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**Market orientation and its effect on firm performance and
competitiveness in case of exporting Hungarian medium and large
enterprises**

**A piaci orientáció hatása a vállalati teljesítményre és a
versenyképességre az exportáló magyar közép- és nagyvállalatok
esetében**

Author: Lídia Várkonyi

Advisor: Miklós Stocker, PhD

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Abstract

This study is conducted within the frames of the Export and Innovation research group of the Competitiveness Research Centre of Corvinus University of Budapest. Since exporting companies have been proved to have superior performance in many aspects than their domestic counterparts, it is important to investigate what the underlying causes of their competitiveness and a higher level of success may be. The focus of the current research is to examine the effects of market orientation on firm performance and competitiveness in the case of exporting Hungarian medium and large enterprises, with the research questions being: *To what extent is market orientation present in the exporting Hungarian medium and large enterprises and their practices? What factors influence the level of their market orientation? How does market orientation influence their performance and competitiveness?* The research was done under the ‘In global competition – Competitiveness of the Hungarian Micro-sphere’ research program, using survey methods in combination with official financial data, applying various statistical analyses. The results indicate that basic company characteristics and export intensity have no significant connection with market orientation, but responsiveness and firm performance do have a strong and positive relation to it. Moreover, market orientation has a significant positive effect on firm competitiveness, while export competitor orientation has a significant positive impact on adaptivity, abuilding block of competitiveness. The study contributes to the existing literature by using a validated firm competitiveness measure in the assessment of the effects of market orientation. Moreover, it expands the range of studies conducted in European context among medium and large enterprises.

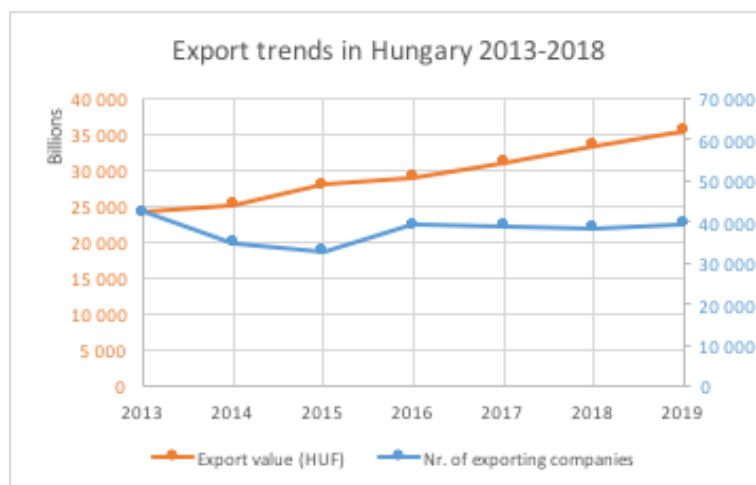
Absztrakt

Jelen tanulmány a Budapesti Corvinus Egyetem Versenyképességi Kutatóközpont Export és Innováció kutatócsoportjának keretében készült. Mivel az exportáló vállalatok esetében sok szempontból kimagaslóbb teljesítmény figyelhető meg, mint a hazai piacon működő társaiknál, fontos megvizsgálni, milyen tényezők állhatnak versenyképességük és magasabb szintű sikereik hátterében. A jelenlegi kutatás fókuszában annak vizsgálata áll, hogy a piacorientáció milyen hatást gyakorol a cégek teljesítményére és versenyképességére az exportáló magyar közép- és nagyvállalkozások esetében. A kutatási kérdések a következők: Mennyire van jelen a piacorientáció az exportáló magyar közép- és nagyvállalatok gyakorlatában? Milyen tényezők befolyásolják a piaci orientációjuk szintjét? Hogyan befolyásolja a piaci orientáció teljesítményüket és versenyképességüket? A kutatás a "Versenyben a világgal – a magyar gazdaság nemzetközi versenyképességének mikrogazdasági tényezői" kutatási program keretében készült. Kutatási módszerek tekintetében pedig a szakirodalmi áttekintést követően különféle statisztikai elemzéseket alkalmaztam, melyek a kutatás keretében készült kérdőív válaszaira és hivatalos pénzügyi adatokra támaszkodnak. Az eredmények szerint a vállalati alapjellemezők és az exportintenzitás nem állnak szignifikáns összefüggésben a piacorientáltsággal, azonban a reagálóképesség és a határozott teljesítmény szoros és pozitív kapcsolatban áll vele. Ezenkívül a piaci orientáció szignifikáns pozitív hatást gyakorol a cég versenyképességére, míg az export versenytárs orientáció szignifikáns pozitív hatással van az alkalmazkodóképességre, amely a versenyképesség egyik alapeleme. A tanulmány azzal járul hozzá a szakirodalomhoz, hogy egy validált vállalati versenyképességi mérőszám alkalmazásával vizsgálja a piacorientáció hatásait, mi több, bővíti az európai kontextusban, közép- és nagyvállalkozások terén végzett elemzések körét.

Introduction

This study is conducted within the frames of the ‘In global competition – Competitiveness of the Hungarian Micro-sphere’ research program administered by the Competitiveness Research Centre (CRC) of Corvinus University of Budapest. The program has been in place since 1995 with the leadership of Attila Chikán and participation of university professors from Corvinus Business School. Project no. NKFIH-869-10/2019 has been implemented with the support provided from the National Research, Development and Innovation Fund of Hungary, financed under the Tématerületi Kiválósági Program funding scheme. The Research Centre focuses all its projects around national and firm competitiveness, but each program has a dedicated theme and time frame and rely heavily on survey data collected from Hungarian firms. Previous themes have been centred around the following topics: ‘In global competition’ – period of transition to market economy, Info-communication technologies and competitiveness, Competitiveness on the verge of joining the EU, International economic processes and competitiveness. The currently ongoing 5th phase, started in 2018, embraces the theme of Competitiveness at the dawn of the new industrial revolution. (Chikán et al, 2019a)

The Export and Innovation group, under the egis of which the current study is written, bears special importance from a competitiveness point of view, due to the opportunities offered by the globalizing free market and the notion, that internationalizing companies achieve higher performance in many aspects than their domestic counterparts. (Stocker (2016), Czakó et al (2014)). Although the number of exporting firms was higher in 2013 than today, the export volume grew by almost 50% in the 2013-2018 period, as it is illustrated on Figure 1.



1. Figure: Export trends in Hungary 2013-2018 (Source: Author's edition based on KSH 2020)

By analysing these internationalizing firms, critical factors may be discovered, which could help the development of competitive capabilities and provide a greater chance to success. In general, the articles published by the colleagues of the CRC focus on assessing performance, seek to identify its causes or enablers and aim to find distinguishing characteristics between practices leading to different performance outcomes.

According to Chikán (2008), a business reaches its purpose, if it can satisfy customer needs at profit and is competitive if it offers goods for which the customers are willing to pay a price providing higher profitability than that of the competitors. This research takes a dive into exploring an aspect of how such an offering can be created. Market orientation is commonly perceived as a key to this, especially in these times of technological and market turbulence and high level of competition, when mass customization, personalized promotion and high level of transparency through public feedbacks and evaluation constitute everyday business – there is a reason why it is called consumer society.

Market orientation, however, requires certain capabilities and resources, that are not easy to acquire, thus it can be a source of sustainable competitive advantage for those investing in it. (Kohli and Jaworski, 1990) From the above, it is logically deductible, that a strong level of market orientation may lead to competitiveness and superior business performance. The investigation of whether the empirical evidence supports this is the focus of this study and the proposed research questions are as follows:

To what extent is market orientation present in the exporting Hungarian medium and large enterprises and their practices? What factors influence the level of their market orientation? How does market orientation influence their performance and competitiveness?

In order to assess the market orientation of companies and its effects on business and export performance, as well as on competitiveness, introducing of all of these concepts separately first is inevitable. Then, an overview is provided on the empirical research examining the effect of market orientation and export market orientation on performance.

