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Determinants for competitiveness in the context of international integration pressure: Case of small and medium enterprises in emerging economy-Vietnam

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MANAGEMENT | RESEARCH ARTICLE

Determinants for competitiveness in the context of international integration pressure: Case of small and medium enterprises in emerging economy–Vietnam

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Abstract: This paper aims to intensively explore the factors that affect competitiveness for small and medium enterprises (SMEs) and how SMEs can improve their competitiveness in the context of an emerging economy like Vietnam. This study combined qualitative and quantitative methods and employed covariance base structural equation model (CB-SEM). The originality of this study is of great contributions including (1) Proposing the latest model for SMEs for improving their competitiveness, taking internal and external factors aggregation into consideration; (2) Research context particularly on emerging economy like Vietnam, an emerging economy with great economic and medical achievements that has received special attention from the world after a long period of fighting against the global Covid19 pandemic. More importantly, in the context of increasing competitive pressure due to global integration; (3) Deliverable of this study disclosed the overall decisive factors for firm's competitiveness, both internal and external. More importantly, it revealed the impact mechanism of each factor to contribute to increasing



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PUBLIC INTEREST STATEMENT

Competitiveness is often considered the central factor of corporate strategy. It is the key role in sustainable development in the emerging countries such as Vietnam. Since Vietnamese market opened to get involvement of joining of foreign enterprises, the increase in competition in sustainable increase in the SMEs performance. Research context particularly on emerging economy like Vietnam, an emerging economy with great economic and medical achievements that has received special attention from the world after a long period of fighting against the global Covid-19 pandemic. More importantly, in the context of increasing competitive pressure due to global integration. Deliverable of this study disclosed the overall decisive factors for firm's competitiveness, both internal and external. This study provides important theoretical and managerial implications that can help SMEs achieve greater results as long as their competitiveness improved. Furthermore, the contributions of this study are also expected to be a valuable source of reference for SMEs in other emerging countries, as long as in similar economic settings.

firm's competitiveness in some ways. This study provides the implications of this study are expected to make breakthrough contributions for SMEs in Vietnam to gain higher achievement, towards sustainability. Furthermore, the contributions of this study are also expected to be a valuable source of reference for SMEs in other emerging countries, as long as in similar economic settings. The findings are interested to business practitioners, economics and policy maker as an attempt to boost SMEs' competitiveness in a systematic and sustainable manner by integrating multilevel powers of firm, industry and nation.

Subjects: Economics and development; economics; business, management and accounting

Keywords: Competitiveness; competition; SMEs; emerging economy

1. Introduction

The conceptualization of competitiveness has been modified over time according to global socio-economic context (Gonçalves et al., 2019). "Competitiveness indicates competition among the companies in an industry, leading to their competitive advantage" (Farhikhteh et al., 2020, pp. 2&3). "The competitiveness objective is to achieve an economic superiority" (Tambade et al., 2019, p. 2). According to N. R. Khan et al. (2019), organizational competitiveness is conceptually defined as the ability of a certain firm to outstandingly perform against its competitors. Likewise, as Rengkung et al. (2017), competitiveness is normally viewed as a measure to compare two or more companies in the same industrial base, in this manner, it may relate to prevailing competitive advantage. Hussain et al. (2015) argued that organizational competitiveness depends on a firm's ability to perform well in relation to innovation, cost, flexibility, process, delivery and quality.

Competitiveness was determined as one of the vital factors besides innovation and sophistication factors that principally influences the efficiency levels of organization for Economic Cooperation and Development countries (Salas-Velasco, 2019). According to Baral (2017), business globalization and global integration are the engines of economic growth for all countries in the modern era. Integration is the best opportunity for reform and innovation (Baral, 2017) while globalization has significantly increased international competition (Abbas et al., 2017). Against the Vietnamese context, international economic integration has been a driving force of its growth since it introduced Doi Moi policy (Renovation) in 1986. International economic integration importantly focuses on the two key aspects which are trade and investment relations between Vietnam and other countries (Baral, 2017).

Competitiveness contributes to sustainability of economic growth. Growth in effectiveness of SMEs is vital to economic development. Competition is the environment, the driving force to promote the development of all economic sectors in the market economy, contributing to the elimination of monopolies, irrationalities and inequalities in business. Competition makes the national economy strong, enables businesses to expand into foreign markets. Particularly, a healthy and fair competitive environment is perceived as the key factor to drive the economy in a sustainable manner (N. R. Khan et al., 2019).

The focus of this study is on domestic SMEs who are exporters in manufacturing industry. In general, exports are a necessary stimulus for economic growth and wealth creation in developing countries (Haddoud et al., 2018). Moreover, SMEs are of high importance to the global and local economies. SMEs play a significant role in moving national economy, simultaneously important to its stakeholders. There are estimated around 400 million SMEs worldwide (National Action Plan on Business and Human Rights, 2020). These SMEs are of important force for driving the economy and representing about 90% of businesses and more than 50% of employment worldwide. SMEs statistically contribute up to 40% of national income (GDP) in emerging economies (World Bank

Group, 2020). According to Wilson (2018), the majority of firms in developing countries are SMEs. Asian economies stand on pillars of support built and confirmed by about 98% of participating firms are SMEs. Vietnam has around 518 thousand SMEs (Tuan, 2020). Considering the fact that Vietnam is an SME-driven economy as an emerging economy, the analysis of factors affecting SMEs competitiveness and proposing theoretical implications and practical implications is crucial for SMEs to stay competitive.

Indeed, most SMEs do not have any formal strategy and their assessment of the competitive environment is basically a subjective assessment of its pressure on a company (Kalita & Chepurensko, 2020). While the existing literature does not specifically support a comprehensive overview of competitiveness of SMEs in emerging economy, particularly in the context of global integration and the environment of full fluctuations as aforementioned. According to Cetindamar and Kilitcioglu (2013), previous studies on competitiveness have majorly focused on specific areas of competitiveness in isolation and in macro environments such as country, city, or industry. There was very little research that has focused on firm-level analysis, particularly SMEs. Furthermore, there is still no consensus in literature on competitiveness regarding factors that affect competitiveness and its importance (Sirikrai & Tang, 2006). In addition to this, studies explaining causal mechanisms and factors that improve a firm's competitiveness remain scarce (Naşiri et al., 2018). Thus this study focuses on filling this gap by empirically validating seven factors that affect competitiveness as the proposed conceptual model. This work is of important value because the similar work is unavailable in the existing literature, particularly for SMEs in emerging economy like Vietnam. We believe that, in addition to the existing partial approaches, it is essential to analyze the entire range of variables that affect firm competitiveness, deriving a total outcome that are very useful to both the scholars and the practitioners.

The world economy is experiencing many changes due to many objective factors such as politics and pandemic, Covid-19, which has been destroying the world economy. In this context, the purchasing decision makers are more and more conservative. Moreover, the future of the world economy remains unpredictable in this sensitive context. In addition to that, the world tends to liberalize trade through bilateral and multilateral free trade agreements which create opportunities also challenges for business players globally on the unprecedented uncertainty basis. Therefore, how to survive and how to sustainably grow in this context, particularly SMEs, remained as a throbbing topic. This important matter is perceived as a multilevel issue (Cojanu & Pîslaru, 2011). To address this issue, the major questions that need to be comprehensively solved include (1) What factors affect SMEs' competitiveness in emerging economies? (2) How to increase SMEs' competitiveness in emerging economy context? (3) What priority SMEs should properly pay attention for increasing firm's competitiveness? (4) How international integration context impacts SMEs' competitiveness? (5) What the theoretical and managerial implications will be?

This study is expected to deliver a holistic concept of firm's competitiveness, its influential factors and priorities for improving firm's competitiveness for SMEs in Vietnam, an emerging economy. With this study, we hope to contribute to theoretical advancements by providing a comprehensiveness of firm's competitiveness in emerging economy, and managerial practices by implying from the study results and adding value to society by contributing to value enhancement for firms and their stakeholders towards sustainable development on the basis of sustaining economy, society and environment as a whole.

This study has a physical structure sequentially including abstract, introduction, literature review, research methodology and hypothesis, results and discussion, conclusion and references. In the main content of this study, an empirical model is proposed and tested and theoretical and managerial implications are presented.

