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**Sustainable product attributes and export performance
of German manufacturing SMEs
from the international entrepreneurship perspective**

Doctoral Dissertation in Economics and Finance

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Dedication

In the course of writing my first and second doctoral theses, I had the privilege of being supervised by four different mentors. I am deeply grateful to all of them, but especially to **prof. dr. hab. Krzysztof Wach**, who has inspired me to become both a better researcher and a better human being.

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List of used abbreviations

AVE	Average Variance Extracted
BGs	Born Globals
BMWK	Bundesministerium für Wirtschaft und Klimaschutz / Federal Ministry for Economic Affairs and Climate Action
CASI	Computer-Assisted Self-Interviewing
CAWI	Computer-Assisted Web-Interviewing
CDT	Cognitive Dissonance Theory
CE	Circular Economy
CE	Corporate Entrepreneurship
CEOs	Chief Executive Officers
CFOs	Chief Financial Officers
CR	Composite Reliability
CSR	Corporate Social Responsibility
EDP	Expectancy Disconfirmation Theory
EMO	Entrepreneurial Market Orientation
EMW	Export Market Withdrawals
EO	Entrepreneurial Orientation
EP	Export Performance
ESG	Environmental, Social, and Governance
ESPA	Environmentally Sustainable Product Attributes
EU	European Union
FP	Financial Performance
GDP	Gross Domestic Product

GTAI	German Trade and Invest
HOCs	Higher Order Components HOCs
HTMT	Heterotrait-Monotrait Ratio
IBV	Institutional-Based View
IE	International Entrepreneurship
IEO	International Entrepreneurial Orientation
INVs	International New Ventures
IO	Industrial Organisation
ISO	International Organization for Standardization
LOCs	Lower Order Components
MBE	Multinational Business Enterprise
MNEs	Multinational Enterprises
MO	Market Orientation
OLT	Organizational Learning Theory
PESTEL	Political, Economic, Socio-Cultural, Legal, Technological, and Ecological
R&D	Research and Development
RBV	Resource-Based View
REACH	Registration, Evaluation, Authorisation, and Restriction of Chemicals
REM	Reason for Internationalization, Environment Selection, Mode Choice
RoHS	Restriction of Hazardous Substances
VRIN	Value, Rare, Inimitable, Non-Substitutable
SAT	Satisfaction of managers from export operation
SDGs	Sustainable Development Goals
SEM	Structural Equation Modelling
SMEs	Small and Medium-Sized Enterprises

SOPs	Standard Operational Procedures
SSPA	Social Sustainable Product Attributes
SP	Sustainable Performance
SPA	Sustainable Product Attributes
TBL	Triple Bottom Line
UN	United Nations
UNGC	United Nations Global Compact
VIF	Variance Inflation Factor
WCED	World Commission on Environment and Development
WWII	World War II

Introduction

Justification of the research problem

SMEs contribute significantly to the important macro-economical goals, such as national economic growth, full employment and price stability (Al-Karkhi, 2024). These market players like other major players are not living in a vacuum but surrounded with external forces, which in case of international entrepreneurship are very dynamic and even hyper-turbulent (Fathallah et al., 2018). It means that market players must adapt themselves to the constantly changing economic and market trends including those enforced by consumer demands or changes of formal institutions. It pushes them to gain new sources and develop new capabilities to survive the competition and create sustainable competitive advantage. In fact, recent environmental concerns including global warming, climate change, air pollution and the recent Covid-19 (Yu et al., 2017) along with the neglect of social responsibility of the business (Ullah et al., 2021) urge a shift in business model (Puślecki et al., 2021).

Many governments impose new regulations to foster this transition to control CO₂ emissions and implement better recycling practices (Padilla-Lozano & Collazzo, 2022), which means that sustainable solutions are important for companies. Although this shift initially starts by governments and corporate pressure but also fuelled by consumer awareness about social and environmental obstacles and subsequently their demands for green products (Nguyen et al., 2023). In order to fight the old battle in a new way, both large corporations and small and medium-sized enterprises (SMEs) need to leverage their entrepreneurial behaviour (Yi, 2021). Constant increase in production costs (including market research, R&D, product development and marketing) while maintaining efficiency, rooted in stricter regulations and awareness of the consumer.

SMEs are the essence of entrepreneurship and the backbone of all European economies (Breitkreutz et al., 2023; Tu et al., 2024), including Germany. A researcher's interest in SMEs stems from their unique characteristics. Understanding the specific type of business is also essential. According to the German government, SMEs are businesses with fewer than 500 employees or with an annual turnover up to 50 million euros (Deutschland, 2023). SMEs are defined by the European Commission as having less than 250 employees or

generating at least 50 million euros in annual revenue (European Union Commission, 2003). It is estimated that over half of the value added in Germany in 2021 was generated by roughly 2.3 million SMEs, while they account for 97.1% of Germany's exports. 56 percent of Germany's 38.4 million employees were employed in SMEs in 2021 (Deutschland, 2023). Thus, the government support them to enhance their competitiveness specially during the economic turmoil. This indicates the importance of SMEs internationalization in advance economies for keeping the economic growth momentum.

According to the Global Sustainability Report (2021) that collected data from more than 10,000 consumers from 17 countries including all different generations, 63% of consumers have altered their preference toward sustainable practices and 34% of the study samples confirmed that they would have pay higher for sustainable products, which proves that sustainable product attributes (SPA) are becoming more and more important. For instance, Horská et al. (2023) compare the shopping behaviour of iGeneration (18–25 years) with silver generation (58–76 years) in Solakia and find that iGeneration is more likely than silver to support sustainability issues, such as recyclable packaging, organic production, animal welfare, and to read nutrition and composition information.

To cope with this demands, responsible enterprises alter their strategies and implement marketing practices, policies, and procedures that consider concerns about the natural environment and society while pursuing the goals of generating revenue and delivering outcomes that meet organizational and individual objectives (Zeriti et al., 2014).

SMEs' sustainability practice in the international markets attract scholar interest and the majority of literature currently highlights the negative environmental aspects of business while ignoring the social parts (da Cunha Bezerra et al., 2020). Recently a few researches such as Ullah et al (2021) shifts their attention to sustainable product attributes. A conceptual framework that encompasses environmental and social sustainable attributes of products. The attributes part of this strategic new term distinguishes its contribution. In the strategic literature, attributes are referred to observable, concrete and measurable characterises of a product (Wu et al., 1988). Thus, it is essential to understand the sustainable product attributes framework that satisfy the needs of consumers.

From the Triple Bottom Line (TBL) perspective, a sustainable company seeks economic advantages while maintaining environmental and social stability. Results from Chen & Liu (2018) and Bıçakcıoğlu et al. (2019) suggest that a company's Corporate Social Responsibilities (CSR) strategy should be meticulously planned. It is becoming ever more crucial to embed CSR dynamics, such as level of competition, product positioning and availability of resources into organizational decision-making matrix to maintain competitiveness in the global market (Ullah et al., 2021). Davidenko et al. (2024) collect data from enterprises in the industrial region of Kazakhstan and conclude that building a management system in accordance with international environmental standards is likely to facilitate exports.

The prior literature aids in screening different related terms, such as eco-product (Hartmann & Germain, 2015), green product (Hang et al., 2022), or environmental product (Rehfeld et al., 2007) etc. However, in most cases, these refers to the environmental side, while the social aspect is generally disregarded. Therefore, researchers suggest a performance-oriented sustainable product attributes mix, a customer tailored CSR initiative; that converts the needs of consumers to the product (Ullah et al., 2021). The sustainable product attributes is built around the distinction between environmental and social aspects while combining both to create a sustainable product (Ketata et al., 2015).