I Firm performance, competitiveness and market orientation

I.1 Performance and competitiveness

Different interests of the different stakeholders can be important when measuring the level of success of a business, thus performance can be interpreted in various ways. Business

performance can be scrutinized on different levels, such as on the level of strategic business units, firm, group, etc. For the purpose of this study, firm-level was chosen as the field of examination, due to the stream of literature and the more probable availability of data.

Firm performance can be measured in various ways, objective and subjective, financial and non-financial alike. Siepel and Dejardin (2020) list the following as potential performance measurement tools: employment, turnover, profitability, productivity, R&D/innovation, firm survival. These could include both financial and non-financial measures, for the latter key performance indicators of any kind may be defined, depending on the characteristics and goals of the business. However, when looking at financial measures, there is a higher level of homogeneity, as the financial statements providing the basis of them are legally standardized, especially in an international environment.

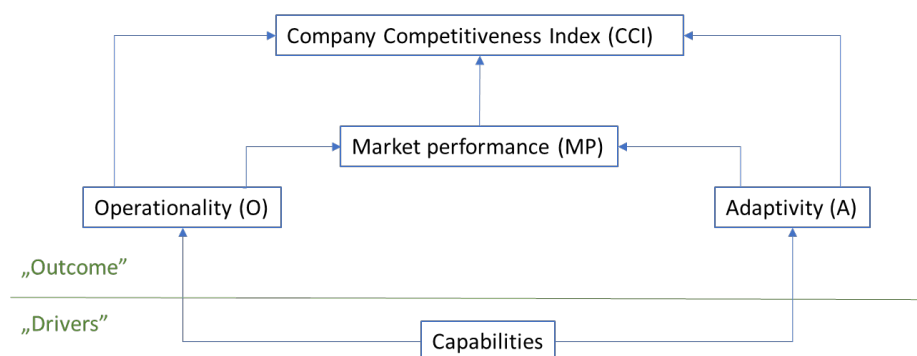
A possible approach to these indicators is to distinguish return related measures (return on equity (ROE), return on assets (ROA), return on sales (ROS), etc.), efficiency related measures (i.e. EBITDA/Sales), value creation related measures (Value added/employee, Value added/Sales, etc), enterprise value related measures (enterprise value, economic value added (EVA), etc.) and also project-based measures (net present value (NPV), internal rate of return (IRR), return on investment (ROI)), although this latter is not relevant for the current study. Comparison of these along time series provides growth indicators. Nonetheless, this already grants a wide variety of measures to choose from and yet, many more could be possibly calculated. For each situation, it has to be determined what the most relevant ones are based on the focus of the performance measurement.

What is important, that when measuring the performance of various firms, depending on the objective, comparability can be an aspect that should not be overlooked. A numeric indicator, as most of the listed, gives an absolute result, which does not take into account, among others, the industry, the firm size and the life cycle of products or industries, thus the shown performance itself may not reflect the actual relations. Therefore, it is essential to include benchmarks, such as comparison to previous year, set performance goals, industry average or main competitors. (for example in Hooley et al., 2000)

On the other hand, competitiveness can be also considered as a measure of corporate effectiveness and it is definitely compared with competitors. According to Chikán, the definition is as follows:

“Firm competitiveness is a capability of a firm to sustainably fulfil its double purpose: meeting customer requirements at profit. This capability is realized through offering on the market goods and services which customers value higher than those offered by competitors. Achieving competitiveness requires the firm’s continuing adaptation to changing social and economic norms and conditions.” (Chikán, 2008, pp. 24-25)

Chikán (2006) highlights, that although there is often an assumption, that higher performance determines higher competitiveness or the two are even confused sometimes, his interpretation is built on the resource-based view (RBV). This means that the above described resources, which are hard to imitate, provide a *potential* to success, but appropriate strategy and implementation are also needed. He developed the Company Competitiveness Index (CCI) to measure the level of firm-level competitiveness, which is constituted of Capabilities, Operationality (O), Adaptivity (A) and Market Performance (MP), as it can be seen on Figure 2. Operationality is constituted of Costs and prices, Quality, Time, Flexibility and Service indicators, while Adaptivity consists of Market relations, Human preparedness and Organisational responsiveness. Market performance is measured by Return on Sales (ROS) and market share, both relative to industry average. The logic behind the index can be expressed in the form of $CCI = (O + A) * MP$, which means, according to Chikán, that the ‘measure of competitiveness is the proportion of the combined degree of Operability and Adaptability recognized by the market.’ (Chikán, 2006, p. 44)



2. Figure: Construction of Firm Competitiveness Index (Source: Author’s edition based on Chikán (2006))

The CCI model was tested on a sample of hundreds of Hungarian firms and proved to be a statistically adequate measure of firm-level competitiveness. Since performance indicators are already incorporated in the Index, CCI can be considered as a higher-level demonstrator of

success. It is important to note, that CCI regards the firm as a whole. Nonetheless, even when examining exporters, CCI is appropriate to assess and compare overall performance.

In this research there is a strong emphasis on internationalized companies, more precisely, on those companies which conduct exporting, as that is the easiest to measure and there is evidence, that they perform better than players sticking to the domestic market. According to Stocker (2014), successful exporting companies significantly outperform their strictly domestic counterparts in many aspects, significantly: they employ 20% more employees, pay 70% more wages and create 70% more added value. He also found that export intensity grows with firm size. Czakó et al. (2016) proposes that among the companies with domestic majority ownership, the ones with higher export intensity have better performance results. They found, that irrespective of whether the majority ownership is domestic or foreign, firms with higher wage level have better performance results than the ones with lower wage level. Stocker – Czakó (2018) discovered, that in terms of small and medium companies exhibiting significant export performance, a.k.a 'Local Heroes', export sales and Profit after Tax (PAT) measures have a strong positive relation, while the authors claim there is no significant connection between export intensity and Return on Equity (ROE). They suggest that the revenue growth contributed to employee wages and investments.

What these imply is, that higher profitability does not come from higher export ratio, but export orientation is in connection with capabilities that improve the other performance measures. This may mean a long-term effect on the firm's profit generation, which can not be assessed with a snapshot analysis, especially with little overlap between the samples over time, so this remains a question for later research.

Although Chikán (2006) indicates, that export orientation is not a factor, that plays a key role in competitiveness (as in its level is not outstanding in any of the clusters created along the competitiveness scale), it still remains to be investigated, how competitiveness and its relation to market orientation looks like in the case of exporting firms.

When assessing export performance, the same opportunities and issues arise as in the previously discussed case of firm performance. Acikdilli et al. (2020) created an overview of the different approaches used (see Table 1) and concluded that the most commonly used indicators are company export profitability and sales, alongside with export market share and export intensity. In order to have a more comprehensive understanding of export performance, Zou et al. (1998) developed a multi-dimensional measure in a cross-national context, called the EXPERF scale.

It integrates financial export performance, strategic export performance and satisfaction with the export venture.

These aspects are measured based on managerial perceptions, which is although widely used in this field of research, still raises the risk of biased results. The same conclusion applies here as in terms of firm performance, that using benchmarks enhances the validity of measures and choosing the outcome variable should depend on the research objective and on the availability of data and information – often this latter is the decisive factor.