2. Literature review

Competitiveness is often considered the central factor of corporate strategy (J. Barney, 1991; M.A. Hitt et al., 2016; M. Porter, 1980). “The competitiveness of enterprises has become an indispensable character in modern enterprises” (Wu & Parkvithee, 2017). According to Cojanu and Pîslaru (2011), there are three levels of competitiveness such as nation, industry and firm. In this study, authors focus on competitiveness at firm level because firm’s competitiveness is a core of industry’s competitiveness that drives national competitiveness and economy (Carrera et al., 2003), simultaneously take the current socioeconomic context into account by investigating how external factors affect firm’s competitiveness.

Competitiveness refers to the definitions of Ambastha et al. (2004) as the ability of SMEs to maintain and win the competition with similar businesses. The competitiveness of SMEs is analyzed from the business performance described in two categories of indicators includes (1) profitability which is measured by three items such as increase in profits, increase in capital, and increase in wealth and (2) productivity which is measured by production targets, increasing production quantities, and offering products of the highest quality to the buyer’s expectations. According to Caner Taçoğlu et al. (2019), in the context of an economy under increasing competitive pressure on viability and development of SMEs, firm’s competitiveness is the vital factor therefore, today, it is not possible for SMEs to focus on a couple of competencies to gain competitive advantage but firms are required to consistently make efforts in multiple areas for driving competitiveness.

Competitiveness is still a huge challenging issue for SMEs in Vietnam, more importantly in the context of global economic integration though Vietnam has been recognized as a developing country based on its major achievements of economic growth and poverty reduction (Vo, 2005). “Firm capabilities in Vietnam need improvement to enhance competitiveness” (World Bank Group, 2017). Baral (2017) pointed out that the challenges to competitiveness in the Vietnamese context are in the economy, businesses, industries and products that are still weak in comparison with other countries. Consequently Vietnam’s products are difficult to compete, brand value is affected, exported products’ value is low and the structure of exports remains poor in general. Most domestic firms in Vietnam do not have the capacity to establish linkages with foreign firms and meet their requirements for quality, price and reliability, and to acquire new knowledge and technology that affect competitiveness (World Bank Group, 2017).

Literature review discovered that there are numerous factors as majorities that affect the firm’s competitiveness, particularly SMEs in the context of emerging economy such as (1) Flexibility; (2) Human Capital; (3) The pace of innovation development; (4) Firm size; (5) Intangible assets; (6) External factors and (7) Corporate social responsibility those are respectively described as follows:

The first factor, flexibility, is reviewed and hypothesized as follows:

2.1. Flexibility

“Flexibility is first and foremost the capacity of an enterprise to respond to change” (Yanine et al., 2016, p. 3). Additionally, it is strategically perceived as the property of the business to ductile, resilient and self-adjusting to different situations and conditions or environments that are outside the set of conditions normally given for which it is specially designed. Flexibility of a business can also be viewed as the ability of such a system to be successfully managed or controlled to meet its goals (Sheffi, 2005). According to Hussain et al. (2015), the global competition is increasing thus firms are required to improve their capacity by showing their ability to adapt to the changing market trends. In addition, Gao (2009) stated that in order to effectively compete in the market place, SMEs should utilize their advantage of flexibility and adaptability. Enterprises need to integrate business resources and innovation to improve competitive advantage and overall sustainable competitiveness. Besides, Eruemegbe (2015) emphasized that the major objectives of firm

are not only to make profit but also to survive and sustainably grow in a changing environment. Therefore, the ability to respond quickly to the changes is a must for gaining competitiveness.

Vietnam is a developing country and is an SME-driven economy as aforementioned. Based on the characteristics of SMEs that their governance apparatus and management mechanism usually tend to be simple, thus theoretically, the flexibility as responding to market trend will be possible. However, practically, Vietnamese culture is inclined to tradition, afraid of change, so this can also be a barrier to flexibility actualization.

On this basis, the first hypothesis of this study, H1, is reasonably assumed as follows:

H1: Flexibility (FL) has a positive and significant effect on the firm's competitiveness (FC).

Human capital is the next factor to be reviewed for developing the relevant hypothesis as follows:

2.2. Human capital

Following the resource-based view (RBV), according to de De Brito and De Oliveira (2016), human capital is perceived as center of organizational competitiveness as well as a strategic and valuable asset for SMEs. On the other hand, human capital is strategically perceived as intellectual resource that is not easy to imitate or replace that helps firm achieve sustainable competitiveness. In addition, according to Shafeek (2016), human capital is a strategic asset that adds value to firm's effectiveness and efficiency better than that of competitors. Likewise, Masood et al. (2018) found that effective human resources positively impact on the organizational competitiveness. According to Edvinsson et al. (1997c), human capital basically consists of the factors such as skills, knowledge, experience, creativity, and innovation. Additionally, Bontis (1998) stressed that genetic inheritance, education, expertise, and attitudes as factors that constitute human capital.

World Bank Group (2017) stated that Vietnam lacks skilled workforce, importantly, managerial skills set is a top priority. Furthermore, management practices in Vietnam are, on average, not performing well compared to other countries. Pervasiveness of management practices in Vietnam is also not as wide as in other Asian countries, which certainly provides room for improvement. Vietnamese businesses are also at a disadvantage due to poor management skills those which is crucial for driving a business in increasing global competition.

On this basis, the first hypothesis of this study, H2, is reasonably assumed as follows:

H2: Human capital (HC) has a positive and significant effect on the firm's competitiveness (FC).

The third factor, intangible assets, is reviewed and hypothesized as follows:

2.3. Intangible assets

Kyung and Yoo (2017) emphasized that intangible assets are an important source to enhance competitiveness of firms through profitability and productivity. Intangible assets are viewed as inclusive of advertising intensity, capital intensity and research and development intensity. In addition to this, Song (2004) stressed that intangible assets are critical for SMEs to stay competitive for sustainable growth. Furthermore, Sharma and Dharni (2016) emphasized that intangible assets are a powerful resource for firm's survival and development. Intangible assets combined with physical assets improve productivity and profitability of firm. Particularly in context of environment changes, intangible assets are very critical that help a firm stay competitive against its competitors. Intangible assets composed of business reputation, name recognition, intellectual

property, knowledge assets, know-how, research and development efforts and relationships with the stakeholders.

On this basis, the third hypothesis of this study, H3, is reasonably assumed as follows:

H3: Intangible assets (IA) has a positive and significant effect on the firm's competitiveness (FC).

The pace of innovation development the next one to be reviewed for developing hypothesis as follows:

2.4. The pace of innovation development

Study by Hutahayan and Yufra (2019) found that the pace of innovation plays a significant role in increasing firm's competitiveness. Innovation speed is perceived as innovative ideas quickly realized and products entering markets faster that will generate a greater chance of improving competitiveness through profitability and productivity. Innovation is defined by Schumpeter (1990) includes developing new products, new factors, new markets, new method applications and changes in business models. Innovation helps remain quality, improved productivity and enhances customer satisfaction (Meissner & Carayannis, 2017). Wu and Parkvithee (2017) stressed that innovation does not only bring the profit opportunity to the innovators and companies but also the path of development in a sustainable manner on the basis of continuously increasing competitive advantage. Rapid innovations normally generate significant advantages for firms. From this perspective, a product is introduced to the market faster, the company will reap the larger potential benefits, large number of customers, large market share, high-profit margin, longer sales life and safer competitive position. Consequently, it facilitates firm to achieve price maker and economies of scale. Besides, Kessler et al. (2007) stated that innovation speed can generate additional significant advantages such as ownership of technology through patents and licenses, indirect benefits through brands or reputation as innovators. Furthermore, it realizes innovative ideas faster than planned; launching new products to market as planned; and innovating faster than before. The aforementioned outputs of innovation and pace of innovation consequently help increase competitiveness of firm against its rivalries.

According to World Bank Group (2017), innovation and pace of innovation are critical for future growth for SMEs in Vietnam. Innovation is categorized into three types that included product innovation, process innovation and organizational innovation for enhancement of firm's competitiveness.

On this basis, the third hypothesis, H3, of this study is reasonably assumed as follows:

H4: The pace of innovation (PI) has a positive and significant effect on the firm's competitiveness (FC).

