regards to its psychometric characteristics we follow a reflective indicator (unidimensional measure) over a formative indicator (multidimensional) approach as Miller (1983), Covin and Slevin (1989) and Wiklund and Shepherd (2005). "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 risk. 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" (Miller, 1983, p.780).

Precedent literature has argued (e.g., Covin & Slevin, 1989, 1991) that if competitive aggressiveness and proactiveness are distinct, independent concepts suggesting that proactive organizations compete with competitors on the market. 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). A Higher magnitude of autonomy inside the top-management definitely foster innovativeness and risk-taking, but this measure may lead to misunderstanding of the concept since autonomy on the firm level should analyze all levels of the organization. Innovations, for example, can come from the research and development (R&D) department or a new marketing campaign might boost the selling volume from the marketing department. Our research study places business organizations as entities under the spotlight, thus we adopt Miller's (1983) three-dimension, unidimensional strategic posture. In addition, "more recently, the three initial dimensions appeared to be the ones with the higher validity" (Kreiser, Marino & Weaver, 2002, p.76). Therefore, autonomy and aggressiveness are excluded from the unidimensional measure of EO.

A comprehensive literature review on EO leads to the result that post-socialist, transforming economies attracted significantly less attention from scholars and researchers in the past. There is an abundance of empirical evidence on EO in developed economies and mature markets, such as the United States, while other large-scale markets as Eastern Europe, have remained unexplored (Frank, Kessler & Fink, 2010). Ha-Brookshire (2009) noted entrepreneurs "to play a significant role in firms' competitiveness, revitalization, and superior performance" not just in developed economies, but also in transitional economies (p.131). In this vein, Marcotte (2011, p.194) argues that "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.

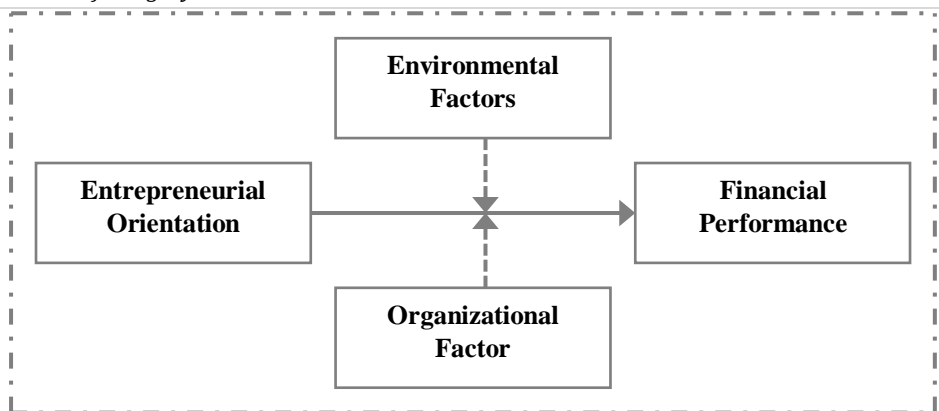
These rankings have been notably used to monitor or predict the economic performance of countries.” Analysts, policymakers and occasionally researchers have the tendency and willingness to make entrepreneurial intensity equal to economic growth, as for example the Commission of the European Communities (2004).

In their comparative study of strategic orientation’s impact on business growth, Laukkanen, Nagy, Hirvonen, Reijonen, and Pasanen (2013) challenge the differences between Finland and Hungary. They focus on the effect of earning orientation, EO, market orientation, and brand orientation on business performance in an SME context. Complementing evidence, Danis and Shipilov (2002) highlights entrepreneurial development in the context of post-socialist economies comparing Hungary and Ukraine. The aforementioned and other studies slightly have elaborated the field of entrepreneurship; however, investigating the EO–performance relationship only in Hungary is still not addressed by any previous research.

According to the Global Entrepreneurship Monitor (Kelley, Singer & Herrington, 2015), 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 catalyzer for entrepreneurship and corresponding economic activities. On the other hand, Slevin and Terjesen (2011) found that there are differences in entrepreneurship perception favorability of country populations, distinguishing between highly favorable (e.g., Ireland and the United States) and less favorable (e.g., Hungary and Japan). Hungary’s post-social, transitional market and the drawn up contradictions among studies reveal that further research is needed in order to understand these markets more deeply, and how the turbulent environment affects the entrepreneurial actions.