Export Performance Measures	Citations
Export growth	Knight and Cavusgil (2004); Morgan et al. (2012).
Export intensity	Ito and Pucik (1993); Kaynak and Kuan (1993); Das (1994).
Export market share	Katsikeas et al. (1996); Knight and Cavusgil (2004); Morgan et al. (2012).
Export profitability	Kaynak and Kuan (1993); Katsikeas et al. (1996); Knight and Cavusgil (2004); Kuivalainen et al. (2007); Morgan et al. (2012).
Export sales	Ito and Pucik (1993); Kaynak and Kuan (1993); Das (1994); Katsikeas et al. (1996); Kuivalainen et al. (2007).
Financial performance and strategic effectiveness	Azar and Ciabuschi (2017).
Overall sales, export sales, export profitability	Katsikeas et al. (2000); He et al. (2018).
Perceived success	Knight and Cavusgil (2004).
Reaching exporting goals	Morgan et al. (2012).
Return on assets	Sharma et al. (2020).
Return on investment	Morgan et al. (2012).
Subjective economic and non-economic factors	Madsen and Moen (2018)

1. Table: Export performance measures used in the literature (Source: Acikdilli et al. (2020))

I.2 Market orientation

Market orientation had been a vaguely used concept, until in the 1990s the need for more concrete exploration arose and some measurement approaches were developed. Most research (Mahmoud (2011), Hussain et al. (2015), Udriyah et al. (2019), Dubihlela & Dhurup (2015), Chao & Spillan (2010), Mokhtar et al. (2014), Nurhilalia et al. (2019)) build on two of these: either the one proposed by Kohli and Jaworski (1990), called the MARKOR scale, or on the one offered by Narver and Slater (1990), generally referred to as the MKTOR scale. These two will be in the focus of the research.

Kohli and Jaworski (1990) considered market orientation to be the implementation of the marketing concept and it refers to “the organization-wide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organization-wide responsiveness to it.” (Kohli and Jaworski, 1990, p. 6).

Their conceptualizing effort built on earlier theories and management interviews. They derived from the integration of previous definitions, that customer focus, coordinated marketing and profitability are the three main themes underlying market orientation. The interviews on management members' views on market orientation revealed, that

- customer focus is not just about market research, but also 'taking action based on market intelligence' (p.3), which takes into account external market aspects that influence customer preferences, in the present as well as for the future.
- coordinated marketing can be a result of multiple departments having the same clarity about customer needs and the capability to respond to them, which needs to be supported by a specified, fitting coordination type.
- profitability is rather a result of market orientation, not a component or influencer.

Kohli and Jaworski (1990) propose that business performance is a consequence of market orientation, moderated by supply-, and demand-side factors: market turbulence and competition have a positive impact on business performance, while technological turbulence and the general economic state have a negative one. They argue that pursuing market orientation is only worth it when the results outweigh the - often significant amount of - invested resources. Moreover, to achieve the desired performance effects, the quality of market orientation needs to be ensured. It is dependent on the quality of market intelligence and the quality of execution of the

marketing plan. They highlight, that since it requires certain capabilities and resources that are not easy to acquire, it can be a source of sustainable competitive advantage.

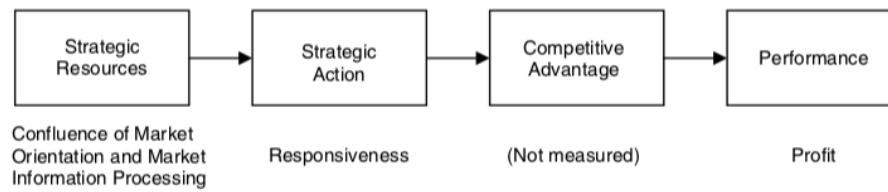
The other widely used measurement approach was developed by Narver and Slater (1990). They identified three behavioural components that constitute market orientation: customer orientation, competitor orientation, and inter-functional coordination. Additionally, they proposed two decision criteria as well: long-term focus and profitability, which were later excluded from the model. The behavioural components resemble those defined by Kohli & Jaworski from another angle, the first two standing for generating and disseminating information about customers and competitors, while inter-functional coordination ensures integrated efforts to respond to these by creating superior value to customers. In their model, the three components account for equal weights in the calculation of the final score.

Farrell & Oczkowski (1997) draw attention to problems regarding the validity of both scales and propose excluding some questions, by which the 20-item MARKOR scale is shortened to 10, while the 14-item MKTOR scale is decreased to 8. Furthermore, Oczkowski & Farrell's (1998) results suggest that MKTOR is a better indicator than MARKOR in explaining variations in business performance measures. Cano et al (2004) also discovered a tendency, that market orientation has a stronger effect on business performance when measured the MARKOR scale rather than the MKTOR scale.

Raju (2011) highlights the differences in the role of market orientation for larger firms and SMEs. These differences may come for example from higher level of innovativeness, customer contact and output flexibility in case of SMEs. Their conceptual framework consists of organisational structure and organisational culture antecedents, and mediators, as well as, environmental moderators of the market orientation-performance relationship. They suggest, that this relationship can be generally stronger in case of SMEs than in large corporations.

Hult et al. (2005) assessed the two measurement approaches and handle them as completely distinctive. They found positive connection between each of them (market orientation (MKTOR) and market-information processing (MARKOR)) and responsiveness, which showed a positive relation to performance, however, no direct link could be found between any of the market orientation measurements and performance. This means, that responsiveness fully mediates both relationships. (See model in Figure 3) They emphasise, that neither of the scales should be used over the other, rather they represent different antecedents of performance. They

encourage using both concepts and broader models, so linking market orientation directly to performance can be avoided.



3. Figure: The journey from market orientation to performance (Source: Hult et al, 2005)

I.3 Export market orientation

Export market orientation or international market orientation can genuinely be viewed as the market orientation concept applied to the export market(s). It is worth to note, that in some cases these terms are used to merely describe a focus on export activities or a preference of international markets over the domestic one, but those are not interpretations of the present research. Cadogan et al (2001) highlights, that a strong market orientation on a firm's domestic market does not predestine the same level of capability on the export market by default. Based on this, due to the peculiarities of individual markets, it can be viewed, that export market orientation capabilities need to be developed for each export destination of a firm, or at least for the ones with significantly different environments. A widely used operationalization of the indicator is the scale proposed by Cadogan et al (1999), an adjusted version of the MARKOR scale (Kohli et al, 1993) to the export context. By this, export market orientation is the export-focused generation and dissemination of export market intelligence, alongside the responsiveness to these in international markets. However, other measures are also used, such as the original Narver and Slater (1990) market orientation scale.

Several studies found evidence for a significant relationship between export market orientation and export performance of SMEs (Singh and Mahmood (2013), Abiodon and Mahmood (2015), Acikdilli et al (2020)), some for indirect relationship (Pascucci et al, 2016), while others discovered no connection between them (Godwin Ahimbisibwe and Abaho (2013), Acosta et al (2018)). Table 2 below presents an overview of some examples with the different measurements and results.

A study by Lengler et al (2013) is worth displaying, since it identified the different ways in which the elements of market orientation effect performance: while customer orientation has a U-shaped relationship to export sales, as well as to export profit, the latter is mediated by export

sales. On the other hand, competitor orientation has a linear connection to export profit. None of these are moderated by competitive intensity, which was an unexpected result. Cadogan et al. (2009) also discovered a quadratic relationship between export market oriented behaviour and export sales, however, this one has an inverted U-shape: after a certain level, additional export orientation reduces performance. Mac and Evangelista (2016) arrived to a similar conclusion, stating, that export orientation can be a ‘double-edge sword’, as it may have a negative effect on profit while improving level of satisfaction.

Although these studies offer highly valuable insights, they need very specific data about the exporting activities of a company, which are not available for the current study. Thus, substantive comparison could be provided, therefore the depth of analysis of the empirical studies is also limited here.