The next one, CSR, to be reviewed and hypothesized as follows:

2.5. Corporate social responsibility (CSR)

De Melo et al. (2019) found that CSR has a significant relationship with firm's competitiveness, particularly in emerging economies. Additionally, A. Khan et al. (2013) implied that CSR disclosures positively and significantly relate to the possibility of creating advantage for firm, particularly those operating in export-oriented industries. While Nunes and Bennett (2010) determined that firms must adhere to the environment rules if they want to survive in business. Indeed, the global players deeply perceive of the importance of competitiveness to their development possibility globally and how to protect their leading position in the market by increasing their

competitiveness. They tend to take advantage of the first mover or environmental leader to achieve this. To be environmental leader, firm consistently stays responsible for the environment and CSR direction from strategy to action. Practicing CSR consistently and transparently will help firm enhance brand image and corporate reputation (Kim, 2019), improve organizational identification (Ahmed & Khan, 2019), increase customer satisfaction (Aziz Al-Ghamdi & Nada, 2019) and gain support from stakeholders those are critical to firm's competitiveness (Fernández-Guadaño et al., 2018).

On this basis, the fifth hypothesis, H5, of this study is reasonably assumed as follows:

H5: Corporate social responsibility (CSR) has a positive and significant effect on the firm's competitiveness (FC).

Hereafter is the next one to be reviewed for hypothesis as follows:

2.6. Firm size

Kyung and Yoo (2017) stressed that firm size is more significant than it's generally perceived to be. Large companies can achieve economies of scale that generate competitive advantages for them. In addition, according to Ravenscraft (1983), it has been shown that large firms have an advantage over small firms because of their economies of scale. Moen (1999) defined that firm size has an impact on firm's competitiveness. However, it's still controversial that under what circumstance firm size significantly or insignificantly affects firm's competitiveness. The basic assumption has often been that large-scaled firms are more competitive than small-scaled firms for competing in international markets (Calof, 1993). Furthermore, Aaby and Slater (1989) determined that larger firms have more resources in relation to finance, technology and human capital which make them more competitive in global markets than smaller firms.

On this basis, the sixth hypothesis, H6, of this study is reasonably assumed as follows:

H6: Firm size (FS) has a positive and significant effect on the firm's competitiveness (FC).

The last one to be reviewed for developing hypothesis as follows:

2.7. External factors

Gonçalves et al. (2019) stressed that external factors have impact on SMEs' competitiveness. Accordingly, external factors include criteria that reflect the macroeconomic climate of firms, such as their competition, market dynamics, financial access and political and legal-related instability. According to Njoroge et al. (2016), the external factors are a set of exogenous factors which relate to organization and affect the effectiveness of the organization. In addition, M. Hitt et al. (2011) emphasized that the external factors are integration of society, technology, economics, politics and legal factors beyond the firm's control and imposing restrictions on them about the organization's activities.

Additionally, Civelek et al. (2016) conceptually perceived external factors as the premise for long-term competitiveness and growth of all market economies. In the broadest sense, the external environment reflects the quality of economic conditions and the prerequisites for an enterprise's economic performance. According to Porter et al. (1975), internal environment is considered as strategic resources and capabilities that help firm achieve competitive advantage, simultaneously some environmental influences that firms should deal with for achieving the best. In addition to this, Belanová (2014) states that a quality external environment facilitates long-term sustainable economic growth and is a basic premise for business operations to develop and

increase the country's competitiveness on an international scale. Most businesses are affected by the external environment during its operation process.

In Vietnam, access to finance is considered as one of the top business constraints (World Bank Group, 2017). Vietnam is a developing country with stable social and political condition. However, the business environment is increasingly competitive because Vietnam is perceived as a potential market in the perspectives of multinational companies that causes pressure on domestic enterprises, particularly SMEs. This situation is increasingly serious in the context of global integration considering competitiveness, SMEs in emerging country are not strong enough to compete with multinational companies that hold certain position in the market place and are capable of competing. Indeed, there was cases that domestic firms could not compete in their own market. Those indicate that external factors are very important to competitiveness of firm, particularly SMEs in a developing country.

On this basis, the seventh hypothesis, H7, of this study is reasonably assumed as follows:

H7: External factors (EF) has a positive and significant effect on the firm's competitiveness (FC).

Based on the above literature review, authors perceived that it's very necessary to study how competitiveness of firm is influenced by internal and external factors in emerging economies. More importantly, in the context of international integration of emerging economies as the newly signed free trade agreements which are taking into effect. Therefore, authors proposed the research model and hypotheses in the next part named "Research methodology and hypothesis".

[Table 1](#) sets out the findings and limitations of recent studies on firm's competitiveness related.

[Table 2](#) presents the theories related to firm's competitiveness in this research context those are considered theoretical foundation of this study.

3. Research methodology and hypothesis

Studies on firm's competitiveness were taken from different perspectives, different contexts and different prospect expectations, as shown in [Table 1](#). However, those have focused on specific areas of competitiveness in isolation and in macro environments such as country, city, or industry. Therefore, it's necessary to have a holistic research that specifically focused on an integration of internal factors and external factors that affect the firm's competitiveness from different angles in the context of increasingly competitive pressure due to the open economy world. Furthermore, there is a lack of studies on SMEs while this is considered as a core force to move economy. The research model of this paper is proposed as [Figure 1](#) which was developed on the basis of inheriting the research model of previous studies of Mustafa et al. (2019) and Wu and Parkvithee (2017) with necessary adjustments to suit the research context of this study. The idea of developing this research model is principally based on theory of contingency (Volberda et al. (2012), general system (Kast and Rosenzweig (1972) and resource advantage Hunt and Morgan (1995) those are described in the abovementioned [Table 2](#).

The variables of this study were constructed that FL has eight items, HC has eight items, IA has seven items; PI has four items; CSR has six items; FS has three items, EF has eight items and FC has eight items. Overall, this model has seven independent variables and one dependent variable and total 52 items.

Hypotheses of this model are proposed as following:

Table 1. Studies on firm's competitiveness related

Author	Context	Methodology	Findings/ Contributions	Limitation
N. R. Khan et al. (2019)	SMEs sector in Pakistan	Quantitative	Strategic human resource management practices positively impact on the firm's competitiveness.	Scope of research (subject, industry, region, sector)
Ayodotun et al. (2018)	SMEs sector in Nigeria	Quantitative	Strategic entrepreneurial orientation (SEO) has a significant relationship with competitiveness of SMEs. The findings indicate that SEO is very important for achievement and improvement competitiveness of SMEs.	Scope of research (subject, industry, region, sector)
Sanchez-Gutierrez et al. (2016)	SMEs manufacturing sector in Guadalajara, Mexico.	Quantitative	Intellectual capital has a significant impact on the firm's competitiveness.	Scope of research (subject, industry, region, sector)
Dalimunthe (2019)	SMEs sector under women's SMEs Business Incubator Centre of the Universitas Sumatera Utara in Medan.	Qualitative	Entrepreneurial mindset and strategy aspects have a significant relationship with firm's competitiveness.	Scope of research (subject, industry, region, sector)
Hutahayan and Yufra (2019)	SMEs food industry sector in Malang, Indonesia.	Quantitative	The pace of innovation plays a significant role in increasing firm's competitiveness. And such influence is more significant if the pace of innovation is followed by "creative destruction".	Scope of research (subject, industry, region, sector)
Wu and Parkvithee (2017)	Chinese SMEs in Thailand.	Qualitative	External environment has significant effects on the firm's competitiveness. External environment consists of competition, legal and political related, social and cultural related.	Scope of research (small sample size, subject, industry, region, sector)

(Continued)

Table 1. (Continued)

Author	Context	Methodology	Findings/ Contributions	Limitation
Kalita and Chepureno (2020)	Russian manufacturing SMEs sector, Russia.	Quantitative	Intangible assets such as technology, processes, management systems, and external environment such as financial access have significant relationship with firm's competitiveness.	Scope of research (subject, industry, region, sector)
Gonçalves et al. (2019)	SMEs	Interview, post-it-notes, panel	Innovation and human capital are very important in increasing firm's competitiveness.	Scope of research (subject, industry, region, sector)
Mustafa et al. (2019)	SMEs sector in Kosovo.	Qualitative and quantitative combination	Change and innovation are very important for firm's competitiveness, particularly in the market competition context. Simultaneously, change and innovation help reduce operating cost for profitability optimization.	Scope of research (subject, industry, region, sector)
Appiah et al. (2019)	SMEs, non-traditional horticultural, in Ghana	Qualitative	The government plays a very important role in the firm's competitiveness, particularly for the export possibility.	Scope of research (subject, industry, region, sector)

H1: Flexibility (FL) has a positive and significant effect on the firm's competitiveness (FC).