In Germany sustainability is a growing philosophy not only in terms of formal institution but also in many other disciplines such as R&D. Transforming toward social ecological market economy that set by German government, showing the roadmap of German manufacturing industry in future. The government calls for further social sustainable action in German Industry (Deutschland, 2023b). Hence, German manufacturing SMEs are one of the pioneers in shaping economic development that is socially viable and ecological. SMEs in Germany with portion of 97.4% total enterprises in the German manufacturing sector, consumed 36.4% of production energy in 2016 (Statistisches Bundesamt (Destatis), 2017). It is surprising that German SMEs are poorly incorporated into sustainable development agendas despite their large number. One of the reasons for these circumstances is the neglect of SMEs in the sustainability research field (Steinhöfel et al., 2019).

An undeniable role is played by entrepreneurship on SMEs performance in this new transition (Isichei et al., 2020). As a result, the entrepreneurial orientation theoretical

framework has captivated both academic and industrial researchers who have studied entrepreneurship, related determinants and entrepreneurship drivers and their impact on SMEs' performance (Liñán & Chen, 2009). The reason for this is that many strategists believe entrepreneurial orientation (EO) drives SMEs toward a greener economy by following an innovation path. Some researcher such as Shepherd and Patzelt (2011) call it green entrepreneurship and highlight it as an essential solution to save ecosystem. This is why it is imperative to study the impact of EO on export performance of manufacturing SMEs.

A recent study by Boso et al. (2019) highlight the role of dynamic capability in integrating and building new capabilities, such as product innovativeness, to increase firms' export performance. Export innovation occurs at the product level when a SME adds a new product to its export basket for the first time, despite the fact that the same product may already be exported to the foreign market by other SMEs. SME export baskets are more important than large enterprise export baskets in terms of new items (Jusufi et al., 2020).

As Yaghoubi Farani et al. (2024) note in their study of the performance of 197 agriculture firms evaluating environmental sustainability orientation and EO, both determinants positively influence the performance of the samples, and entrepreneurial orientation positively influences environmental sustainability orientation. Linking to the sustainable product attributes, the remaining question that is not quite well answered by the scholars is whether sustainable product attributes develop via entrepreneurial orientation, which generates a higher cost business model, is able to enhance financial export performance in the same way as it enhances environmental export performance.

Apparently, SMEs, taking risks to proactively innovate green products to fulfil their commitments in this new trend. However, there is always a great risk of market rejection. Which mean the new product might fail to receive consumer attention and consequently not being adopted by the market. This would open the spectrum for another important determents of export performance which is export market orientation justifies by market orientation theoretical framework.

As Atuahene-Gima and Ko (2001) report, scholarship on market and entrepreneurship divides into two streams: management discipline considers entrepreneurship orientation,

marketing literature focuses on market orientation. While a market-oriented entity strives to meet the desires of its consumers, it may find it difficult to design a product or service that customers cannot envisage. This is where entrepreneurship get more fundamental, so these two variables are complimentary. According to Eggers and Kraus (2011) marketing efforts can be lean and flexible when entrepreneurship orientation and responsive market orientation are combined. A post-disaster business recovery framework develop by Morrish and Jones (2020) is one of the few available frameworks that combines both entrepreneurial and marketing orientations. The framework demonstrates that while businesses are caught up in a crisis, they can adjust their business models, organize resources, and create customer value in different ways. From the theoretical perspective, entrepreneurial orientation and export market orientation are justified by the International Entrepreneurship theoretical framework. Where International entrepreneurship (IE) is *“the discovery, enactment, evaluation and exploitation of opportunities—across national borders—to create future goods and services”* (Oviatt & McDougall, 2005, p. 540).

Export Market orientation that in the cultural approach (MARKOR) resonate with a corporate culture that encompass competitor, costumer and instructional coordination (Narver & Slater, 1990). He et al. (2018) research the effect of market orientation on 7500 Chines exporting firms, and report that stronger market orientation capabilities help firms improve export performance when regulatory distance increases. Faroque et al. (2020) study Bangladeshi apparel exporters, and conclude that export market orientation positively mediates the association between international entrepreneurial capability and export performance.

To the best of our knowledge, few studies are considered to investigate the triadic impact of sustainable product attributed, entrepreneurial orientation and export marketing orientation on SMEs' export performance. This is an existing research gap that should be addressed to understand to what extend SMEs should allocate their limited resources to export market orientation and considering entrepreneurial orientation to invent product with sustainable product attributes. The novelty of this research in considering the interaction of these important determinants would provide better understanding for German exporting SMEs. *So, it is important to know whether export market orientation can reduce market risk and increase customers' acceptance.* Thus, there is an urgent need to further investigate the effect of entrepreneurial orientation & export market orientation to see if they could *have*

complimentary role and boost up exporter's success specially in turbulent environment! And accordingly, how does the fit between entrepreneurial orientation, sustainable product attributes & export market orientation affect export performance?

The above-mentioned research results prove that the research gap lies in the following facts:

- Lack of insights on the internal relations of export performance namely, financial performance strategic performance and satisfaction with export activities.
- Although that many studies investigated the relationship between sustainable strategies and export performance, yet only few addresses the social aspects of sustainable product or services.
- Lack of comprehensive models to investigate, operationalise both environmental and social aspects of sustainability.
- although researchers investigated the impact of EO on export performance, but less attention paid on the impact of EO on the financial and strategic performance.
- Sustainability is a new trend and there are not enough studies on the link between sustainability and export market orientation.

Research methodology

The following research questions are posed in order to fill the research gap in understanding the impact of SPA and EO on export performance, exploring the interrelationships among the export performance dimensions, and determining if EMO influences SPA:

- RQ1.** How does German manufacturing SMEs' financial and strategic performance influence managers' satisfaction?
- RQ2.** How does German manufacturing SMEs' sustainable product attributes influence its export's performance?

- RQ3.** How does German manufacturing SMEs' entrepreneurial orientation influence its export's performance?
- RQ4.** How does German manufacturing SMEs' export market orientation influence its sustainable product attributes?

It brought us to establish the **main objective** of the doctoral dissertation, which is:

to identify key internal determinants within Entrepreneurship Orientations (EO), Sustainable Product Attributes (SPA), and Export marketing Orientation (EMO) that contribute to the successful export performance of German SMEs in manufacturing through the application of empirical methods.

Within the main objective, the following research assumption and **detailed objectives** are established:

- O1:** to present and discuss of the firm-level internationalization and sustainability empirical research (Chapter 1).
- O2:** to prepare a review of prior knowledge on internal determinants export performance of SMEs and its academic discussion (Chapter 2).
- O3:** to develop the research framework for empirical studies linking SPA, EO & EMO to SME's export performance including the selection of the variables and data analysis approach arising from the results of the preceding analysis of research fields (Chapter 3).
- O4:** to present results of statistical analysis and to identify the main determinants among the researched variables that significantly enhance German SMEs' export performance in manufacturing industry (Chapter 4), in particular:
- O4.1:** to understand the interrelationship among the export performance different dimensions.
- O4.2:** to explore the impact of SPA on different dimensions of EP.
- O4.3:** to explore the impact of EO on EP
- O4.4:** to explore the relation between EMO and SPA

- O5:** to explore and discuss relevant research limitations of the study as well as making suggestions for further studies (Chapter 5).

The literature study allowed to develop the hypotheses, which are discussed in detail in the methodological chapter. The following **research hypotheses** are tested in this dissertation:

- H1:** SMEs' financial performance impact on satisfaction with export operation in the German manufacturing industry.
- H2:** SMEs' strategic performance impact on satisfaction with export operation in the German manufacturing industry.
- H3:** Sustainable product attributes impact on financial performance in the German manufacturing industry.
- H4:** Sustainable product attributes impact on strategic performance in the German manufacturing industry.
- H5:** Sustainable product attributes impact on general satisfaction with export operation in the German manufacturing industry.
- H6:** Entrepreneurial orientation impacts on financial performance in the German manufacturing industry.
- H7:** Entrepreneurial orientation impacts on strategic performance in the German manufacturing industry.
- H8:** Export market orientation impacts on the SMEs' SPA in German manufacturing industry.