### **Contextualization, constructs and research hypotheses**

Adapting the contingency theory approach of Khandwalla (1977) and Venkatraman (1989) we consider the contextual impact on the relationship of EO and FP to be moderating variables. Figure 1 depicts the conceptual model of this study that builds upon prior work of Lumpkin and Dess (1996).



**Figure 1. Contextualization of the EO - FP relationship (modified from Lumpkin & Dess, 1996)**

EO as a variable is divided into three predictors – innovativeness, risk-taking, and proactiveness – according to Miller’s model (1983) composing a unidimensional variable. Thus, we do not treat the three indicators as separate variables, but as a conceptual entity. Two indicators, namely profitability and growth, capture the FP variable. Indeed, according to its psychometric characteristics. Nonetheless, due to the predictor duo, the construct identifies two dimensions, which are crucial to capturing a more depth understanding of financial performance (Murphy, Trailer & Hill, 1996). We adopt the scales for profitability from Venkatraman and Ramanujam (1986). These include ‘return on corporate investment’ and ‘return on investment relative to competitors’; however we applied only the latter to avoid a posteriori item removal due to an overlapping nature.

The moderator variables are divided into two main groups: organizational or internal factors, and environmental or external factors (Lumpkin & Dess, 1996). In this study we consider one organizational factor; firm age (FA), and two environmental one; namely environmental hostility (EH) and environmental dynamism (ED).

“How the environment affects the organization depends on two crucial factors: the kind and quality of environmental information reaching decision makers and the interpretation and use of the information by them. How the information is interpreted and used depends in turn on the goal and attitudes of the decision makers” (Khandwalla, 1977, p.331). Environmental hostility implies an unfavorable environment for business organizations. EH is assessed by four items – safety level of the external environment, investment opportunities, dominative nature of the business environment, and the threatening degree of competitors’ actions. The

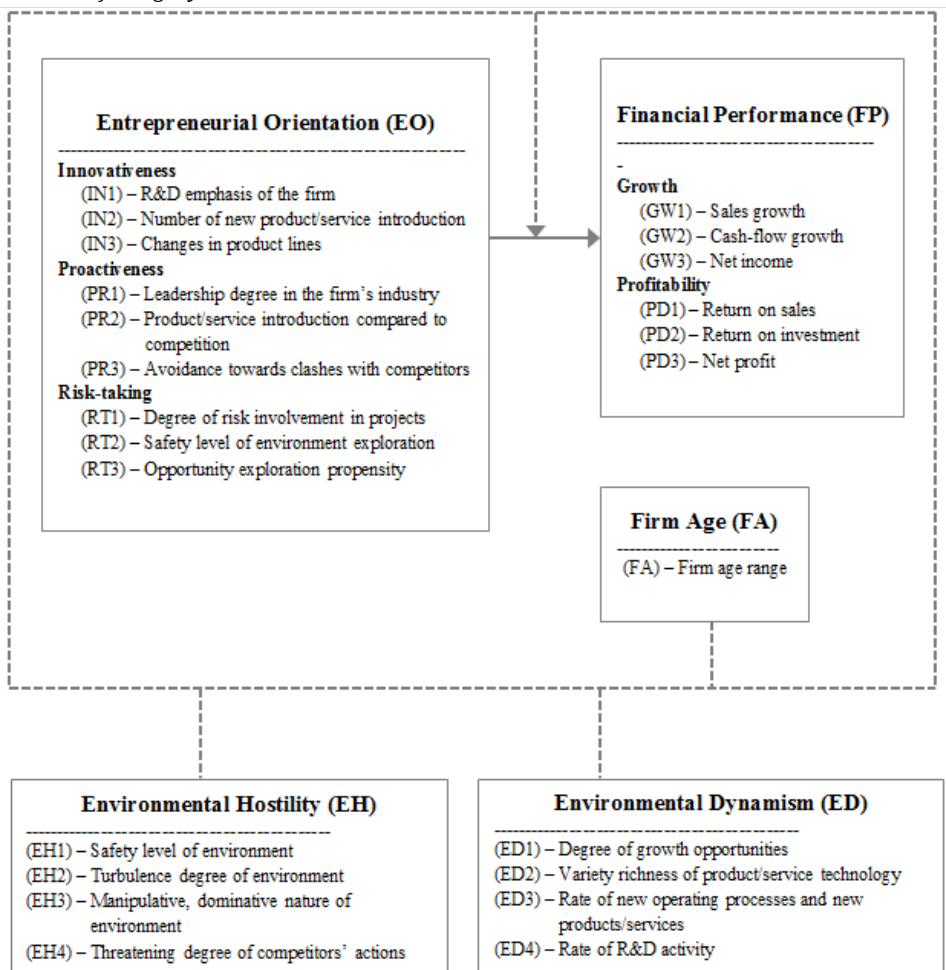
wordings are adapted from Khandwalla (1977), with a minor modification readjusted from Miller's (1987) hostility scale.