H2: Human capital (HC) has a positive and significant effect on the firm's competitiveness (FC).

H3: Intangible assets (IA) has a positive and significant effect on the firm's competitiveness (FC).

H4: The pace of innovation (PI) has a positive and significant effect on the firm's competitiveness (FC).

H5: Corporate social responsibility (CSR) has a positive and significant effect on the firm's competitiveness (FC).

H6: Firm size (FS) has a positive and significant effect on the firm's competitiveness (FC).

H7: External factors (EF) has a positive and significant effect on the firm's competitiveness (FC).

The constructs' measurement items were adopted after careful literature review; however, we have made some changes as required by the study for the research context. All structures are

Table 2. Previous theories related to this research context

Source	Theory	Definition and brief explanation
Volberda et al. (2012)	Contingency theory	Management style and organizational structure depends on a set of “contingency” factors and there is no best way to organize. The way of organizing is contingent and dependent on the firm’s environment.
J. B. Barney (2001)	Resource-based-view (RBV) theory	RBV theory emphasizes the board structure and board composition as a possible resource that can add value to the company, a source of competitive advantage for company.
Kast and Rosenzweig (1972)	General system theory	Promotes better awareness of complex situations and increases the likelihood of taking appropriate actions.
Ravenscraft (1983)	Theory of firm size	Large firms have an advantage over SMEs because of economies of scale.
Chacko (1997)	Theory of continuous competitiveness	Related to sufficient conditions (both internal and external) that firm and country achieve and maintain continuous competitiveness.
Hunt and Morgan (1995)	Resource advantage theory	An approach of the process of competition in market-based economies. Accordingly, competition involves a constant struggle between companies for a comparative advantage in resources that results in a position in the market for competitive advantage and, therefore, superior financial performance.
Krugman (1979b)	New trade theory	Productivity growth is the main driver of competitiveness in an imperfect competitive market.

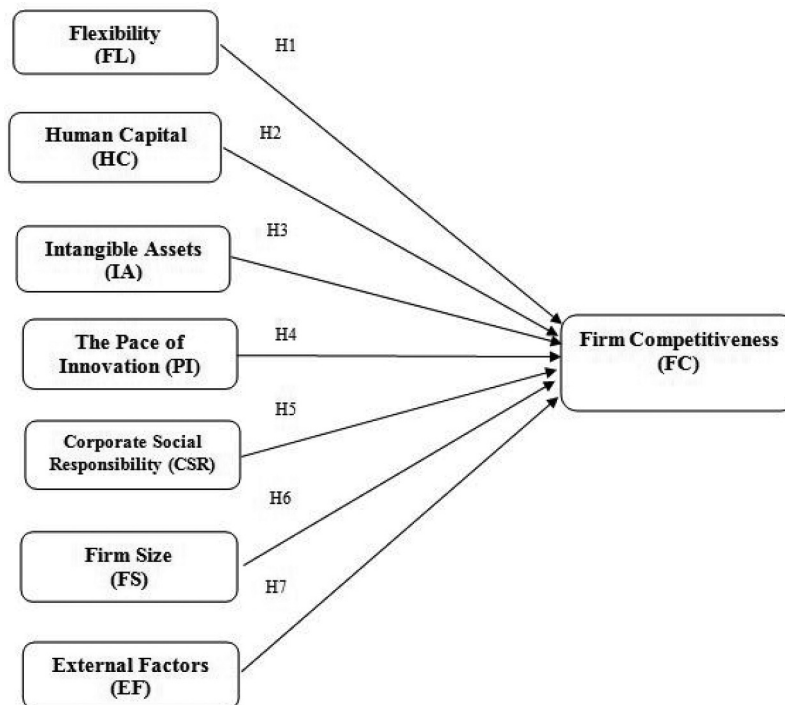
measured on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). The details of constructs and their items are given in [Table 3](#).

[Table 3](#) summarizes constructs of the proposed research model of this study.

This manuscript intends to intensively understand the factors that affect the SMEs competitiveness in emerging economy like Vietnam, in the context of increasing competitive pressure due to global integration. This study focuses on SMEs who are exporters in the field of production because of their important role in the national economy. There were 380 companies selected for this study that have been in this field for more than 10 years.

This study uses a combination of qualitative and quantitative methods to utilize the advantages of both research methods for the comprehensive assessment of the relationships of variables of the research model. Qualitative research method enables us to approach in-depth and detailed information about the views, visions for the relationship of the defined factors and firm’s competitiveness (FC). Qualitative research with the form of in-depth expert interviews at face to face model that enables authors to collect different attitudes and behaviors potentially

Figure 1. Proposed research model.



leads to the same action or a decision. Authors prepared interview questions at an open-ended mechanism to encourage interviewees to answer in the most comfortable, realistic and unrestricted way within a certain framework. The types of chosen respondents for interview are firms' managing directors, economists, managers and entrepreneurs. There are 50 respondents which are composed of 15 managing directors, 10 economists, 15 managers and 10 entrepreneurs. The qualitative research methods employed in this study were individual and group interview, combined with observation and document review. The data collected from this stage were labeled and classified to support preparation of questionnaire for the main survey. The questionnaire was structured in two parts. The first part is for respondent's information and the second part is for the interview questions. The questionnaire was built using 7 Likert scale point which indicates that the point ranges from 1 (strongly disagree) being ascending to 7 (strongly agree).

We obtained the data for our study from interview and survey those were conducted for a period from 15 January 2020 to 18 June 2020. The secondary data were collected from various reliable sources for factors that affect firm's competitiveness in different ways and determined SMEs on the basis of quantitative approach that includes number of employees, amount of capital and sales revenue (Gümüs & Kütahyalı, 2017). The primary data were collected by survey using questionnaire with initial sample size is 595. The target interviewee included managing directors (about 35%), managers (about 45%), and entrepreneurs (about 20%) with no age limit to fully understand the perceptions of different positions in the organization at different ages. The survey was implemented by distributing questionnaires to the target respondents through email and direct delivery. The 570 questionnaires received represented a response rate of 95.79%. The collected data were then transformed, interpreted, categorized against the indicated constructs and analyzed using covariance base structural equation model (CB-SEM).

Table 3. Constructs

Constructs	Items	Description	References
Flexibility (FL)	FL1	Flexibility is perceived ready at different levels of firm.	De Leeuw and Volberda (1996); Córdova and Yanine (2013)
	FL2	Flexibility is practiced at the regular basis.	
	FL3	Firm's strategies stay flexible.	
	FL4	Firm's operating tactics remain flexible.	
	FL5	Firm's resources stay flexible.	
	FL6	Products diverse according to consumer trends.	
	FL7	Business policies stay flexible according to competition context.	
	FL8	Flexible market approach.	
Human Capital (HC)	HC1	Employee skills.	Edvinsson et al. (1997c); Bontis (1998)
	HC2	Employee's education level.	
	HC3	Employee's experiences.	
	HC4	Employee's creativity ability.	
	HC5	Employee's innovation ability.	
	HC6	Employee's knowledge.	
	HC7	Employee's expertise.	
	HC8	Employee's attitude.	
Intangible Assets (IA)	IA1	Firm's reputation.	Sharma and Dharni (2016); song (2004)
	IA2	Brand's recognition.	
	IA3	Intellectual properties.	
	IA4	Know-how possession.	
	IA5	Research and development capability.	
	IA6	Relationship capital with the firm's stakeholders.	
	IA7	Technical-related.	
Pace of Innovation (PI)	PI1	The speed of realizing innovation ideas faster than planned.	Hutahayan and Yufra (2019); Kessler et al. (2007)
	PI2	The speed of entering new products in the markets.	
	PI3	The speed of realizing innovation ideas faster than previous periods over the past three years.	
	PI4	The intensity of entering new products in the markets higher than previous periods over the past three years.	