A survey of 178 German manufacturing SMEs is used as the basis for this doctoral dissertation. During February to May 2024, data was collected during various international fairs in Germany using judgemental sampling. An iPad is used to collect data via the Computer-Assisted Self-Interviewing (CASI) questionnaire and rest of responses are collected via Computer-Assisted Web-Interviewing (CAWI). In order to test hypotheses, the researchers used Structural Equation Modelling (SEM) via SmartPLS4. The summary of research methodology assumptions is presented in Table 1.

Table 1: Methodological assumptions of the research

Gap of study	Research Objectives	Research questions
Main research gap is lack of comprehensive model in German scholar to justify the relation among the new trending determinants of export performance such as SPA and different dimension of export performance. In addition, there is lack of comprehensiveness in German scholar on how SPA, EMO and EO influenced performance of German SMEs in an integrated model.	The objective of this study is to identify key internal determinants within entrepreneurial orientations, sustainable product attributes, and export marketing orientation that contribute to the successful export performance of German SMEs in manufacturing through the application of empirical methods.	-
Since empirical studies are lacking and fragmented, we do not understand how export performance dimensions interact. Scholars who have investigated the relationships are either old or have conducted a partial investigation (Ahamed & Skallerud, 2015; Wang & Olsen, 2002). The one-stage model is used by some researchers, to evaluate companies' export performance without considering their interrelationships (Al-Ghwayeen & Abdallah, 2018; Escandon-Barbosa et al., 2019).	To understand the interrelationship among the export performance different dimensions.	How does German manufacturing SMEs' financial and strategic performance influence managers' satisfaction?
Majority of the studies that investigated the impact of sustainability on firm performance focused on the environmental part while less attention paid to the social dimension. Apart from that it is not clear how firms' sustainability practice influenced export performance different dimensions (Ullah et al. 2021). With considering the importance of sustainability for German trading culture, there are only few studies available to address this issue in Germany.	to explore the impact of sustainable product attributes on different dimensions of export performance.	How does German manufacturing SMEs' sustainable product attributes influence its export's performance?
Research about the impact of entrepreneurial orientation on different dimension of SMEs' export performance are limited. It is not cleared how EO influence short term (financial) and long term (strategic performance) SMEs performance in German manufacturing sector (İpek et al., 2023).	to explore the impact of entrepreneurial orientation on export performance.	How does German manufacturing SMEs' entrepreneurial orientation influence its export's performance?
Limited research available on the relationship of EMO and sustainable product attributes in German literature (İpek & Bıçakcıoğlu-Peynirci, 2020).	to explore the relation between export market orientation and sustainable product attributes	How does German manufacturing SMEs' export market orientation influence its sustainable product attributes?

Source: own study.

Structure overview

This dissertation is divided into four chapters, the introduction and conclusions based on its structure:

Chapter 1 (*Internationalization from theoretical perspective*) presents and discusses the main ideas and theoretical concepts of firm-level internationalization and sustainability in empirical research. In addition to covering the definition and history of related theoretical frameworks, we also explore the behaviour of SMEs in international markets.

Chapter 2 (*Determinants of Small and medium-sized enterprises' export performance*) presents and discusses the concepts of export performance, sustainable product attributes, entrepreneurial orientation and export market orientation in the literature. Through levels of analysis, dimensions, and measurement models, export performance is contextualized. Following this, it analyses the literature in depth on three internal determinants: entrepreneurial orientation, sustainable product attributes, and export marketing orientation. It explores their emergence, definition, and overview of their related dimensions, as well as how to measure them.

Chapter 3 (*Research methodology linking sustainability and export performance of SMEs*) discusses how empirical research frameworks are developed by linking sustainable product attributes, entrepreneurial orientation and export marketing orientation (independent variables) to different dimensions of export performance including financial, strategic and managers' satisfaction (dependent variables), through the conceptual model. Furthermore, this chapter outlines the objectives, detailed hypotheses, research methods, and variables to be collected for empirical analysis.

Chapter 4 (*Empirical findings linking sustainability and export performance of German SMEs*) provides the results of statistical analysis to determine the relationship between sustainable product attributes, entrepreneurial orientation and export marketing orientation and the dependent variables such as SMEs' financial, strategic performance and managerial general satisfaction. Analyses will be presented based on descriptive statistics, reliability tests, bivariate correlation analysis, and linear regression analysis.

Chapter 5 (Discussion of empirical results) make a deep dive in the findings and provide discussion around the empirical findings. The chapter explores the implications of the results, verifies them with existing literature and highlights any discrepancies.

Conclusions include a discussion of empirical findings, limitations, recommendations for future research, and final conclusions.

1. Internationalization from theoretical perspective

1.1 Internationalization of small and medium-sized enterprises

Since decades international business has become a rutin for any nations and their market players (direct or indirectly). The definition of international business based on Czinkota et al. (2021, P. 6) is “*the flow of goods produced by a company to other countries for sake of making profits and focuses on transactions between two or more countries*”. This definition is built on some key points that worth to be unpacked. It highlights the motivation of entities involved in this process from internationalisation. Those market players with different size might have different motives for their internationalisation. From the stakeholder theory perspective, different stakeholder might negatively or positively be influenced for internationalisation decision of a company. It is also interesting to know that internationalisation is a process that will be influences by internal and external forces. It makes internationalisation an interdisciplinary phenomenon that engaged researcher from different fields. Next, the review tries to briefly talk about internationalisation and its relationship with globalisation process from different dimensions, levels and perspective. Multilevel analyses can be conducted on internationalization, including macro (the economy), meso (the industry), and micro (the firm) level analyses (Wach, 2018). Figure 1 illustrates these three layers and map relevant players for each layer. In the **macro level**, firms deal with certain forces in national, sub-global and global level. The famous framework to investigate the impact of this forces in firm’s behaviour is so called “PESTEL” that is introduced by Francis J. Aguilar's book "Scanning the Business Environment" (Aguilar, 1967). PESTEL encompasses six elements of political, economic, socio-cultural, legal, technological and ecological. There is direct link (positive or negative) among the forces in the macro level and international business and subsequently international trade. International trade growth massively since 1950s, in a way that the growth volume is much higher than domestic economies. The rapid growth of international trade leads to a growing number of businesses seeking competitive advantages globally instead of surviving in a saturated domestic market (Chen & Nuangjamnong, 2022). One of the main reasons behind this massive growth that can be seen in Table 2, is globalisation.