2. Table: Overview of empirical research on market orientation and performance (Source: Author's edition)

Author	year	Sample	EMO scale	Performance measures	Other measures	EMO-performance relationship
Acosta et al	2018	161 Export SMEs in Mexico	Narver and Slater 1990	satisfaction with Internat. Results, Int. Perf. (IP) compared to competitors.	Int. entrepreneurial orient., network capability	IMO → IP no significant relationship
Pascucci et al	2016	64 Italian coffee roasting SMEs	Cadogan et al (2006)	export intensity	no. of foreign markets, no. of years, export department	responsiveness → exp. perf. (direct & strong), EI Generation & EI Dissemination → exp. perf. (indirect via responsiveness)
Acikdilli et al	2020	346 export SMEs in Turkey	Cadogan et al. (2009)	Zou et al.'s (1998) scale. EXPERF	competitive strategies, market turbulence, competitive intensity	EMO → exp. perf. Competition intensity: negative moderator
Singh and Mahmood	2013	201 Malaysian exporting SME manufacturers	Cadogan et al. (1999)	sales volume, profitability, market share, new markets – as perceptions	-	EMO → exp. perf. positive
Abiodon and Mahmood	2015	457 Nigerian SMEs from manufacturing sector	Kohli and Jaworski (1990)	financial, strategic and satisfaction's export performance measure	Learning Orientation (LO), Environmental Turbulence (ET);	Better export performing SMEs possess a stronger export market orientation; ET moderates the relationship between EMO & exp. Perf.
Lin et al	2014	232 manufacturers from Taiwan	Cadogan and Diamantopoulos' (1995)	financial, strategic and competitive indicators compared to competitors, along with an overall performance indicator.	Inter-organizational relationships (trust, commitment, social interaction and power.	Trust and social interactions positively influence EMO EMO → exp. perf positive degree of internat. has no moderating effect on EMO and exp. perf.
Kayabasi et al	2016	443 export companies from Turkey	Chung, 2012; Cadogan et al., 2003, 2006	9 items by Navarro et al. (2010) and Okpara (2009)	Marketing effectiveness (ME); Marketing capabilities (MC);	EMO → MC&ME significant EMO central to MC development ME → exp. perf. significant

I.4 Empirical evidences from previous research

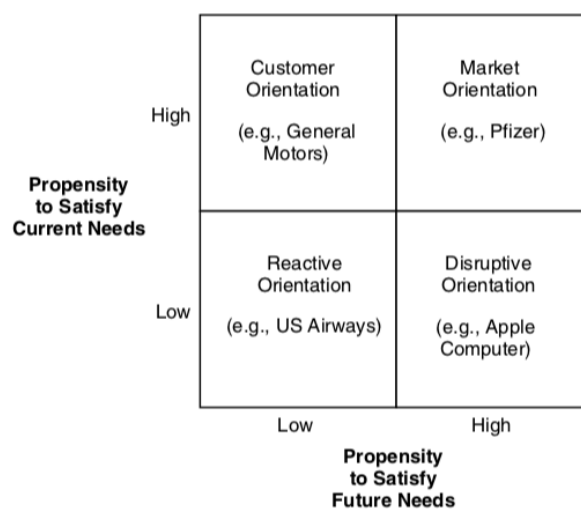
I.4.1 Stakeholder orientation and business performance

Ketchen et al. (2007) states that Market orientation and Customer orientation should not be interpreted on one continuum, but as elements of a two-dimensional approach along the axes of propensity to satisfy customer needs in the present and in the future. From a different point of view, Ferrell et al (2010) explains the contrast between market orientation and stakeholder orientation in a way, that while the first one only indirectly considers the stakeholders beside customers and competitors, the latter does not have a general priority order, it is rather situation-dependent. Nonetheless, they identify an overlap between the two, furthermore, a positive relationship between market orientation behaviours and stakeholder orientation, as responsible behaviours towards stakeholders. They also emphasise, that stakeholder orientation can have a positive effect on business performance, if it results in enhanced stakeholder resources. (See Figure 4 and 5)

As a segment of stakeholders is connected to the company through market coordination, market orientation could also be interpreted as a part of stakeholder orientation.



5. Figure: Market orientation and stakeholder orientation (Source: Ferrell et al, 2010)



4. Figure: Market orientation and customer orientation (Source: Ketchen et al, 2007)

In line with the concept by Ferrell et al (2010), Vaitoonkiat and Charoensukmongkol (2020) demonstrate evidence, that not only customer and competitor orientation, but also employee orientation had a significant positive effect on performance, but shareholder orientation did not.

When assessing the moderating effect of perceived market uncertainty, they discovered significant relation to all of these, positive to customer and competitor, negative to employee and shareholder orientation. Greenley et al. (2004) define multiple stakeholder orientation profile (MSOP) as “the simultaneous ordering of attitudes towards each set of primary stakeholder interests, and allocated managerial behaviour to serve these interests” (p. 1483). In their research they identify a cluster of Market Focus MSOP, which bears high resemblance to the above understanding of market orientation. They describe the cluster as one focusing on customer and competitor interests, where employees are also considered important, while shareholders are not of primary concern. Although the paper did not analyse the MSOPs’ relation to performance (only focused on marketing capabilities and assets), combining this with the previously introduced results of Vaitoonkiat and Charoensukmongkol (2020), it can be suspected, that the market focus MSOP is positively related to business performance, however, that is not in the scope of this study.

1.4.2 Strategic orientation and business performance

Some researchers approach market orientation as one of several strategic orientations, and examines these together, providing a wider context and more comprehensive understanding of what role market orientation plays in businesses’ performance. Schweiger et al (2019) proposes that superior performance can be attributed to a company’s ability to align entrepreneurial, market and learning orientations. They found that these have a high interrelatedness and that strategic orientation as the combination of these has a greater effect on performance than the individual orientation factors. Laukkanen et al (2013) found a positive impact of entrepreneurial, market and brand orientations on business growth through brand and market performance. However, the effect of market orientation itself on market performance proved to be insignificant in case of the Hungarian sample and weak in case of the Finnish sample, yet not moderated by country. This was not expected and contradicts some previous evidence (i.e. Homburg and Pflesser, 2000). Although country does not have a moderating effect, their findings are in line with some previous research (Sin et al., 2005) stating that the effect of market orientation on performance is stronger in developed than in transitional markets (although the size of the sampled firms differed in the two studies).

I.4.3 Market orientation and business performance

Cano et al (2004) conducted a meta-analysis of 53 empirical studies examining the relationship of market orientation and business performance across 23 countries of 5 continents. They concluded that the dominant majority of results exhibit a positive connection between the two, worldwide. Still, there have been non-neglectable cases, where the results indicated only indirect (Demirbag et al (2006), Keskin (2006)) relation, no significant relation, or even negative (e.g., Grewal & Tansuhaj (2001), Han, Kim, & Srivastava (1998), Siguaw & Honeycutt, (1995)) relationship. They found furthermore, that organizational objective (for-profit / non-profit) and industry type are factors that do impact the assessed relationship: market orientation's performance-influencing effect is stronger in case of service providers than of manufacturers and also stronger in case of non-profit organizations than of profit oriented ones. The authors suggest that the choice of measurement scale also plays a role, the relationship is observed to be stronger when applying the MARKOR concept than when using MKTOR. However, they state that a country-based differentiation of the relationship is not adequate anymore, it is not influenced by culture or socioeconomic development. This latter is in considerable contradiction with abovementioned (Sin et al., 2005) and Laukkanen et al (2013).

In Table 3 a list of studies can be found examining the market orientation – business performance relationship in case of SMEs from 2010 to 2020. The structure of the collection is based on Raju (2011). All but two studies focus on a single country, while the remainder compare two countries. The examined firms in some cases are concentrated in one industry, however industry selection varies on a wide range, service and manufacturing alike. Most studies do not have a specific industry focus. The average sample size is 246 , but by excluding the outlier value of the Finnish sample of Laukkanen et al (2013), it decreases to 190.