(Continued)

Table 3. (Continued)

Constructs	Items	Description	References
Corporate Social Responsibility (CSR)	CSR1	Our company guarantees outstanding product quality as declared.	Turker (2009); Porter and Kramer (2002)
	CSR2	Our company has a system and process in place for keeping improving productivity and efficiency.	
	CSR3	Our company provides products at the competitive price against competitors.	
	CSR4	Our company has a system and process in place for employee development (education, skillsets, ect).	
	CSR5	Our business gives adequate contributions to charities and community activities for enhancement of social welfare.	
	CSR6	Our company operates on the base of respect for environment.	
Firm Size (FS)	FS1	Sales	Nassar et al. (2014)
	FS2	Total assets	
	FS3	Number of employees	
External Factors (EF)	EF1	Competition.	Gonçalves et al. (2019); M. Hitt et al. (2011)
	EF2	Market dynamics.	
	EF3	Financial access.	
	EF4	Government supports.	
	EF5	Political and legal instability.	
	EF6	Technological access.	
	EF7	Trade agreements.	
	EF8	Economics.	
Firm Competitiveness (FC)	FC1	Degree of differentiation.	Wernerfelt (1984), M.E. Porter (1990), Schwab (Schwab, 2014)
	FC2	Firm capabilities.	
	FC3	Supply chain management.	
	FC4	Intellectual property protection.	
	FC5	Value chain presence.	
	FC6	Firm specific processes.	
	FC7	Innovation possibility.	

4. Results and discussion

4.1. Sample characteristics

Sample characteristics as shown in Table 4 present the basic information of respondents. It is composed of demographics of respondents and size of the enterprise (on the basis of total number

Table 4. Sample characteristics

Index	n = 570	Intensity (%)
Gender	304	53.33
Male	266	46.67
Female		
Age	230	40.35
40–45 years	250	43.86
46–50 years	90	15.79
51 years above		
Education	352	61.75
Bachelor	142	24.91
Master	76	13.33
Above		
Years of working for the company	70	12.28
1–5 years	304	53.33
6–10 years	196	34.39
Above 10 years		
Size	199	34.91
30–50 employees	290	50.88
51–100 employees	81	14.21
100–200 employees		

of employees) that they are working for. It shows that the majority of respondents were male (53.33 percent). There is 43.86 percent of respondents who were aged from 46 to 50 years, followed 40.35 percent were aged from 40 to 45 years and 15.79 percent were aged above 51 years. Further analysis showed that 53.33 percent of the respondents have worked for the company from 6 to 10 years, 34.39 percent above 10 years and 12.28 percent between 1 and 5 years. For those who have worked for the company for over 5 years, have assumed a variety of functions and duties within the company. They demonstrate a deep understanding of the competitive landscape of their industry and the challenges related to competitiveness, particularly in the context of global integration.

4.2. Assessing reliability of the scale

The analysis results show that Cronbach’s Alpha coefficient of all variables is greater than 0.7, simultaneously composite reliability values are also greater than 0.7. According to J. F. Hair et al. (2016), the aggregate reliability between 0.7 and 0.95 represents a satisfactory level of reliability. Therefore, this result confirms that the reliability of this scale is good and acceptable. Table 5 is summary of these results.

Table 5. Cronbach’S Alpha and composite reliability results

Variables	Cronbach’s Alpha	Composite Reliability
HC	0.891	0.915
IA	0.918	0.923
FS	0.747	0.895
CSR	0.858	0.898
FL	0.914	0.895
PI	0.794	0.860
EF	0.896	0.799
FC	0.892	0.750

Next, factor analysis was taken using KMO and Bartlett’s Test as an assessment before taking a further step, exploratory factor analysis (EFA), as process (Bartlett, 1954; Kaiser & Rice, 1974). Results show that KMO coefficient is greater than 0.5 and sig. is smaller than 0.05. Thus, it is satisfied for taking EFA. Table 6 shows results of KMO and Bartlett’s Test of this research.

Table 6. KMO and Bartlett’s test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.897
Bartlett’s Test of Sphericity Approx. Chi-Square	16,340.908
df.	1326
Sig.	0.000

The next step was taken accordingly by proceeding with exploratory factor analysis. Results indicated that all items converge on the proper factors according to the research model as all the factor loading values are strong greater than 0.5, so it can be concluded that all variables satisfy convergence (J. F. Hair et al., 2009). Table 7 summarizes the range of factor loading of items.

Table 7. Factor loading

Variables	FL	IA	HC	EF	FC	CSR	PI	FS
FL1—FL8	0.613–0.876							
IA1—IA7		0.721–0.848						
HC1—HC8			0.595–0.823					
EF1—EF8				0.626–0.767				
FC1—FC8					0.586–0.876			
CSR1—CSR6						0.578–0.784		
PI1—PI4							0.545–0.818	
FS1—FS3								0.631–0.741

4.3. Convergent validity

The convergence of the measurement items on their respective structures is assessed using Average Variance Extracted (AVE) values. According to J. Hair et al. (2010) and (Fornell & Larcker, 1981), AVE index should be over or equal to 50%, then the convergence is confirmed satisfactory. Table 8 shows the results of AVE whose are all greater than 0.5 therefore it can be concluded that the observed variables are focused on the research concept that it is involved in or convergent validity is supported.

4.4. Discriminant validity

Discriminant validity of the measurement model was assessed by using Maximum Shared Variance (MSV) values. According to J. Hair et al. (2010) and (Fornell & Larcker, 1981), MSV values are smaller than AVE value then the discriminant validity of the measurement model is established. In

Table 8. CONVERGENT VALIDITY

Variables	AVE
FL	0.574
IA	0.632
HC	0.519
EF	0.524
FC	0.516
CSR	0.510
PI	0.505
FS	0.502

Table 9. AVE vs MSV values

Variables	AVE	MSV
FL	0.574	0.211
AI	0.632	0.162
HC	0.519	0.188
EF	0.524	0.006
FC	0.516	0.211
CSR	0.510	0.038
PI	0.505	0.196
FS	0.502	0.182

this study, MSV values are all smaller than that of AVE so discriminant validity is supported. [Table 9](#) summarizes the MSV values compared with AVE values.

Overall, the above analysis results confirmed that this research model is reliable and valid. It's therefore concluded that the reliability and validity of the research model of this study are supported and ready for taking the next step as process.

4.5. Confirmatory factor analysis (CFA)

As statistics above, with Cronbach's alpha values greater than 0.7 and AVE values greater than 0.5 that meet the conditions for confirmatory factor analysis (CFA). Therefore, it can be concluded that relationships between items and their respective factors are verified and the proposed theoretical model fits the data collected (Brown, 2006; Stevens, 2009). [Figure 2](#) is the confirmatory factor analysis result.

4.6. Evaluation of structural model

Model-of-fit analysis was performed to determine its fitness and its validity. This analysis was conducted by assessing a set of indices such as RMSEA, GFI, CMIN/DF and TLI. Those values in this study satisfied the defined acceptance thresholds of the previous authors of the relevant studies. [Table 10](#) summarizes the model-of-fit indices with full name, the acceptance thresholds and results. Overall, it can be concluded that this model is fit and valid.

The next step was conducted to access the relationships of variables of the model using p values. The statistical significance levels are expressed as p-values from 0 to 1, when p-value \leq 0.05, it indicates statistical significance (McLeod, 2019). In this study, p values are all smaller than 0.05 and positive so it can be concluded that all variables have statistical significance and their

Figure 2. Confirmatory factor analysis (CFA).