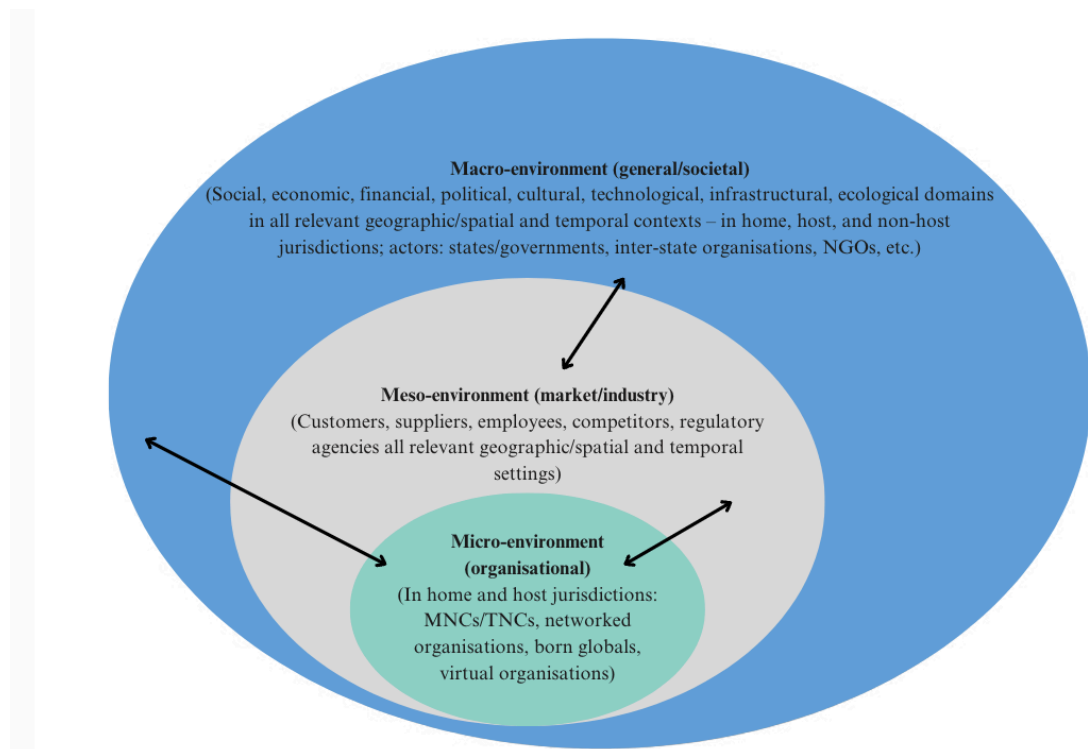


Figure 1: Typology of business environment

Source: Mohamed (2015, p. 181).

Table 2: Waves of Globalisation

	First Wave	Second Wave	Third Wave
Time Period	(1870–1914)	(1944–1980)	(1980–Present)
Technology	Steam engine, Telegraph, Electricity, Internal combustion engine	Container shipping, Jet planes, Communication satellites, Television	Personal computers, Internet, Mobile phones
Political Leadership	Great Britain economic leader	U.S. economic leader	Multipolar: United States, European Union, China
Commerce	Initially free trade but rising protectionism	Gradually decreasing tariffs	Freer trade spreading followed by rising protectionism
Capital Movements	Free	Regulated	Free
Migration	Free migration	Regulated migration	Regulated migration

Source: own compilation based on Carbaugh (2021, p. 5).

During each phase, market players influence by different technological, political and social forces. During the **second wave of globalisation**, reduction of trade barriers, **containerisation** and technological advancement, made a big push to the world economy. This trend boos-up with emergence of internet that open new spectrum for E-commerce. Although in some durations, the world experiences some nationalism or protectionism period (Wave III) (Carbaugh, 2021). In addition, technological advancements in information and communication technologies have enabled firms to target global markets soon after their inception, such approach is known as **born globals** (BGs) or/and **international new ventures (INVs)** in the literature (Cavusgil, 1994; Oviatt & McDougall, 1994, 2005).

Aligned with technological advancement, political and legal aspects also experience revolutionary changes during the different waves of globalisation. Governments as a regulatory body mostly intervene in the markets via passing and enforcement of certain laws. For instance, declining of tariffs or nontariff barriers in the globalisation process reflected governments decisions. Recently, government took certain action to moderate social and environmental aspects of business. Due to decades of globalization and free trade tendencies, these tougher environmental rules and standards have emerged as a new trade barrier in a global marketplace (Joo et al., 2018).

Meso layer encompasses forces in level of sectors and industries. Customers, competitors, suppliers, and employees are part of the meso layers of the business environment. Substantially, this layer is important for our research as the research conceptual model will be developed based on the interaction of stakeholders in this layer. In the literature, one can see development of different frameworks such as Porter's 5 forces analysis or strategic grouping analysis to analyse the interaction and impact of each market players on the other (Porter, 1998, p. 4). While this analysis could help firms to have better perspective on industry dynamics, trends and competitive rivalry or as whole, it can be also relevant to micro layer. In the micro layers, scholars investigate the relation or interrelations of such forces on individual firms or organisation. This is the area that managerial approach toward internationalisation emerged in the literature (Wach, 2018).

In the contemporary economy, **micro-level** strategies (e.g. as networking, first-mover advantage, technological capability such as Artificial Intelligence (AI)) (Mohamed, 2015) are becoming more critical than macroeconomic strategies (e.g. cultural differences or taxation systems). Taking advantage of these variables will allow firms to gain a competitive advantage by learning about customer behaviour and overcoming the **liabilities of outsidership**. By lowering risks, allowing entry and withdrawal (**de-internationalisation**), requiring fewer resources, and having the option of reaching foreign customers without a physical presence, companies will gain an advantage over their competitors (Erdil & Özdemir, 2016).

Internationalisation of firms can be studied based on two approaches including and traditional (conventional) and unconventional (simultaneous). The conventional approach such as stage models and Uppsala argued that internationalisation happens gradually and via stages while the other group emphasized on the pace and blame the traditional model for incapability to justify internationalisation of certain market players such as born globals. Later, the review, explains certain models that are most relevant to the research topic and reflects on the fact that how simultaneous approach justified the internationalisation behaviour SMEs. With considering all this approaches and paradigm, Wach (2018, P. 13) stated: *“there is no commonly accepted definition of internationalisation in the economic literature, which fully capture all aspects of this phenomenon.”* As part of globalisation, international trade plays a key role in internationalisation. It defines, A flow of goods and services that cross national borders, via export and import. Apart from exporting there are different types of entry modes. (Figure 2).

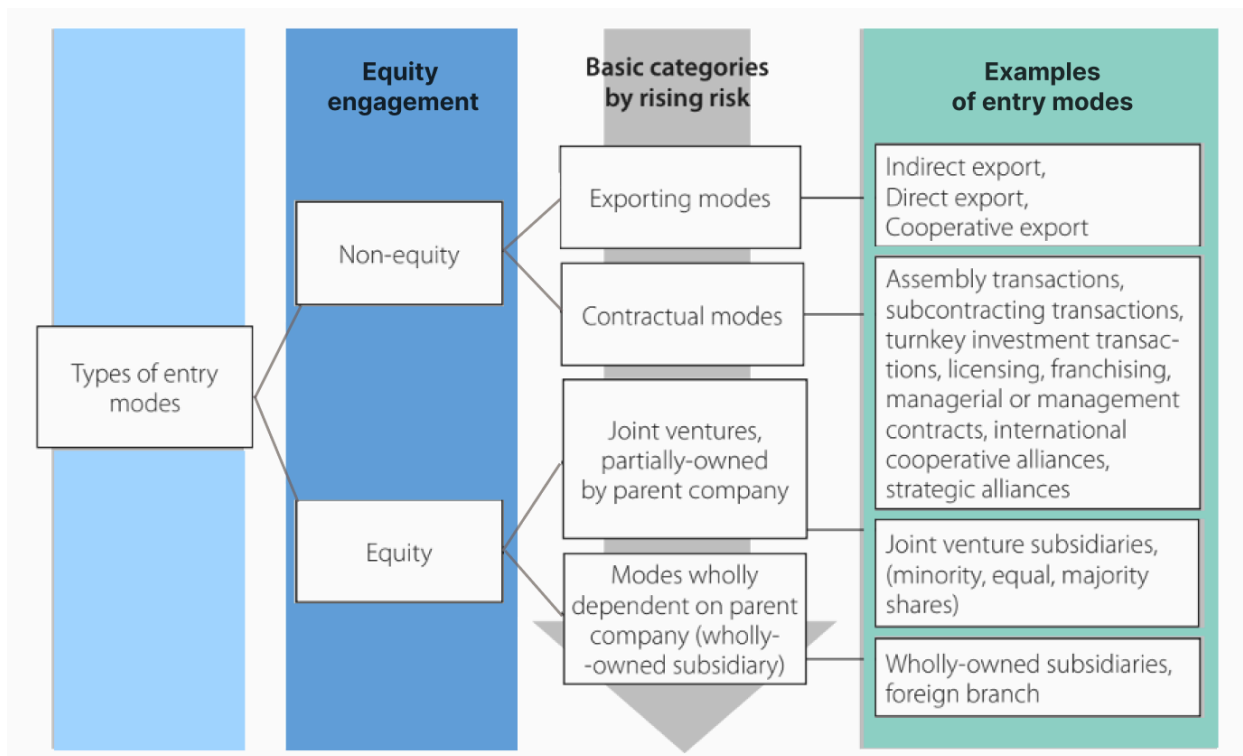


Figure 2: Foreign market entry modes

Source: Pera (2018, p. 21) based on Wach (2012, p. 77-81).