Similar to what Cano et al (2004) derived from their overview, among the studies listed, results can be found with both significant positive or insignificant connection of market orientation (or its components) to performance. This may not come unexpected, as there is a wide range of market orientation measures used (although most of them build on the two origins previously discussed in detail), a variety of performance measures and other measurement of possibly influencing factors (antecedents, moderators, barriers, other strategic orientations, etc.), as well as a line of different statistical approaches. Five of the studies take a disaggregated approach, meaning, that they aim to determine the effect of the individual components of market orientation on firm performance. What is conspicuous, is the almost complete contradiction

between the findings of Chao & Spillan (2010) and Mokhtar et al. (2014). On the USA-Taiwan sample intelligence generation and intelligence dissemination showed no relation to business performance, while responsiveness had a significant positive effect on it. In case of the Malaysian study, customer focus and market dissemination proved to have a significant positive impact on business performance, but market intelligence and responsiveness were not related to it. The only common point in these is market intelligence generation not having an impact on performance, all the other elements (which are the same beside customer focus, since the MARKOR scale served as a basis for both) have exactly opposite results. The reason behind this is not yet discovered, Mokhtar et al. (2014) did not use the earlier study as a reference. A possible explanation may lay in the difference of economic development stages of the sampled countries.

3. Table: Studies on market orientation and business performance between 2010-2020 (Source: Author's edition)

Author	Year	Sample	MO scale	Performance measures	Other measures	MO-performance relationship
Chao & Spillan	2010	138 SMEs in the USA and 151 SMEs in Taiwan	(Jaworski & Kohli, 1996) MARKOR	comparative business performance based on perception	-	Mixed: intelligence generation, intelligence dissemination → no relation to BP; responsiveness → positive
Mahmoud	2011	191 SMEs in Ghana	MKTOR (Narver and Slater's, 1990) and MARKOR (Kohli et al., 1993)	Perception of business performance	antecedents: moderating external factors	positive
Laukkanen et al	2013	300 Hungarian and 820 Finnish SMEs	Farrell et al, 2008	Market performance: perception of performance relative to competitors in terms of (1) success in competition, (2) acquiring new customers, (3) gaining customer satisfaction and (4) retaining current customers. growth: perception of turnover change in the 21 st century	learning orientation, brand orientation, brand performance	MO - brand performance: positive in both countries. MO - market performance: insignificant (Hungary) or weak (Finland), and not moderated by country.
Mokhtar et al	2014	140 SMEs in Malaysia	(Jaworski & Kohli, 1996) (4. item: customer focus)	degree of perceived performance of the organisation over the last three years. (Kaplan & Norton, 1992; Narver & Slater, 1990; Singh, 2004; Vorhies & Harker, 2000)	-	Mixed (customer focus, market dissemination → positive to BP. Market intelligence and responsiveness → no relation to BP)
Hussain et al	2015	213 SMEs in Pakistan	MKTOR (Narver and Slater's,	customer satisfaction, innovation, service quality, growth, employee satisfaction	-	positive
Dubihlela & Dhurup	2015	273 SMEs in South Africa	(Jaworski & Kohli, 1996) MARKOR	Perception of Financial performance, Customer satisfaction & loyalty and Organizational commitment	determinants and barriers	positive
Buli	2016	171 metal works, engineering, and wood works SMEs in Ethiopia	Laukkanen et al 2013	Perception of gross margin, profitability and cash flow, sales and employee growth (Kraus et al 2012)	Entrepreneurial orientation	positive
Nurhilalia et al	2019	168 silk SME entrepreneurs in Indonesia	Inter-function coordination: Narver & Slater (1990) Cust. comp. or: Mavondo et al 2005	Marketing performance based on Lynch et al, 2012	innovation orientation (as part of MO)	Mixed
Udriyah et al	2019	150 textile SMEs in Malaysia	Narver & Slater, 1990; Azam et al., 2014; Tham et al., 2017	market performance, supplier performance, process performance, people performance, and customer relationship performance (Nur et al., 2011)	innovation, competitive advantage (CA)	positive (MO-CA, MO-BP, CA-BP)

II Research methodology

II.1 Research method

Survey method

The Competitiveness Research Centre of Corvinus University of Budapest has been conducting surveys on firm competitiveness since 1996 in frames of the ‘In global competition?’ research program. For the sixth time, the latest data collection took place between December 2018 and July 2019 by TÁRKI Társadalomkutatási Intézet Zrt., which serves as the basis of the current study. This method is widely used in management studies to assess the opinion and perception of managers and respondents. Although there is a risk of perception bias, the method is considered reliable in the field.

Population

Although the population only consists of Hungarian enterprises, due to the widely accepted notion that country does not play a differentiating role in market orientation or its effect on performance (Cano et al, 2004), the results may be interpreted generally, at least in the Central and Eastern European region.

II.2 Selection criteria and sample

The survey was addressed to companies operating in Hungary as individual legal entities with more than 50 employees. Industry-wise, the survey is focused on the manufacturing, construction, trade, transport, storage, hospitality and the information and communication sectors. There were five sections in the questionnaire, covering the operational environment and functional areas of the firms: management, marketing, production and finance. The respondents were top managers of the given area. The survey was designed based on the previously used questions and was updated by an expert group dedicated by the Competitiveness Research Centre. (Chikán et al., 2019b)

Out of the 4292 firms in the sampling frame of the specified industries, more than 2000 were contacted and 237 responses were returned, including 45, which were part of the previous study as well. Then the invalid responses (with a lot of missing or erroneous responses) were filtered out, leaving 234 valid results. Finally, financial data was obtained from Bisnode for these firms,

and further 25 companies were excluded because of inability to match these data, resulting in a sample size of 209 at the end. The attached financial data includes the financial statements for the 2013-2019 period in most cases. Data in foreign currencies were changed to HUF based on given year's average exchange rates. Both the perceptual and financial databases are completely anonymous, in case of personal and company names alike. The research is based on the license of the Hungarian Scientific and Research Ethics Committee (IV/4599-2/2020/EKU).

Due to the present research objective of assessing exporting medium and large enterprises, organizations with less than 50 employees or with no export activity were excluded, leaving a sample number of 119. The size-based distribution of Hungarian exporting middle sized and large enterprises is shown in Table 4 for the whole population and the sample as well. The sample ratio is 3.7% and the size distribution of the sample is very similar to that of the whole population. As in case of company samples 3.7% is a high selection ratio and the size-based distribution is not significantly different, the results can be interpreted as representative to the exporting Hungarian middle-sized and large enterprises.

4. Table: Distribution of companies by size in Hungary and in the sample (Source: Author's edition based on KSH (2020))

	Hungary		Sample	
	Number	Proportion	Number	Proportion
Exporter medium enterprises	2 545	79%	90	76%
Exporter large enterprises	690	21%	29	24%
Sum	3 235	100%	119	100%

II.3 Research questions and hypotheses

The research questions are as follows: *To what extent are the exporting Hungarian middle-sized and large enterprises market oriented? What factors influence the level of market orientation? How does market orientation influence their competitiveness and performance?*

In order to investigate this, the below hypotheses were formulated, all referring to internationalized medium and large Hungarian firms:

H1: There is significant connection between market orientation and the main characteristics of the company.

H1a: There is a significant connection between market orientation and firm size.

H1b: There is a significant connection between market orientation and ownership type.

H1c: There is a significant connection between market orientation and sectoral profile.

H2: There is a significant connection between market orientation and export intensity.

H3: There is a significant connection between market orientation and responsiveness.

H4: Market orientation has a significant positive effect on firm performance.

H5 Market orientation has a significant positive effect on the company's competitiveness.

H6: Competitor orientation in the export market has a significant positive effect on the company's competitiveness.

II.4 Operationalization of variables

II.4.1 Market orientation measures

From the reviewed studies, it can be seen, that the most widely used market orientation scales are the MARKOR (Kohli and Jaworski, 1990) and MKTOR (Narver and Slater, 1990), or some kind of a mixture of them. All measurements of market orientation were conducted through a Likert-scale with differing number of scale items (mostly 5-7) reflecting the perception of respondents.