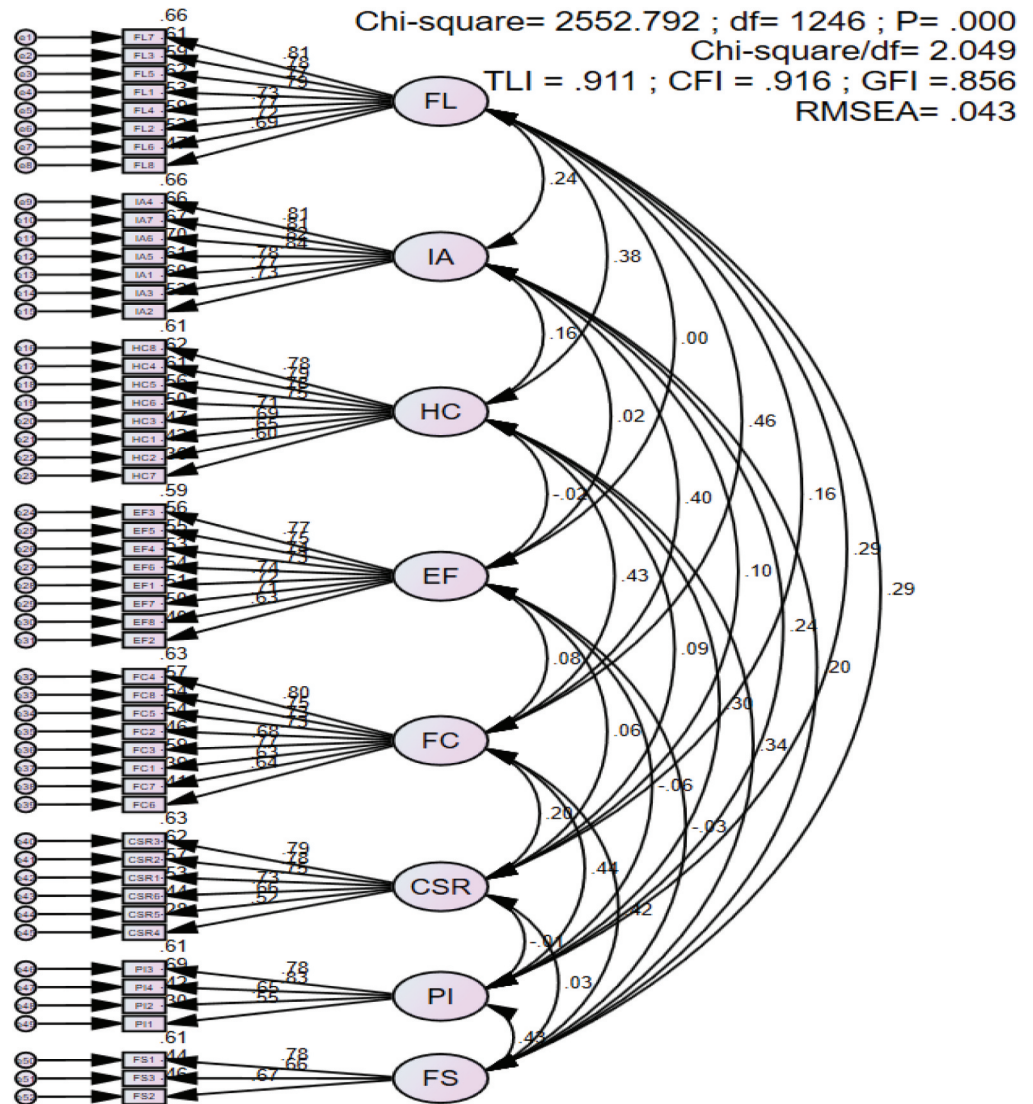


Table 10. Model-of-fit analysis

Model-of-fit indices	Full name	Acceptance thresholds	Results	Conclusion
RMSEA	Root mean square error of approximation	0.08 ≤ Value ≤ 0.10 (mediocre fit); Value < 0.8 (good fit); Value ≤ 0.05 (close fit) (J. Hair et al., 2010)	0.043	Close fit
TLI	Tucker–Lewis index	Value > 0.9 (J. Hair et al., 2010)	0.911	Good fit
CMIN/DF	Chi-Square/DF	Value < 3 (good); Value < 5 (acceptable) (J. Hair et al., 2010)	2.049	Good fit
CFI	Comparative fit index	0 < Value < 1 (acceptable); ≈ 1 (good fit)	0.911	Good fit

Table 11. P values

Relationships	p value	Relationships	p value
FC ← FL	< 0.001	EF3 ← EF	
FC ← IA	< 0.001	EF5 ← EF	< 0.001
FC ← HC	< 0.001	EF4 ← EF	< 0.001
FC ← EF	0.019	EF6 ← EF	< 0.001
FC ← CSR	0.002	EF1 ← EF	< 0.001
FC ← PI	< 0.001	EF7 ← EF	< 0.001
FC ← FS	< 0.001	EF8 ← EF	< 0.001
FL7 ← FL		EF2 ← EF	< 0.001
FL3 ← FL	< 0.001	FC4 ← FC	
FL5 ← FL	< 0.001	FC8 ← FC	< 0.001
FL1 ← FL	< 0.001	FC5 ← FC	< 0.001
FL4 ← FL	< 0.001	FC2 ← FC	< 0.001
FL2 ← FL	< 0.001	FC3 ← FC	< 0.001
FL6 ← FL	< 0.001	FC1 ← FC	< 0.001
FL8 ← FL	< 0.001	FC7 ← FC	< 0.001
IA4 ← IA		FC6 ← FC	< 0.001
IA7 ← IA	< 0.001	CSR3 ← CSR	
IA6 ← IA	< 0.001	CSR2 ← CSR	< 0.001
IA5 ← IA	< 0.001	CSR1 ← CSR	< 0.001
IA1 ← IA	< 0.001	CSR6 ← CSR	< 0.001
IA3 ← IA	< 0.001	CSR5 ← CSR	< 0.001
IA2 ← IA	< 0.001	CSR4 ← CSR	< 0.001
HC8 ← HC		PI3 ← PI	
HC4 ← HC	< 0.001	PI4 ← PI	< 0.001
HC5 ← HC	< 0.001	PI2 ← PI	< 0.001
HC6 ← HC	< 0.001	PI1 ← PI	< 0.001
HC3 ← HC	< 0.001	FS1 ← FS	
HC1 ← HC	< 0.001	FS3 ← FS	< 0.001
HC2 ← HC	< 0.001	FS2 ← FS	< 0.001
HC7 ← HC	< 0.001		

relationships are significant. It means that hypotheses of this study are accepted. Table 11 is a summary of p values that supported the above analysis and conclusion.

Taking further assessment on the analysis results of SEM (structural equation model), it indicated that the non-standardized regression coefficients all carry the positive sign, so they all work in the same direction. Table 12 is analysis results of SEM.

Additionally, the degree of influence of factors affecting firm’s competitiveness through the following standardized regression coefficient. Results show a positive effect of factors on firm’s competitiveness as Table 13.

Figure 3 is the result analysis of this research model.

Furthermore, bootstrap test was conducted with sample loop 1000. Results show that CR is mostly smaller than 1.96, so the SEM results are reliable predicting from the sample to the population. Table 14 summarizes results of bootstrapping.

Table 12. Analysis results of sem

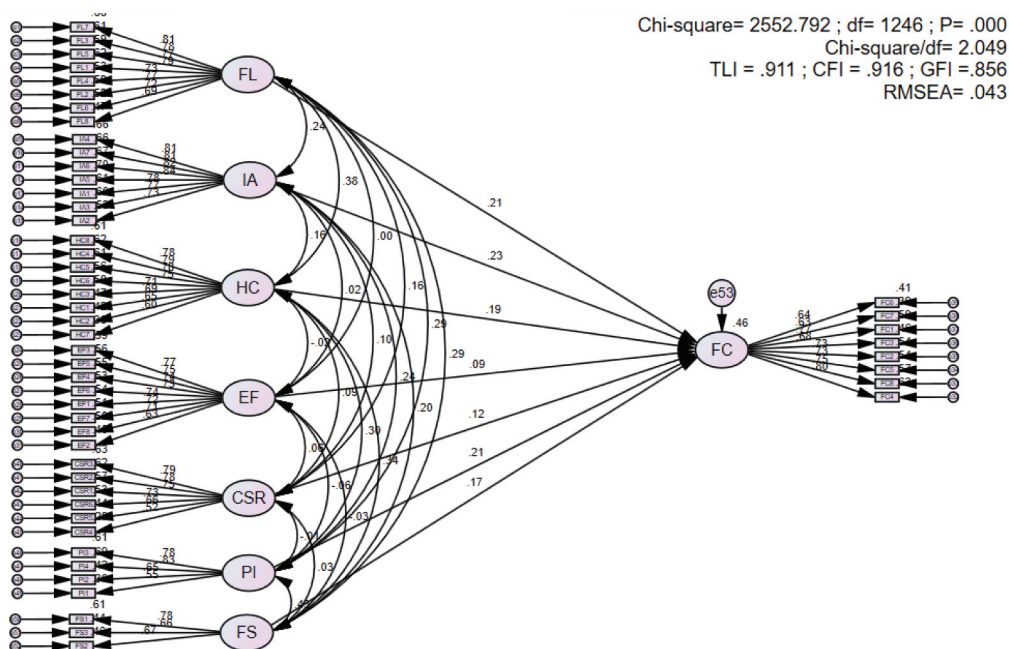
Parameter	Estimate	S.E.	C.R.	P
FC ← FL	0.178	0.037	4.797	< 0.001
FC ← IA	0.164	0.029	5.712	< 0.001
FC ← HC	0.167	0.037	4.456	< 0.001
FC ← EF	0.054	0.023	2.344	0.019
FC ← CSR	0.114	0.037	3.045	0.002
FC ← PI	0.149	0.034	4.374	< 0.001
FC ← FS	0.182	0.054	3.394	< 0.001