Usually, we have three groups of entry modes, namely exporting modes, contractual modes and investment modes. Firms based on the available resources and their commitments might involve in **equity or non-equity mode**. In case of non-equity, firms prefer not to invest or dedicate so many resources and take less risk. However, firms' equity entry modes reflect on the firm's behaviour when they involve themselves with dedicating more resources and adopt more risk-oriented behaviour. Different exporting modes or contractual modes can be named as some examples of non-equity market entry strategy while joint ventures and whole-owned subsidiaries are some forms of equity market entry modes (Daszkiewicz & Wach, 2012). Scholars list different sizes of players with different mindsets involved in the process of internationalization, such as multinational enterprises (MNEs), small and medium-sized enterprises (SMEs), start-ups, born globals (BGs), and many others.

Each player might have different motivations for internationalisation. In general, resource seeking, market seeking, efficiency seeking and strategic asset seeking are some main and old motives of internationalisation (Buckley et al., 2018, p. 67). In this vein, Ismail et al. (2017) conclude that one of the most cost-effective entry options for SMEs is exporting, which helps SMEs gain a competitive advantage in international markets (market seeking)

and increase sales (efficiency seeking). The logic of “pull” and “push” factors also introduces in some strategic management book such as Shenkar et al. (2021) as main SMEs internationalisation motivation. A push factor for SMEs is the competitive pressure in its domestic market, which "pushes" it to expand its operations via exports to not only benefits from low-cost factors of production in other countries but also access to international customers and reach to a better economies of scale. The concept of push factors is also in the research of Chen and Nuangjamong (2022), where the researcher argue that SMEs rather than trying to survive in an increasingly saturated domestic market, opts to go global to gain competitive advantage everywhere.

Pull factors include those forces that make foreign markets more attractive (e.g., emerging markets with a high GDP or GDP growth rate or even growth potential). Regardless of their motives of internationalisation, SMEs are engine of growth for any economies (Tu et al., 2024). REM framework helps to link the reason (R) for internationalisation to environment (E) selection and finally the appropriate modes (M). The framework is developed based on analysing of the process internationalisation of some big firms’ internationalisation post-Soviet (Figure 3).

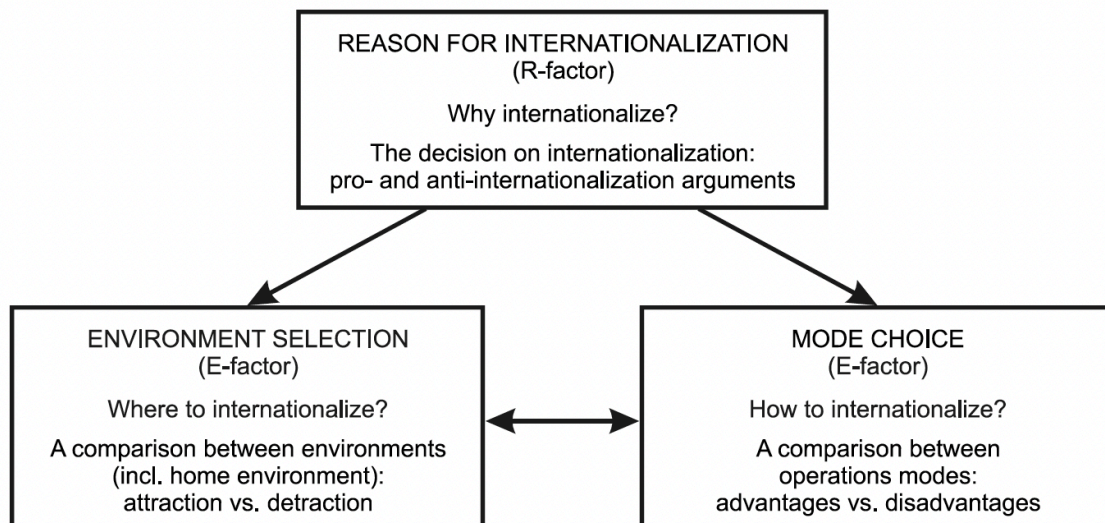


Figure 3: The REM model

Source: Liuhto (2001, p. 21) quoted in Daszkiewicz and Wach (2012, p. 73).

1.2 Theoretical modelling of firm-level internationalization from SMEs' perspective

1.2.1 Typology of internationalization theories

Hyper competition and shifting the importance of factors production from traditional forces (land, labour, and capital) to the new forces (knowledge and entrepreneurship) provided a great opportunity for SMEs (McHugh et al., 2012). Entrepreneurial dynamism and flexibility to react to changing internal and external environment are among SMEs' innovative strengths. In addition, when it is compared to huge corporations, SMEs are better positioned to innovate due to their streamlined organizational and decision-making structures, which makes them more responsible for changing client demand (Jusufi et al., 2020). In this case, SME internationalization is a process that must accelerate. Only SMEs that follow worldwide standards and manage their businesses strategically will be able to stay afloat. Therefore, some new theoretic paradigm such as international entrepreneurship and networking approach develop to challenge the traditional perspectives such stages model and Uppsala model. In business studies, there are many ways to explain internationalization of firms from both the economics and management perspectives. It is necessary to distinguish the main research strands, related theoretical framework and their development from stage models to holistic approaches. These theoretical frameworks that are listed below facilitates understanding of SMEs' internationalisation behaviour:

- Stages models, Johanson and Vahlne (1977)
- Resource-based view, Barney (1991)
- Network approach, Johanson and Mattsson (1987, p. 4)
- Business strategy approach, (Zucchella et al. 2012), (Welch & Luostarinen, 1988),
- International entrepreneurship approach, Oviatt and McDougall (2005)
- Expectancy disconfirmation theory, (Patterson et al., 1997)
- Stakeholder theory, (Freeman, 1984)
- Tripple bottom line, (Elkington, 1998)
- Integrative approach (holistic models) Bell and Young (1998) Bell et al. (2004).

In addition, the research also reviews expectancy disconfirmation theory to explain managerial perception toward satisfaction for the export activities. The second group of theoretical frameworks including stakeholder theory and triple bottom line are also

supported to understand the new sustainability trend emerged and how does it impact firms' internationalisation process.

1.2.2 Stages models

The stages theory of internationalization (stages models) is the oldest and most significant research stream studying small firm export strategies. Based on stage theory, a firm initially operates on its domestic market before expanding to international market through a few stages after achieving a stable position (Daszkiewicz & Wach, 2012). It helps a company test and improve its business model before expansion. A familiarity with the local market facilitates an understanding of hypercompetition in a more dynamic international market to mitigate risks. Based on this model foundation, it is expected that gradually firms will become involved and dedicate resources as their knowledge increases.