The strategic management literature, especially organization theory is immensely involved and deals with environmental dynamism and points out that the lack of economic pattern, unpredictable turnover are the superior measures of "environmental stability-instability" (Dess & Beard, 1984). Organizations acting in a dynamic environment are more willing to establish further clusters and segments inside their own industry branch due to the survival-driven nature of the business surrounding. Four items capture the ED in which the firms operate. The first addresses the external environment from decreased growth opportunities to increment in those opportunities. The second item scales the environment properties from diminution of product/service technology to increment of those. The third item challenges the environment on a scale starting from a high rate of innovation of processes and products/services to the low rate of those. The fourth item assesses the R&D rate from high to low in the firm's principal industry. All four indicators are adapted from Miller's (1987) environmental dynamism scale.

If we draw a chronological axis representing aging of a firm, structural modifications empirically never are linearly growing or changing. Starbucks (1965) discusses what he mentions as "metamorphosis models," which views growth not as a "smooth continuous process" but as a "market by abrupt and discreet changes" in organization conditions and structures (p. 486). By the lapse of time, the organization experiences changes, but not in a linear chronological flow, but rather in an infrequent random changing behavior. However, investigating the start and end point of the drawn-up time axis, on a theoretical ground the change in size, structure should be linear.

These indicators build a complex conceptual framework, where all the exogenous variables and their influence can be acknowledged on the endogenous financial performance outlined in Figure 2.





**Figure 2. Conceptual Model**

The conceptual framework embraces only one direct causal relationship from EO to FP (H<sub>1</sub>). The impact of the other exogenous constructs is assumed to moderate this causal relationship (H<sub>2</sub>-H<sub>4</sub>). Our hypotheses follow the Bourgeois' (1980) strategic management literature distinction 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 distinctive point between the two concepts is hidden in the decoupling of "what" from "how" (Miller, 2011).

Consequently, we define EO aligned to Miller's (1983) and Covin and Slevin's (1991) standpoint as a marriage of firm level "entrepreneurial behavior and managerial inclination at the strategic decision-making level, favoring actions with uncertain outcome" (Anderson et al., 2015).

Entrepreneurship and EO studied for various reasons, but the primary purpose of all studies is the major overriding perspective on the topic, which is the broad belief that "entrepreneurial activity stimulates general economic development as well as the economic performance of individual firms" (Covin & Slevin, 1991, p.9). Accordingly, any micro or macro level of entrepreneurial orientation, especially if it is observed as a firm behavior, would be neglectful to leave behind or subordinate the construct of performance as a measure (Covin & Slevin, 1991). Performance improvement is the heart of strategic management and "conceptual arguments suggest that EO leads to higher performance" (Rauch et al., 2009, p.8).

H1: Firms with higher EO have a better financial performance than the ones with lower EO.

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). In a "dynamic environments where demand constantly shifts, opportunities become abundant, performance should be highest for those firms that have an orientation for pursuing new opportunities because they have a good fit between their strategic orientation and the environment" (Wiklund & Shepherd, 2005, p.77).