Table 13. Standardized regression weights

Path Coefficient	Estimate
FC ← FL	0.206
FC ← IA	0.226
FC ← HC	0.192
FC ← EF	0.087
FC ← CSR	0.117
FC ← PI	0.205
FC ← FS	0.166

Figure 3. Result analysis of research model

Source: Authors' analysis



As the analysis result in Table 12 indicates, the output result of this study accepted hypothesis 1 that flexibility (FL) positively impact on firm's competitiveness (FC) (+0.206, $p < 0.05$). This result supported the findings of Yanine et al. (2016); Hussain et al. (2015); Eruemegbe (2015) and Gao (2009). The analytical results showed that flexibility is the second most powerful factor for firm's competitiveness. This relationship is significant therefore the more flexibility, the higher competitiveness that a firm can utilize. Additionally, results interestingly discover that for firm to maximize

Table 14. Results of bootstrapping

Parameter	SE	SE-SE	Mean	Bias	SE-Bias	C.R
FC ← FL	0.05	0.001	0.207	0.001	0.002	0.5
FC ← IA	0.043	0.001	0.226	0	0.001	0
FC ← HC	0.048	0.001	0.191	-0.001	0.002	-0.5
FC ← EF	0.038	0.001	0.088	0.001	0.001	1
FC ← CSR	0.044	0.001	0.117	0	0.001	0
FC ← PI	0.05	0.001	0.203	-0.003	0.002	-1.5
FC ← FS	0.051	0.001	0.169	0.003	0.002	1.5

its competitiveness by staying flexible, it's necessary that flexibility should be controlled so that the organization's resources are optimized and the external environmental conditions are leveraged.

This study results confirmed hypothesis 2 that human capital (HC) positively impacts on firm's competitiveness (FC) (+0.192, $p < 0.05$). This result confirmed the findings of de De Brito and De Oliveira (2016), Shafeek (2016), and Masood et al. (2018). The statistics show that this relationship is significant and positive therefore the quality of human capital is the decisive factor for the competitiveness of an organization. So in order for the organization to improve its competitiveness, the organization must have a practical strategy and programs for human capital development.

Next, hypothesis 3 is accepted in this study. It indicates that intangible assets (IA) positively influence firm's competitiveness (FC) (+0.226, $p < 0.05$). This relationship is significant. The statistical analysis result revealed that intangible assets are the strongest factor impact on firm's competitiveness. This implies that when a firm improves its intangible assets, it will enhance firm's competitiveness in numerous ways. This finding supported the previous studies of Kyung and Yoo (2017), Song (2004), and Sharma and Dharni (2016).

This study results accepted hypothesis 4 that the pace of innovation (PI) has a positive and significant impact on firm's competitiveness (FC) (+0.205, $p < 0.05$). This result confirmed the findings of Hutahayan and Yufra (2019); Wu and Parkvithee (2017). The statistics showed that PI is the third most powerful factor for firm's competitiveness. It revealed that when a firm improves its pace of innovation, it will contribute to increasing its firm's competitiveness against its rivals to lead the market or lead the game in the marketplace. Such lead should be price maker as innovation can help increase productivity or differentiation maker as innovation makes creativity and this makes differences.

This study results accepted hypothesis 5 that corporate social responsibility (CSR) positively significantly impact on firm's competitiveness (FC) (+0.117, $p < 0.05$). This finding supported the previous studies of De Melo et al. (2019), A. Khan et al. (2013), and Nunes and Bennett (2010). It interestingly found that increased CSR associated with respects of environment, human rights and human development those return to enhance firm's reputation for firm's competitiveness.

This study results accepted hypothesis 6 that firm size (FS) has a positive and significant impact on firm's competitiveness (FC) (+0.166, $p < 0.05$). The analytical results interestingly revealed that firm size has a certain impact on firm's competitiveness in a manner of larger size associated with higher competitiveness. However, how large-scale businesses can optimize their competitiveness is still under discussion. This result confirmed the findings of Kyung and Yoo (2017), Ravenscraft (1983), and Kuncová et al. (2016).

Finally, results of this study accepted hypothesis 7 that external factors (EF) have a positive and significant influence on firm's competitiveness (FC) (+0.087, $p < 0.05$). These findings supported the

previous studies of Gonçalves et al. (2019), Njoroge et al. (2016), M. Hitt et al. (2011), Civelek et al. (2016), Porter et al. (1975), and Belanová (2014). The results interestingly discovered that external factors associated with government factors, society, competition, financial market and other business environment-related factors have different effects on the firm's competitiveness for different market places. It indicates that external factors differently play their roles on firm's competitiveness in different contexts.

Overall, the originality of this study focuses on three main meanings including (1) Proposing the latest model for SMEs for increasing their competitiveness, with highlights of their important role in the country's economy towards sustainable development; (2) Background research focuses on emerging economy where there is a need for a comprehensive knowledge about firm's competitiveness and its influential factors, particularly in the context of global integration and series of international free trade agreements are invalid. More specifically, the Europe-Vietnam Free Trade Agreement (EVFTA) and the Trans-Pacific Partnership Agreement (TPP) are the big deals in the economic-trade sector between emerging economies and developed economies. Having said that, global integration process simultaneously creates opportunities and challenges for businesses around the world, particularly SMEs as the core force of the national economy as aforementioned. Therefore, by comprehensively understanding of decisive factors for firm's competitiveness and their impact mechanism, those SMEs can increase their competitiveness for both domestic and international markets in the most practical manner; (3) Deliverable of this study disclosed the overall decisive factors for firm's competitiveness from inside and outside of firm. More importantly, it revealed the impact mechanism of each factor to contribute to improving the competitiveness of firm as discussion above. Thus, for improving competitiveness of SMEs in emerging economy context, priorities that firm should pay high attention for a practical development strategy is intangible assets; flexibility; pace of innovation; human capital; firm size; CSR and external factors. Particularly, in the context of international integration in emerging economies, internal factors are playing the most important roles for firm's competitiveness enhancement while external factors play as a motivator for firm to strive to improve its competitiveness against competitors.

Interestingly, it's derived through interviewing the experts and business practitioners that in the given context of Vietnam, in order to boost the competitiveness for SMEs, it is very necessary to promote the competitiveness of the industry and the nation as a whole. In the context of emerging economy like Vietnam, most SMEs are commonly independent in their practices and lack of linkage between enterprises in the industry, so the strength of the industry is not promoted so does firm's competitiveness. Previous studies of Najib et al. (2011), Hsu et al. (2013), and Lai et al. (2014) indicated the importance of clustering in increasing industry competitiveness while SMEs can achieve competitiveness from clustering (Awad & Amro, 2017). From the perspectives of experts and business practitioners, clustering can benefit firms by providing access to larger markets and shared networks, simultaneously, firms are encouraged to be more innovative because there are rivalries amongst firms in the clusters too (M.E. Porter, 1990) that boost firm's competitiveness in many ways. Intensively, it stimulates clusters' members always striving to rise and do better than they have done those will in turn increase firm's competitiveness. Therefore, clusters' members are always motivated to stay creative and innovative for advancement; improving human capital for productivity enhancement; being positively flexible for catching business opportunities; focusing on developing intangible assets for brand enhancement; integrating CSR practices into their business strategy for sustainable development; considering the suitable size to ensure business flexibility, while can optimize resources of the established community; paying proper attention to external related factors such as business environment, government-related policies, economics and so on, to promptly adjust accordingly and seize support opportunities.