The market orientation variable was operationalised based on questions of the survey resembling the measurement approach proposed by Narver and Slater (1990), however the exact scale could not be replicated as the survey design did not focus on this area specifically. The variable is defined as the sum of three sub-variables, customer orientation, competitor orientation and inter-functional coordination, consisting of 4, 3 and 2 questions, respectively. In the first two dimensions, the respondents were asked to consider the company's capabilities relative to competitors', while the third focused on the organisation itself. (See Table 5.) The answers were expected on a 5-item Likert-scale, with 1 marking 'completely disagree' and 5 standing for 'completely agree'. 9 meant 'do not know or not relevant', however, these responses were considered missing values and were replaced by the means, thus 97 firms remained on the list. This way the market orientation score could range from 9 to 45, with the lowest actual value being 21 and the highest 45, while the average was 36. It is considered a category variable. The validation of the scale is not in the scope of the study.

5. Table: Survey questions serving as the basis for market orientation measure (Source: Author's edition)

Sub_Cat	#	##	Question
CUST	K12	a)	My company is more familiar with the needs of consumers than its competitors.
CUST	K12	b)	My company is better at customer value creation than its competitors.
CUST	K12	c)	Customer engagement is more important to my company than to competitors.
COMP	K12	d)	My company responds to customer needs more efficiently than its competitors.
COMP	K12	e)	My company responds to competitors' moves faster than the other competitors.
COMP	K12	f)	My company better follows the movements of competitors than the other players on the market.
COMP	K12	g)	My company understands the industry competition better than the other players on the market.
IFC	K12	h)	Within the company, all departments contribute to corporate strategy.
IFC	K12	i)	The corporate culture supports the cooperation among business units.

Based on the market orientation score, 3 categories were defined in order to determine the level of market orientation (low (1), medium (2), high (3)), separating the sample based on equal distribution of values. The average of level was 2.15.

II.4.2 Performance measures and other variables

Although market orientation measures are rather similar in all reviewed studies, performance measures vary greatly, with very few using objective financial data - presumably due to the lack of accessibility. Beside financial performance (profitability, sales growth, ROI, etc), customer satisfaction, innovation and employee growth, satisfaction and commitment are the main indicators assessed.

- Export orientation is determined based on export intensity in 2018 (Export sales/Total Net Sales), where less than 25% is considered low, between 25-75% is medium and above 75% is high intensity.
- Responsiveness or attitude to change is based on combining answers from the CEO survey, with result groups being: 1 – ‘Influences change’, 2 – ‘Prepares for change’, 3- ‘Reacts to change afterwards’.

- Business performance groups were identified based on the V20 question of the CEO survey with factor and cluster analyses, resulting in ‘Leaders’, ‘Followers’, ‘Lagging behind in profitability’ and ‘Average performers’ as categories.
- Firm competitiveness categories were created from the Firm Competitiveness Index detailed earlier based on Chikán (2006) with cluster analysis, differentiating between ‘Competitive’ and ‘Competitive on an average level’ companies.
- Firm Competitiveness Index was calculated using Question VV8 based on Chikán (2006).

II.5 Analysis

The statistical analyses were conducted in IBM SPSS Statistics 25, while Microsoft Excel (from Microsoft Office 365) was used for additional calculations. The differences of the variables, depending on the operationalization of the given variable, were calculated with ANOVA tests, crosstabs, Chi-square tests, Eta-squared and Kendall Tau measures. The significance level was set at $p < 0.05$.

III Results

In the following the results of the statistical analyses are presented and interpreted.

Number of employees were categorized according to the main topic of this study (medium and large sized enterprises according to EU statistical definition about the number of employees). Ownership has three categories: Majority government ownership, Majority Hungarian private ownership and Majority foreign ownership. Main activity of the companies were categorized by their NACE rev 2 statistical classification where the following high level aggregations were used: Construction (C), Manufacturing (F), Wholesale and retail trade, transportation and storage, accommodation and food service activities (G,H,I) (Eurostat, 2008)

6. Table: Market orientation and basic firm characteristics crosstab (Source: Author's edition)

H1		Market _orientation (Level)			Total
		Low MO	Medium MO	High MO	
H1a					
Number of employees (cat.)	50-249 employees	32	18	22	72
	250+ employees	8	6	11	25
Total		40	24	33	97
Pearson Chi-Square =1.69 Asympt. significance = 0.429 Kendall’s tau-b = 0.123					
H1b					
Ownership	Majority government ownership	2	2	1	5
	Majority Hungarian private ownership	24	9	16	49
	Majority foreign ownership	14	13	16	43
Total		40	24	33	97
Pearson Chi-Square= 3,743 Asympt. significance = 0.442 Cramer’s V = 0.139					
H1c					
Main activity	Construction	1	1	1	3
	Manufacturing	24	16	14	54
	Commerce and service	15	7	18	40
Total		40	24	33	97
Pearson Chi-Square= 4,232a Asympt. significance = 0.375 Cramer’s V = 0.148					

There is no significant connection between market orientation and any of the main company characteristic measures, because the Pearson Chi-Square significance exceeded 0.05 by far in all cases. H1a) size, H1b) ownership, and H1c) sector all turned out insignificant with market orientation, thus Hypothesis 1 and all of its sub-hypotheses are rejected. (Table 6)

7. Table: Market orientation and export intensity crosstab (Source: Author's edition)

H2		Market orientation (Level)			Total
		Low MO	Medium MO	High MO	
Export intensity	Less than 25%	16	9	22	47
	Between 25 and 75%	12	8	3	23
	More than 75%	12	7	8	27
Total		40	24	33	97
Pearson Chi-Square = 8,258 Asympt. significance = 0.083					
Kendall's tau-b = -0.155					

There was also no significant relationship found between export intensity and level of market orientation. On $p < 0.1$ confidence level, the test would be significant, with a weak negative connection between the variables., meaning that lower level of export orientation is associated with higher level market orientation. However, Hypothesis 2 is rejected on 5%. (Table 7)

8. Table: Market orientation and responsiveness crosstab (Source: Author's edition)

H3		Market orientation (Level)			Total
		Low MO	Medium MO	High MO	
Responsiveness (Attitude towards change)	Influences change	6	5	26	37
	Prepares for change	22	13	6	41
	Reacts to change awterwards	10	5	1	16
Total		38	23	33	94
Pearson Chi-Square = 33.784 Asympt. significance = 0.000					
Kendall's tau-b = -0.478					

There is a positive relationship between responsiveness and market orientation on a $p < 0.01$ significance level. The value of Kendall's tau b indicates a strong negative connection between the two variables, suggesting that lower values of responsiveness are related to higher level of market orientation. Since the 'influences change' label is appointed to the value of 1 and the

‘reacts to change afterwards’ is represented by the value of 3 (making it a reversed scale compared to the usually used ones), this means that higher level of responsiveness is associated with higher level of market orientation. Based on these tests, however, the direction of the relationship can not be determined. Regardless, Hypothesis 3 is supported. (Table 8)

9. Table: Market orientation and firm performance crosstab (Source: Author's edition)

H4		Market orientation (Level)			Total
		Low MO	Medium MO	High MO	
Firm performance clusters	Leaders	8	11	28	47
	Followers	9	4	3	16
	Lagging behind in profitability	6	5	0	11
	Average performers	16	3	1	20
Total		39	23	32	94
Pearson Chi-Square = 36.759 Asympt. significance = 0.000					
Kendall's tau-b = -0.523					

The Chi-Square test provided results on 0.01 significance level, indicating an existing positive connection between firm performance level and market orientation level. Kendall's tau-b suggests a strong negative relationship between the values representing the variables. Just as in the previous case, 1 stands for the best category, ‘Leaders’, and as the value grows, performance level decreases. The implication of this is that higher level of firm performance is associated with higher market orientation. Thus Hypothesis 4 is supported, firm performance is positively related to market orientation. (Table 9)