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

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

The 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 aforesaid egression, firms should have reasonable resources to re-invest in innovations and proactivity that, – in the case of additional success – may be further reinvested 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).

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

In a benign environment, business organizations are faced with much less intense circumstances, a 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).

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

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. As Mintzberg (1979) states, organizations grow "more or less continuously, but its structure is changed only in discrete steps" (p.232). Litterer (1973) characterized the transition from an informal organization to the one supervised and coordinated by managers, followed by a more developed hierarchical managerial structure. These create a strong theoretical ground, supporting the idea that by the lapse of time the organization ages with the growth of size and becomes more mature and formal in structure and working processes.

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.

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

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

**Table 1. Research Hypotheses**

Hypothesis number	Hypothesis dimension(s)	Regression analysis type	Textual formulation
H <sub>1</sub>	EO	Linear	<i>Firms with higher EO have a better performance than the ones with lower EO.</i>
H <sub>2a</sub>	EO, ED	Moderated	<i>The dynamic environment has a positive moderating effect on the entrepreneurial orientation - performance relationship.</i>
H <sub>2b</sub>		Moderated	<i>The static environment has a negative moderating effect on the entrepreneurial orientation - performance relationship.</i>
H <sub>3a</sub>	EO, EH	Moderated	<i>The hostile environment has a positive moderating effect on the entrepreneurial orientation - performance relationship.</i>
H <sub>3b</sub>		Moderated	<i>The benign environment has a negative moderating effect on the entrepreneurial orientation - performance relationship.</i>
H <sub>4a</sub>	EO, FA	Moderated	<i>Higher firm age has a negative moderating effect on entrepreneurial orientation - performance relationship.</i>
H <sub>4b</sub>		Moderated	<i>Lower firm age has a positive moderating effect on entrepreneurial orientation - performance relationship.</i>

All research hypotheses are in line with prior research (Zahra & Covin, 1995; Wiklund & Shepherd, 2005; Ha-Brookshire, 2009; Rauch et al., 2009; Miller, 2011; Anderson et al., 2015). In case the H<sub>1</sub> will be rejected, the model would not fit the data. If H<sub>1</sub> is supported by the data, this model provides us with the suited foundation for testing the contextual hypotheses H<sub>2</sub>-H<sub>4</sub> of moderating effects of EO in the Hungarian economy. Table 1 gives an overview of the research hypotheses.

### Study design and data description

EO as a strategic behavior is measured on the organizational level, therefore from just one answer per company is required to represent the organization. To investigate EO of a business through top management is a

typical and accepted approach (Covin & Slevin, 1989). Literature suggests that subjective measures of performance can reflect objective measures accurately, thus enhancing validity and reliability (Dess & Robinson, 1984; Venkatraman & Ramanujam, 1986). Primarily owners and C-level managers are targeted with the survey; however, the reachability of those people might be cumbersome. Therefore, upper- and middle manager layers were involved in the sample target to ensure a wider attainability and in order to maintain enough responses.

A self-administrated online questionnaire covering 26 questions facilitates the data gathering of this study. Pretesting feedback of 20 respondents supports an open-and-shut completion procedure. Our stratified sampling builds upon the population of all Hungarian companies independently from their size, revenue or any measurable features. We spread the link to our online questionnaire among all Hungarian SMEs listed in the Amadeus database. Company size by means of a number of employees (assessed by means of full-time equivalents) serves as the control variable of the study in order to create the stratified sample. We used the distinction between micro enterprises (fewer than 10 persons employed), small enterprises (10 to 49 persons employed), and medium-sized enterprises (50 to 249 persons employed). We successfully invited 58 respondents. The majority (approximately 57%) were C-level managers. 31% of the answers came from upper managers, while approximately 12% of middle managers. Almost 88% of the responses come from the top or upper managers providing high reliability of the answers.

Medium-sized companies with 41 (70.7%) in number dominate the sample. Small (22.4%) and micro (6.9%) companies are the tails of the distribution matching the distribution of company size of the population of the basic database. The most frequent mentioned industries are agriculture, machinery engineering, wholesale & retail, food & beverage and IT.