4.7. Theoretical implications and managerial implications

4.7.1. Theoretical implications

Our research contributes to existing literature in some main ways. First, we significantly expanded the literature by extending research on the comprehensiveness of firm's competitiveness and its influential factors. This study integrates the internal and external factors and researches on the influencing level of each factor on firm's competitiveness for SMEs in the context of international integration in emerging economies. Our findings indicate that both internal factors and external factors positively significantly impact on firm's competitiveness. Additionally, the findings showed that internal factors are the most important drivers while external factors play as motivator for firm's competitiveness improvement. Results revealed that in the context of international integration in emerging economies, for SMEs to improve their competitiveness for both domestic and international markets, internal factors are affirmed most critical. Respectively intangible assets are the most important factor, followed by flexibility, pace of innovation, human capital, firm size and CSR. Therefore, increasing intangible assets will increase firm's competitiveness and so do the remaining factors. It is interestingly pressed that the dynamics of global economic trends set new forms of organizational change, apply new knowledge to their management and adopt new technology to deliver competitive products in the global market, therefore key features for SMEs possession are imposed flexibility; independence; quickness in business relations; individual creativity; realizing their ideas and adapting to market needs those will in turn enhance firm's competitiveness. Second, this study proposed an association of macroeconomic and microeconomic approaches to the concept of increasing firm's competitiveness from the sustainable business development point of view under the high competitive pressure context. Those contributions are significant to both businesses and government in relation to socioeconomic development on the sustainability manner at the firm level and national level.

4.7.2. Managerial implications

This study provides helpful contributions for managerial implications. The first one is for managerial level of firm understanding that how to improve firm's competitiveness in priority order by understanding the impact mechanism of each factor. It's generally implied that, at managerial level of firm, it's important to design business development strategy according to a flexible and controlled mechanism in the manner of optimization of internal resources and leverage of external factors for improving firm's competitiveness. Results affirmed that internal factors of firm are the most important influencers for firm's competitiveness for both domestic and international markets in the context of the world trade and economy are more and more open and flat to firms around the world. In particular, results managerially imply that by increasing intangible assets such as business reputation, name recognition, intellectual property, knowledge assets, know-how, research and development efforts and relationships with the stakeholders, firm will accordingly increase its competitiveness. The same goes for flexibility factor when firm maintains a state of flexibility in development strategies, action tactics, products, policies and so on, firm will accordingly increase its competitiveness. Likewise, when firm promotes the pace of innovation for improving either productivity or differentiation, its competitiveness will be progressively increased. So does human capital when firm has a clear strategy and processes for human capital development, it will result in improving firm's competitiveness. Similarly, firm size should be considered so that it is not too small to be of a competitive advantage and not too large to lose flexibility. The size of the company to optimize the internal resources and leverage the external conditions depends on the specific context and industry characters. Next, when firm performs well CSR by respecting environment, human rights and human development, its competitiveness will be increased. Finally, external factors serve as motivation for firm to promote its competitiveness. In the context of global integration in emerging economy like Vietnam, SMEs face high competitive pressure in both domestic and global markets therefore competition related, market trend related, supporting programs and policies from government, scope of international trade agreements and its effective roadmaps should be at high priority for SMEs competitiveness. This implication helps tackle a common problem among business practitioners in Vietnam with respect to intensive

perceptions of factors that drive firm's competitiveness. The reality is that most business practitioners understand the importance of competitiveness to the survival and development of a business, but not intensively understand the factors that affect competitiveness and at what circumstance, firm can increase its competitiveness in a sustainable direction.

The second one is for government-related bodies to comprehensively understand the important factors that impact on the firm's competitiveness. Such comprehensive understanding has important implications for government-related bodies and policy makers because SMEs are the driving force for not only national economy but also global economy (Castela et al., 2018; Oliveira et al., 2017). Results implied that at the macro level, government should offer practical supporting programs and supporting policies in relation to (1) Education for quality of personnel; (2) Finance for investment in research and development, innovation and production; (3) Training given on the adequate and timely basis on free trade agreements, circulars related and guidance provided for improving firm's competitiveness on the sustainability basis in the context of open economy and trade; (4) Trade promotion activities for promoting business opportunities for firms in domestic and global markets; (5) Open policies offered to support businesses to leverage their possible flexibility to timely capture a business opportunity and convert that opportunity into business results. This implication supports the statement of Cavusgil et al. (2013) that the role of governments, especially in emerging and developing markets, is very important, and their role in enhancing the competitiveness of SMEs is no exception. This implication helps address the current common issue with respect to the ways that government supports SMEs. Empirically, there are many activities to support businesses from the government, mainly focusing on trade promotion. From the business practitioner perspectives, there is demand for a comprehensive support program from government that solves the practical problems as aforementioned that SMEs need to be able to improve their competitiveness in a sustainable way.

The third implication derived from this study is of great importance to the government which provides a deep view of the comprehensive planning to facilitate SMEs, particularly for export-driven enterprises to improve their competitiveness in a sustainability manner in the context of global integration. This may lead to initiatives with respect to establishing industrial cluster model that have been successful in other countries like Korea whose GDP and GDP per capita is much higher than Vietnam, progressively 8 times, 9 times more than Vietnam NationMaster (2003–2021). Interestingly, in the current context of the cooperation relationships between South Korea and Vietnam, there would be many advantages for Vietnam to learn this successful model in South Korea and apply it in accordance with the context in Vietnam. This implication provides important insight for a holistic planning for promoting SMEs competitiveness towards sustainability, particularly in the context of global integration. From the business practitioner's point of view, in essence, the current government support is mainly from a subjective point of view, majorly focusing on trade connection. However, trade connection is only a part of business process. The core thing is competitiveness of firm which is decisive factor for firm's success. Therefore, SMEs need a systematic support and comprehensive system from government to help businesses be proactive and systematic in improving their competitiveness.

5. Conclusion

This study provides a holistic knowledge of the firm's competitiveness for SMEs in emerging economies like Vietnam, particularly in the context of global integration. The findings of this study provide significant contributions to theory and implementation as aforementioned. This study therefore achieved its major objectives as initially defined. Besides the above findings from the empirical research, this study also delivers an interesting insight which is very useful for executive level of firms, managers, entrepreneurs, government bodies, economists and policy maker. More importantly, the significance of this study is the impact mechanism of each factor for firm's competitiveness those are helpful for application consideration into practice for improving firm's competitiveness.

The contribution of this study is important particularly for SMEs in emerging economy in the context of global integration. Indeed, global integration process simultaneously opens opportunities and challenges for SMEs, for instance, EVFTA (Europe-Vietnam Free Trade Agreement) takes effect from August 2020 which provides a huge advantage for exporters in Vietnam to Europe in terms of tariff. Besides, big challenges are created in terms of technical barriers and non-tariff barriers that require SMEs to make continuous efforts to improve their competitiveness to outperform their competitors and seize the opportunity. Since the business world is structured differently from country to country, with various company types such as multinational, large, small, and even micro that stimulate national and international economies in different ways. Therefore, comprehensively understanding the factors affecting growth and the competitiveness of SMEs has become increasingly important from a sustainable development perspective (Castela et al., 2018; Grillo et al., 2018).

There are limitations in the study as shown in section 6, however these limitations did not affect the reliability of the data results.

6. Limitations

This study raises the possible limitations of any scientific investigation. First, the sample includes small and medium enterprises from different segments, so respondents' perspectives on firm's competitiveness may differ according to the industry characters and environment context. Therefore, future studies may refer to firms from a single segment to gain a deeper understanding of their knowledge of firm's competitiveness.

Second, this study was conducted in the southern region of Vietnam. Thus, results can present differences in different economic settings. Hence, a multicultural study in emerging countries could be a rich site for future research.

In general, these limitations provide chances for future researches continue to contribute to the literature of firm's competitiveness and ways of improving firm's competitiveness towards sustainable development in different contexts and different research subjects.

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