It encompasses non-regular export activities to an offshoring position on an international market (Johanson & Wiedersheim, 1975), or turning a domestically operated firm into an export-oriented enterprise (Bilkey & Tesar, 1977). In between, a firm would undergo stages such as passive export, export through an agent, or opening a subsidiary (Figure 4).

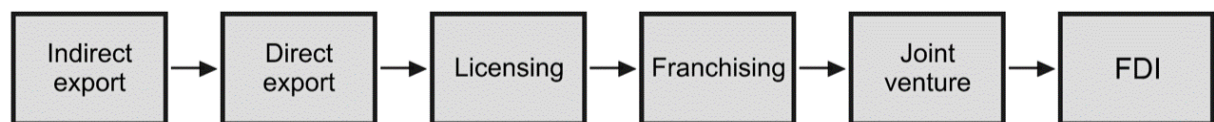


Figure 4: The establishment chain of internationalization stages

Source: Daszkiewicz and Wach (2012, p. 65).

Cavusgil (1984) argues that exporters could begin their international activities by establishing themselves in neighbouring countries before getting involved actively in new markets and becoming a committed exporter (Czinkota, 1982) taken from Daszkiewicz and Wach (2012) till they accumulate sufficient experience and resources. In this case, Leonidou and Katsikeas (1996) classifies these stages into 3 phases including pre-engagement, initial and advanced. Therefore, developing export capability happening incrementally by learning experience that builds a firm's knowledge of a market to invest and be more committed to

the new markets. Uppsala model of internationalisation also introduces slightly later (Figure 5).

As a result of their observation of the internationalisation pattern of Swedish firms rooted in this approach, Johanson and Vahlne (1977) introduce the **Uppsala model** (U-model) for the first time. Research aimed to link aspects of a firm's international transition to state/static (market knowledge and market commitment) and change/dynamic (commitment decisions and current activities). In this approach, decision makers dedicate more resources and be more committed when they had enough experimental and specific knowledge of their target market. Such a transition is time consuming and probably not fit certain business models that need fast scale-up.

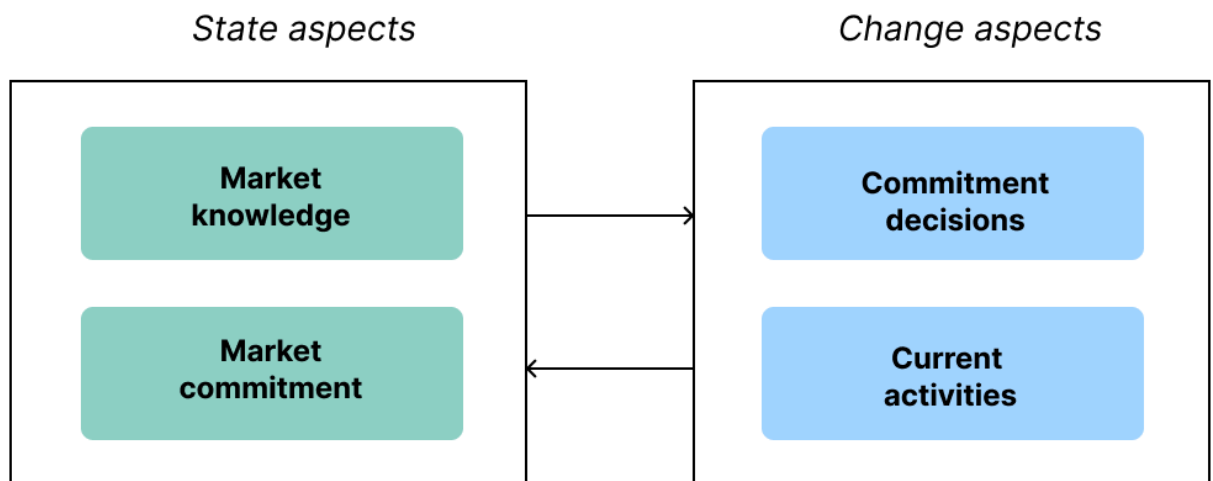


Figure 5: Uppsala model of 1977

Source: Johanson and Vahlne (1977, p. 26; 1990, p.12).

Uppsala's philosophy of internationalisation would consider the delay of internationalization as a necessary precaution when dealing with international business uncertainty. This can be better understood when we consider that the approach was executed in a time that was slightly after the second World War. Firms need intermediate steps such as ad hoc exporting, working with agents, opening subsidiaries and then if the business is successful enough opening a production plant in the host country (Johanson & Wiedersheim-Paul, 1975). All

of these preliminary steps take place to overcome significant trade barriers while developing market share.

Even as far back as the late 1970s, there were critics of this view being voiced (Bell et al., 2004). The model is criticized by other scholars (Oviatt & McDougall, 2005) for not explaining the rapid internationalization of born global companies or neglecting new concepts like risk taking entrepreneurial approaches (Andersson, 2000) and even leapfrogging where a company could skip certain steps (Cannon & Willis, 1981). Thus, the stage model is criticized for lack of alignment between theory and practice in case of certain market players. Furthermore, defining stage boundaries and explaining how transitions occur can be difficult (Chetty & Campbell-Hunt, 2004). However, it is important to consider the perspective of Macciejewski & Wach (2019) that argue in order to compete internationally, a firm must have a proven, developed, and accepted product or service, adequate financial resources, international trade experience, and cultural and legal knowledge. Those resources require time and practice, which startups or newborn company lack. The latest research by Vahlne and Johanson (2017) extends the original Uppsala model by introducing state variables such as capability and commitment performance in one hand and mapped these variables onto the change variables of commitment process and knowledge development process (Figure 6).

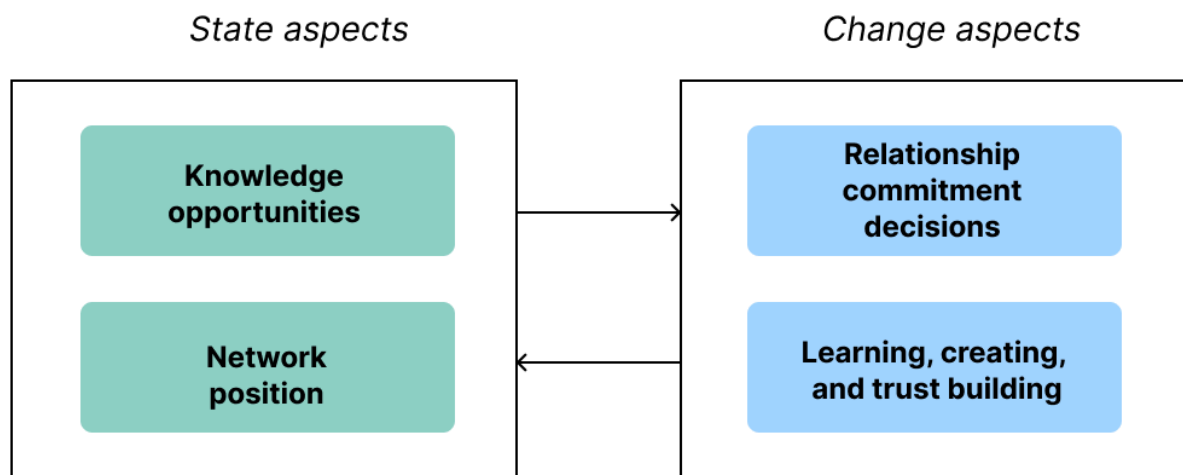


Figure 6: Network Uppsala Model of 2009

Source: Vahlne & Johanson (2009, p. 1424).

As part of the commitment process, firms need to reconfigure and coordinate their actions to mitigate risks or actively seize opportunities in the new model as learning, creating, and trust-building continue to take place within the external environment continuously. The firm will commit to a project when a positive trade-off convinces it to take risk in exchange for a higher-than-average return.