We use Cronbach's alpha coefficient to assess the internal reliability (Hair et al., 2014). Table 2 shows that the internal consistency of the scales meets the minimum required threshold of .7.

**Table 2. Internal consistency reliability**

Name of the Variable	Number of Items	Cronbach's Alpha
Entrepreneurial Orientation (EO)	9	.855
Financial Performance (FP)	6	.855
Environmental Hostility (EH)	4	.813
Environmental Dynamism (ED)	4	.719

## Results

Using Smart PLS 3 (Ringle, Wende & Becker, 2015) for analysis, the results show that EO has a positive effect on the financial performance of an organization. Please see the appendix for the structural model (Figure 3) as well as the Heterotrait-Monotrait Ratio (Table 4). Distinct regression analyses revealed that EO explains 23.5% of the variance of the financial performance of organizations ( $\beta = .485$ ,  $t$ -value = 4.56). With a  $p$ -value of  $<.001$   $H_1$  is accepted.

Regarding hypothesis two to four, no significant moderating effects are found. The moderate regression analysis reveals a correlation between the relation of ED and EO. However, the analysis indicates that the used interaction term is neither significant nor has a relevant beta coefficient. Significant moderation effect of EH on the linear model of EO-FP cannot be observed. Lastly, the hypothesized moderating effect of the firm's age on the relationship of EO to FP could not be validated. Given this, we conclude that the aforementioned hypotheses ( $H_2$ - $H_4$ ) must be rejected. The following Table 3 gives an overview of the hypothesis test results.

**Table 3. Summary of the hypotheses evaluation**

Hypothesis number	Hypothesis dimension(s)	Regression analysis type	Textual formulation	Hypothesis accepted / rejected
H1	EO, FP	Linear	<i>Firms with higher EO have a better performance than the ones with lower EO.</i>	ACCEPTED
H2a	EO, ED, FP	Moderated (multiple)	<i>The dynamic environment has a positive moderating effect on the entrepreneurial orientation - performance relationship.</i>	REJECTED
H2b		Moderated (multiple)	<i>The static environment has a negative moderating effect on the entrepreneurial orientation - performance relationship.</i>	
H3a	EO, EH, FP	Moderated (multiple)	<i>The hostile environment has a positive moderating effect on the entrepreneurial orientation - performance relationship.</i>	REJECTED
H3b		Moderated (multiple)	<i>The benign environment has a negative moderating effect on the entrepreneurial</i>	

			<i>orientation - performance relationship.</i>	
H4a	EO, FA, FP	Moderated (multiple)	<i>Higher firm age has a negative moderating effect on entrepreneurial orientation - performance relationship.</i>	REJECTED
H4b		Moderated (multiple)	<i>Lower firm age has a positive moderating effect on entrepreneurial orientation - performance relationship.</i>	

Surprisingly, environmental factors do not influence the relationship of EO and FP. In the following section, we contextualize reasons for the specific case of Hungary.

## Conclusion

The major contributions of this paper are first, testing the relationship of EO to FP in a post-soviet economy. Behavior patterns in post-soviet transition economies substantially depart from westernized strategic management. EO has become one of the main topics in strategic entrepreneurship research (Anderson et al., 2015).

Second, we adapt established processes in contingency theory and relate the financial performance to both causal EO facets as well as the business environment by means of EH and ED. The latter might carry risks, but at the same time may provide opportunities for development and growth. Hypotheses of this study are anchored around contingency theory due to the adaptation provoking nature of EO.

Third, we investigate EO as a strategic orientation on a business level and test how that organizational behavior affects the financial performance. This allows the measurement unit to determine EO as a macro-level phenomenon and to deliver a more stable relationship with financial performance (Covin & Slevin, 1991). In this study, EO covers as a unidimensional construct composed of risk-taking, innovativeness, and pro-activeness excluding aggressiveness and autonomy. The preeminent interest in entrepreneurship research derives from the global belief that it has a stimulating impact on the development of the economy and organizational entities. Business performance provides the real test of any strategic pattern a firm might employ, independently if the chronological

interval of the research is longitudinal or short-term. Literature suggests that there is a positive effect on FP coming from EO as a firm-level behavior. However, dissimilar contextual factors are critical to take into consideration. H1 is supported by the Hungarian data. Consequently, we confirm the expectation that EO serves as a catalyst for the financial performance of organizations in a post-socialist context. This finding complements prior Western strategic management knowledge (Covin & Slevin, 1991; Wiklund & Shepherd, 2005), and pushes out the contextual reference. This extends the universal body of this type of studies.