10. Table: Market orientation and competitiveness ANOVA analysis (Source: Author's edition)

Adaptivity, Operationality, Performance and Firm Competitiveness Index by Market orientation					
Test of Homogeneity of Variances					
		Levene Statistic	df1	df2	Sig.
Adaptivity - A	Based on Mean	1,976	16	72	0,027
Operationality - O	Based on Mean	0,945	16	72	0,524
Performance - P	Based on Mean	1,442	16	70	0,148

Firm Competitiveness Index (FCI)	Based on Mean	1,543	16	70	0,109	
ONE-WAY ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Adaptivity - A	Between Groups	9,230	20	0,462	2,322	0,005
Operationality - O	Between Groups	3,640	20	0,182	1,034	0,437
Performance - P	Between Groups	12,592	20	0,630	1,995	0,018
Firm Competitiveness Index (FCI)	Between Groups	1417,493	20	70,875	2,247	0,007
Sampe size: V, M: 93- 93; T, VVI: 91-91						
Measures of Association						
	R	R Squared	Eta		Eta Squared	
Adaptivity - A	0,265	0,070	0,626		0,392	
Operationality - O	0,228	0,052	0,472		0,223	
Performance - P	0,290	0,084	0,602		0,363	
Firm Competitiveness Index (FCI)	0,336	0,113	0,625		0,391	

The dependent variables (Adaptivity, Operationality, Performance and Firm Competitiveness Index) are all interval variables, while the independent variable, market orientation, is a category variable, so the ANOVA test can be performed. The Homogeneity of Variances was measured by Levene-test and condition is met in all but one cases. For the Adaptivity building block of the Firm Competitiveness Index the null hypothesis of equal variances is rejected on a $p < 0.1$ significance level, thus its further results are inconclusive here. The one-way ANOVA shows no significant relationship between market orientation and Operationality, but it does have an impact on Performance on a 5% confidence level. A significant relationship is also found between market orientation and the Firm Competitiveness Index on $p < 0.01$ significance level. This means, that Performance and FCI are both influenced by market orientation, 36.3% and 39.1% of their variances are attributable to market orientation, respectively, as Eta Squared measure of association indicates. Based on these, Hypothesis 5 is supported. (Table 10)

11. Table: Export competitor orientation and competitiveness ANOVA analysis (Source: Author's edition)

Adaptivity, Operationality, Performance and Firm Competitiveness Index by Competitor orientation on the export market						
Test of Homogeneity of Variances						
		Levene Statistic	df1	df2	Sig.	
Adaptivity – A	Based on Mean	1,378	8	69	0,222	
Operationality - O	Based on Mean	0,818	8	69	0,589	
Performance - P	Based on Mean	1,390	8	68	0,217	
Firm Competitiveness Index (FCI)	Based on Mean	1,223	8	68	0,299	
ONE-WAY ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Adaptivity - A	Between Groups	5,437	11	0,494	2,632	0,007
Operationality - O	Between Groups	2,165	11	0,197	1,281	0,254
Performance - P	Between Groups	5,207	11	0,473	1,236	0,281
Firm Competitiveness Index (FCI)	Between Groups	621,365	11	56,488	1,682	0,096
Sampe size: V, M: 81- 81; T, VVI: 80-80						
Measures of Association						
	R	R Squared		Eta	Eta Squared	
Adaptivity - A	0,179	0,032		0,544	0,296	
Operationality - O	0,156	0,024		0,412	0,170	
Performance - P	0,212	0,045		0,408	0,167	
Firm Competitiveness Index (FCI)	0,250	0,063		0,463	0,214	

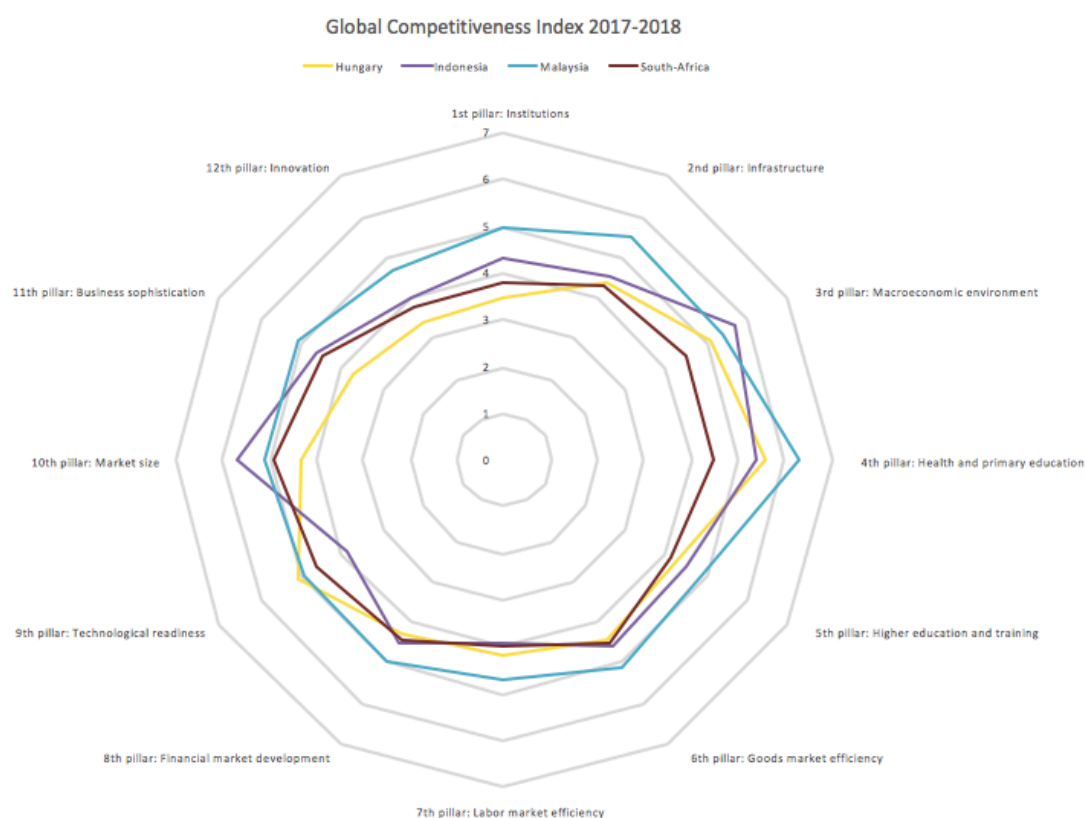
None of the Levene tests showed significant results, the variance inside the groups is homogenous, so the ANOVA outcomes shall be conclusive. On $p < 0.05$ significance level, relation is only detectable between Competitor orientation on the export market and Adaptivity, the independent variable explains 29.6% of its variances. Hypothesis 6 is partially supported. (Table 11)

IV Discussion

Based on the findings of Sin et al. (2005) and Laukkanen et al (2013), that although there is no differentiation effect of countries on market orientation, level of economic development may be an interesting factor, therefore benchmark markets were chosen accordingly. Building on the World Economic Forum's (WEF) interpretation of stages of development, where Stage 1 is Factor-driven, Stage 2 is Efficiency-driven and Stage 3 is Innovation-driven development and there are Transition phases both between Stage 1 and 2 as well as Stage 2 and 3, a categorization of the countries represented in the overview can be found in Table 12, over the years from 2010 to 2017. (Schwab 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017) Since the latest Company Competitiveness Research took place in 2019 and the questions are regarding the year 2018 or previous ones, it would be ideal to compare it with other research and environmental data from the same year, however the measurement approach to identify the development stage was changed that year, and using that would provide limited interpretation opportunities for earlier reports. Moreover, since the table shows no dynamic changes in the last few years, it may be assumed to be a good basis for analysis of the results of the past decade. Thus 2017 data will be used both in terms of development stage and the Global Competitiveness Index. Regarding the development stage of the countries assessed by the listed studies, it can be said, that there are three developed countries in the scope (Finland, Taiwan and the USA), and also three of the factor-driven category (Ethiopia, Ghana and Pakistan). In the midfield, there are two efficiency-driven economies, Indonesia and South Africa, and two in the 2-3 Transition stage, namely Hungary and Malaysia. As for the Global Competitiveness Index, Figure 6 illustrates the differences among the countries by development stages. Even though South Africa and Indonesia are not more different from Hungary than Malaysia is, regardless their distinctively identified stages, Malaysian examples are selected as benchmarks. Studies focusing on Hungary (Laukkanen et al, 2013) are also part of the comparison, naturally, including a less recent one not shown in the comparison table presented in the literature review (Hooley et al (2000). They both focus on another country beside Hungary, Finland and Poland, respectively.