By learning, creating, and possibly building a business network in the evolving environment, the revised Uppsala model could justify the development of **dynamic capability**. In the revised model, new factors, such as knowledge management, networking, and international entrepreneurship, can justify the internationalization of Multinational Business Enterprise (MBE). The revised version underlines the importance of collaboration with partners in active opportunity seeking that challenges the formal linear perspective. In this case firms are more flexible and adaptive, that is more fit to the context of SMEs internationalisation. In this case, knowledge about the external markets would not accumulate incrementally but much faster by interacting with the SMEs' network in the target markets. The approach not only speeds the pace of internationalization but also facilitates reducing of possible risks by sharing it among the partners. The concept is known as effectuation in strategic management literature (Galkina & Chetty, 2015).

In Table 3, Wach (2021) shows how the Uppsala concept has been revisited 6-times since its emergence (1970). Every revision resonates and upgrades the model to justify the rising trends such as networking approach (2009), International entrepreneurship perspective (2010), international entrepreneurship and networking approach (2011), dynamic capability (2013), dynamic capability and strategic approach (2014) and the integrated approach in 2017. Future revisions of Uppsala will hopefully be able to more directly justify sustainability demands and the rise of artificial intelligence. As the findings of Bhatti et al., (2022) study on the impact of industry 4.0 on Uppsala shows, businesses regardless of their size are data driven. AI simplifies the process of accessing and analysing big data. As part of their philosophy SMEs would use these technological capabilities by monitoring real-time data to track the changes which is the bridge to the international market orientation. The recent extension that is suggested by Liesch and Welch (2024) highlights the asynchronous growth concept. It refers to how non-linear internationalisation, that firms jump some stages, that is also called un-even internationalisation. In fact, the extension challenges the original

concept of synchronise opportunity development, organisational learning and risk taking by the help of innovation capacity and organisational network.

Table 3: Summary of various modified Uppsala models

1977	2009	2010	2011	2013	2014	2017
<i>Authors</i>						
Johanson & Vahlne	Johanson & Vahlne	Schweizer, Vahlne & Johanson	Vahlne, Ivarsson & Johanson	Johanson & Vahlne	Vahlne & Ivarsson	Johanson & Vahlne
<i>Theoretical base</i>						
Stages model	Network approach	International entrepreneurship perspective	International entrepreneurship and network approach	Dynamic capabilities and network approach	Dynamic capabilities and strategic approach	Integrated approach
<i>Empirical base</i>						
4 cases	1 case	3 cases	1 case	none	17 cases	1 case
<i>State aspects</i>						
Market knowledge	Knowledge opportunities	Knowledge, Opportunities, Entrepreneurial capabilities	Knowledge opportunities	Dynamic capabilities and Operational capabilities	Operational capability and Dynamic capabilities	Capabilities
Market commitment	Network position	Network position	Network position (internally and externally)	Network position (intra and inter)	Performance	Commitment / Performance
<i>Change aspects</i>						
Commitment decisions	Relationship commitment decisions	Relationship commitment decisions	Decisions to reconfigure and redesign coordination systems	Commitment decisions (re-configuration and coordination)	Commitment decisions (re-configuration and coordination)	Commitment processes
Current activities	Learning, Creating, and Trust building	Learning, Creating, Trust building, and Exploiting contingencies	Learning, Creating, and Trust building	Learning, Creating, and Trust building (as inter-organizational processes)	Learning, Creating, and Trust building (as organizational processes)	Knowledge development processes (Learning, Creating, and Trust building)

Source: Wach (2021, p. 15)

1.2.2 Resource-based view

Resource-based view (RBV) that is proposed by Penrose (1959) and later developed by Barney (1991), is predicated on a premise that the firm competes based on “unique” corporate resources that are valuable, rare, difficult to imitate, and non-substitutable by competitors. These resources are assumed to be distributed in heterogenous manner and are not transferable from one company to another. Therefore, a firm needs to first identify their resources and then cross-checked if they fulfil the said criteria (referring to VRIN). The

criteria for value would be passed if the transaction cost created by the firm's certain resource would be higher than future discounted gain. In case of rareness, the valuable related resource is capitalised only by the firm or by a few competitors, which is created a relative competitive advantage. The rationale behind being hard to be imitated is rooted in the fact that outperforming competitors in the long run via valuable and rare resources would be possible if the resources be costly or timely to be duplicated by other firms. In most cases recently, the intangible, knowledge-based resources usually create complexity for the competitors. Non-substitutable, the last dimension of the model is the fundamental fact, regardless of how valuable, rare and inimitable a resource be, if it could be possible substituted by another's that not only from cost perspective but performance fulfil the customers' needs, the related resource can't lead to sustainable competitive advantage. It is important to note that a firm's resources must fulfil all the four criteria to be considered as a firm's core competency (Mahoney & Pandian, 1992). In line with resource, Barney (1991) also refers to capability and defines it as the way a firm operationalise or use certain resources to achieve their goals. The RBV model illustrates how the interaction between the company's resources and capabilities results in core competencies that help the company obtain competitive advantages.

Firm's resources is categorised to (intangible) human capital, organisational and physical (tangible) (Knight & Cavusgil, 2004). SMEs with limited tangible resources must rely on intangible resources to help them maintain their competitive advantage (Ismail et al., 2017). Later researchers distinguish SMEs based on the types of resources and suggested different internationalisation processes that we will review in the networking paradigm. RBV theoretical model is predominantly used in the export performance literature to justify certain micro determinants of export performance such as firm characteristics (O'Cass & Julian, 2003), management capability (Katsikea & Skarmeas, 2003), quality, marketing strategy, and recently an exporter's corporate social responsibility. The RBV theory may be beneficial for describing how a firm's innovation capabilities improve firm performance since it regards as a distinct, valuable, difficult to imitate organizational resource (Joo et al., 2018). For instance, a firm's corporate social responsibility rooted in development of unique organisational operation capability could improve performance of exporters in the target market (Ullah et al., 2021).

This model could be complementary to uppsala where a firm might develop unique resources or capabilities by gaining direct and indirect market experience gradually that put them in a position that outperform their competitors in a long run. In case of internationalisation, when a firm develop unique capability that needs to be scale up quickly to use the chance of rareness or inimitability, the uppsala approach might not be good fit. This might be the case related to innovation driven SMEs that scale-up internationalisation by capitalising the unique experience of their partner in the target market and skip certain steps to use possible temporary competitive advantage and earn the most from the developed capabilities (Knight & Cavusgil, 2004). One of the internationalisation models based on the RBV proposed by Welch and Loustarinen (1988, p. 39), that shows the interrelation among an organisation's resources (see Figure 7).