However, this conceptual model might be too simple, and would be easily obtainable by organizations, thus the argument of Lumpkin and Dess (1996) is taken into account. They argue that the impact of EO on performance is context specific and therefore the model should consider different factors originating from the inside or outside. The dynamic nature of external and internal factors forces an unpredictable change in a turbulent environment, which most of the time undermines the entrepreneurs' ability to envision the future (Lumpkin & Dess, 2001; Khandwalla, 1977). As a second assessment of the external environment, hostility is the counterpart of munificence and measures the degree of competition intensity and scarcity (Lumpkin & Dess, 2001; Zahra & Covin, 1995). Notably, all hypotheses connected with ED or EH – H2a, H2b, H3a and H3b – are rejected. The denial is surprising considering the development of the Hungarian economy in the past decades. Although, Hungary has transformed from a centrally operated communist economy to a free capitalist market, the development does not have a moderating effect on the EO-FP relationship. Further research is necessary in order to document further changes and the turning point of this development.

Fourth, to the best of the authors' knowledge, firm age with its effect on the EO-FP relationship has never been studied as an internal factor of organizations before. However, the linear structure of firm age is arguable. "An organization grows more or less continuously, but its structure is changed only in discrete steps" as stated by Mintzberg (1979, p.232). Therefore, the investigation of FA and its moderating effect fulfills an unexplored gap inside strategic entrepreneurship research, and in addition it opens up new discussions such as its inclusion with other moderators or variables. Despite of the circumscribed theoretical background the fact of rejection of H4a and H4b might derive from two distinct or parallel causes. In Hungary, the general company structural change is differently related to time development on an imagined chronological axis, or the prescribed structure-firm age relationship is not significant enough. The two might reinforce each other and output a strengthened negative influence.



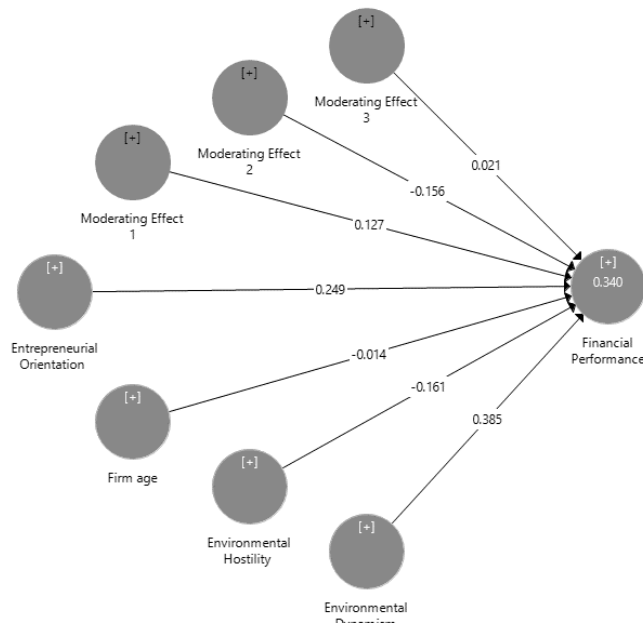
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## Appendix



**Figure 3. Structural model**

**Table 4. Summary of the Heterotrait-Monotrait Ratio**

	Entrepreneurial Orientation	Environmental Dynamism	Environmental Hostility	Financial Performance
Entrepreneurial Orientation				
Environmental Dynamism	0.667			
Environmental Hostility	0.260	0.213		
Financial Performance	0.451	0.555	0.186	
Firm age	0.300	0.178	0.058	0.151

Received November 26, 2016  
Accepted December 21, 2016