12. Table: Stage of development of selected countries (Source: Author's edition based on Schwab 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017)

Stage of development (2010-2017)	
Ethiopia	1
Ghana	1
Pakistan	1
Indonesia	1-2 Transition 2 from 2011
South Africa	2
Hungary	2-3 Transition
Malaysia	2 2-3 Transition from 2012
Finland	3
Taiwan	3
USA	3



6. Figure Global Competitiveness Index (Source: Author's edition based on Schwab, 2017)

Firm characteristics and market orientation

At the time of the study of Hooley et al (2000), both examined economies just started their transition to a market-driven setting, so the results may differ from today's. The sample was distributed into three nearly-equal sized groups based on the level of market orientation (low,

medium, high). The sector and the market type (consumer vs. industrial, services vs. manufacturing, fast moving vs. durables) were not found to be differentiating factors on the level of market orientation, which is in line with the findings of the current study. (See Table 6) On the other hand, small, yet significant differences were detected in terms of firm size by Hooley et al.: smaller companies demonstrated a slightly higher level of market orientation. They suggested that this may be explained by ownership type (large firms were generally state-owned, while smaller ones were private), but performed no tests on the matter. In contrast with this, the current research found no evidence for a connection between size and market orientation. Moreover, it concluded that there is no significant connection between ownership type and market orientation, either. (See Table 6.) These contradictions may come from the fact, that the current sample does not include small enterprises and only focuses on exporters. Another possible cause is the changes in the economy occurred in the past two decades, including the transition to a more market-driven one. Still, it leaves the question, whether ownership has an indirect effect on market orientation, but not through size, but maybe innovativeness or strategic objectives. These analysis only focus on exploring the existence of connection between firm characteristics and level of market orientation, not the influencing effect of the characteristics on the market orientation – performance relationship. Thus, they should not be confused with the conclusions of Cano et al (2004), that market orientation's performance-influencing effect is stronger in case of service providers than of manufacturers. Overall, it can be concluded, that the level of market orientation is irrespective of company characteristics size-, ownership- and industry-wise, any business has the chance to acquire the necessary capabilities.

Export intensity, market orientation and export competitor orientation

This study finds no direct relationship between export intensity and market orientation (Table 7), which may be partly in line with the evidence presented by Pascucci et al (2016), who uses export intensity as the measure of export performance. They identified an indirect, yet significant effect of Export Intelligence Generation and Dissemination (as measures of export market orientation) on export performance through responsiveness, which in turn has a direct and strong effect on export performance. This difference can be due to the fact, that no comprehensive export market orientation measure could be developed and assessed in the current study. Their independent variables may be viewed inclusive of that defined in the current study as export competitor orientation. The findings, that export competitor orientation

has a significant effect on adaptivity can be interpreted as supportive of Pascucci's conclusions of export intelligence generation and dissemination having a positive impact on responsiveness (even though in the current analysis and measurement system there is a distinction between responsiveness and adaptivity).

Responsiveness

Responsiveness may sound highly resembling to Adaptivity assessed among the competitiveness elements, but they were measured in completely different ways and responsiveness rather describes the attitude towards change. It can be concluded from Table 8, that firms with high level of market orientation tend to be the initiators or influencers of change, while companies with lower levels of market orientation follow afterwards, sooner or later. This is evidence for what Ketchen et al. (2007) states about the difference between customer and market orientation: the latter is focusing on satisfying the customers' future needs as well, not just the present.

The finding is moreover in line with the findings of Hult et al. (2005), who showed that market orientation (measured on either MARKOR or MKTOR scales) bears a significant connection with responsiveness.

Performance

The analysis concluded a strong connection between firm performance and market orientation clusters. (Table 9) These results support the expectations and also the findings of Hooley et al (2000): the higher the market orientation category was, the companies had better ROI in general and also achieved better subjective financial and market results compared to budget, previous year and competitors. It is important to remember, that contingency tables were used as the means of analysis, so these significant results do not mean cause-causation relations, rather a simple connection between the two variables. Thus, the comparability with other results is limited in this regard as well. The findings themselves, however, are also consistent both with previous research (Mahmoud (2011), Hussain et al. (2015), Buli (2016), Udriyah et al. (2019)), who, determining the direction as well, found positive effect of market orientation on firm performance. Nonetheless, from Mokhtar et al's (2014) disaggregated analysis it appears that market intelligence and responsiveness were found not to be significantly related to organizational performance, which is against expectations and the authors associate with the small-size nature of the sampled companies. Furthermore, it is interesting to note, that the total

number of ‘Leaders’ in the sample of exporter companies accounts for 50% of the population, so either the internationalizing companies are very successful on the domestic market in general or the perception bias also contributed, as this measurement is based on subjective comparison to industry average. (See Table 9)

Competitiveness

The analysis prepared by Udriyah et al (2019) is special because of the inclusion of Competitive advantage as a variable, making it a close fit to the current assessment of competitiveness. Their Malaysian results prove, that Market orientation has a significant positive effect on Competitive advantage (46.3% combined with Innovation) and also on Business performance, directly and indirectly alike, mediated by Competitive advantage. So, if Market orientation increases, both competitive advantage and business performance rise. Mokhtar et al (2014), also focusing on the Malaysian market, find that market orientation accounts for 34% of the variance in organisational performance. Their disaggregated approach sheds light on evidence, that customer focus is the most important variable in market orientation, followed by market dissemination. Afsharghasemi et al (2013) also found positive connection between market orientation and competitive advantage, moreover, between market orientation and level of internationalization, as well as between competitive advantage and level of internationalization. All three studies are in accordance with the findings of the present research, as it also concludes, that market orientation has a strong and positive effect on firm competitiveness. (See Table 10) Hult et al. (2005) also support the idea of not linking market orientation directly to performance, but through responsiveness and competitive advantage. This supports the argument of present study, that a connection needs to exist first with competitiveness and then with performance. Yet, it is important to note, that competitiveness does not equal competitive advantage, it just creates the opportunity to acquire some. (Chikán, 2006)

V Conclusion, limitation, further research ideas

The results on the interrelatedness of market market orientation and basic and specific characteristics of firms is mixed: size, ownership, sector and export intensity do not show any kind of significant coherence with it, while there is a detectable relationship between market orientation and responsiveness. Regarding the market orientation – firm performance relation, a strong and positive statistical connection is revealed, although it does not exhibit a cause and

effect conclusion. Market orientation was found to have a significant positive effect on firm competitiveness measured by the Firm Competitiveness Index, while the competitor aspect of export market orientation did only showed positive impact on the Adaptivity element of the Index. The results did not show significant deviation from the existing body of research, although there were some minuscule inconsistencies.

The main limitation of the study is that there are no specific measures to explore export market orientation, so it handles the exporting companies as a whole, also including its domestic attributes. There is also lack of sufficient data on export performance and competitiveness, Further limitations include the lack of usage of objective financial data, simple statistical methods, and a narrowed sample size due to a high level of missing values in certain questions.

Further research directions may include the exploration of relationship between CCI and business performance, relationships between (export) market orientation and business performance based on objective financial indicators and also applying multidimensional analyses to assess indirect relationships as well.

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