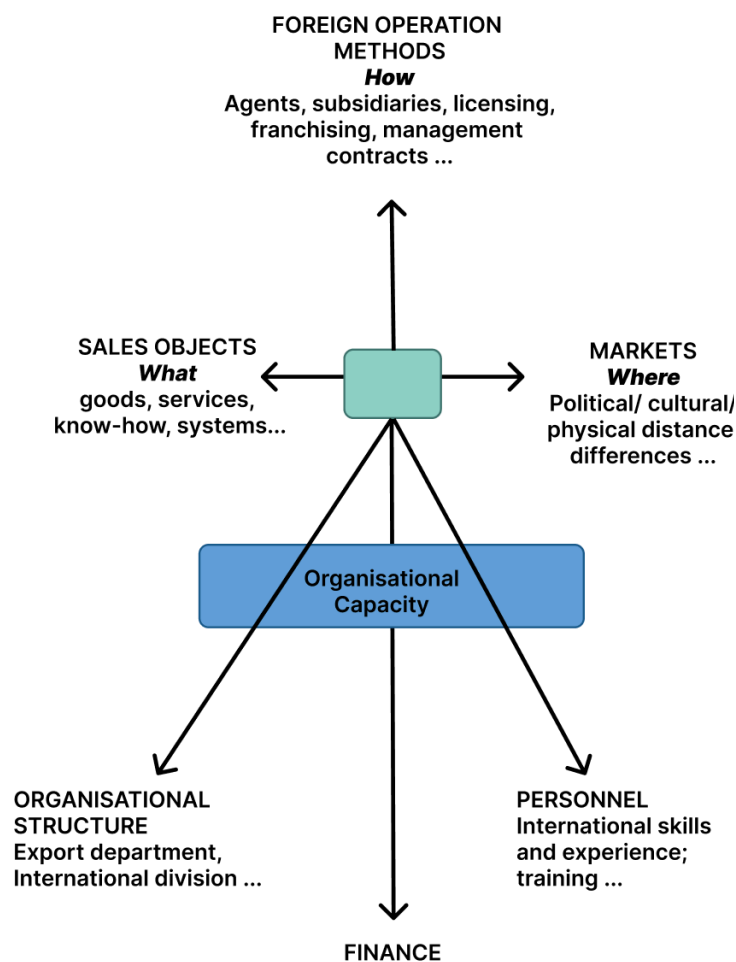


Figure 7: Dimensions of internationalisation

Source: Welch and Loustarinen (1988, p. 39)

This resource-based theory is criticized for failing to adequately explain how firms develop and deploy resources and capabilities to gain a competitive advantage. Superior market position is earned by purposefully configuring and deploying resources and capabilities in a manner that fits a firm's environment, according to **dynamic capability theorists**, rather than being a function of simple possession of resources and capabilities. Thus, an argument can be made that a firm's export marketing capabilities entail complex and coordinated sets of skills and knowledge about exporting activities that are deeply embedded in the firm's internal routines (Boso et al., 2019). Although RBV has been the base for internationalisation of firms since 90s, new developments in hypercompetitive environment require firms to look into faster pace of internationalisation.

1.2.4 Network paradigm in internationalisation

A firm's daily business involves the relationships it has with other companies in the upstream, downstream, or other service providers. In most businesses, firms depend on the outputs or services of other companies. These relationships form a network that shapes the company's business environment. There will eventually be some loss of these relationships and possibly some establishment of new relationships due to competitive factors, not necessarily because of costs. According to Johanson and Mattsson (1987, p. 4) *“A basic assumption in the network model is that the individual firm is dependent on resources controlled by other firms. The firm gets access to these external resources through its network positions”*. The study emphasizes on the position of firm in the network and called it “market asset”.

As Mintzberg (1973) notes, managers' roles entail making and maintaining contacts and interacting with other people and organizations in the business environment. Another pioneer in this field is Bower (1981), the researcher links networking to the memories and moods and concludes that positive memories and happy moods are more associated rather sad and negative ones. Later, it is known as networking theory of affect. Networks can be classified into several types. Daszkiewicz and Wach (2012) describes four types of networks, family and ethnic, community-based, organisations and buyer suppliers. Family and ethnic networks are based on personal contact between the owners. Most often, in a small or start-up company, the company network consists of the founder's social and business networks. It is crucial in the early stage of an entity existent and as Birley (1985) mentions, it operates

as a catalyst for a firm business model. Community based networks are being part of specialised networks such as an industrial zone, resulting in knowledge retained from exchange with different stakeholders being able to influence a firm's business processes. The advantage of such network can be seen also in the "**Cluster Model**" introduced almost in the same timeline in the famous book of Porter (1990, p. 197) "competitive advantage of Nation". Next, is organization's network that is formed when different businesses share ownership and responsibilities. In this vein, a business can benefit from strategic alliances, Francisation, or joint ventures, all of which are types of networks that help a business to leverage other investors' and business owners' resources. In addition, a buyer-supplier network is created when two or more firms interact and exchange information. Creation and maintenance of alliance network supports biopharmaceutical companies during Covid episode to create new vaccines. In this vein, strategic open innovation alliance help firms to share huge R&D cost, minimise the risk and compensate with the resources provides by the partners (Puślecki, Czekajlo, et al., 2021). **Game theory** and prisoner dilemma highlight the importance of such relationships.

The use of networks offers a stepping-stone for SMEs to enter distant markets. This includes both inter-personal and inter-organizational networks. Zahoor et al. (2020) conduct a systematic review to provide an in-depth understanding about the determinants, mediators and moderators in the context of SMEs' collaborative internationalization and report **networking Theory** (28/105) together with other theoretical frameworks such as RBV (24/105), International Entrepreneurship theory (12/105) and Uppsala model of internationalization (6/105), were the most frequent theoretical frameworks used scholar in the context of SMEs internationalization. Johanson and Mattsson (1988) that use networking to study firm's internationalisation divide internationalisation into four stages of : 1) the early starter, 2) the late starter, 3) the lonely international, 4) international among others (see Figure 8). In the early start category, due to possible unbalance cost to reward, firms are suggested to follow gradual approach. While in lonely international, the problem is coordination because of highly intensive network ties. Later starter might have strong pull factors since they are pretty much dependent on the other firms in their network. International among others have a profound network in local and global level that could help them benefit the most from these external sources.

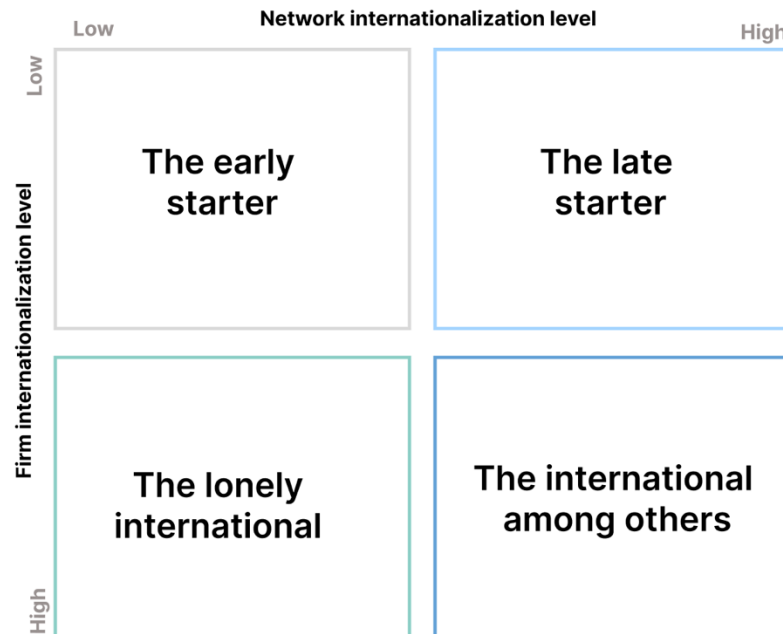


Figure 8: Internationalisation and network model

Source: Johanson and Mattsson (1993, p. 310)

Using a RBV model, a firm's network is able to be considered a resource that is unique, difficult to be imitated or hard to be substituted that would provide a firm with a sustainable competitive advantage (Singh et al., 2022). Consequently, such network could expand and further develop in the international market and serve as bridge to another network and in a long run creates a competitive position in market for an export, this could be referred to the new Uppsala concept (Vahlne & Johanson, 2017).

When a firm expands into a new market, new relationships are necessary to support the firm's business model. Daszkiewicz and Wach (2012) name several impacts of networking on SMEs internationalisation in their review. Motivation and market selection explain how firms extend, penetrate, and integrate their international markets by interacting with their network partners. As a result, firms may be able to take advantage of new opportunities, gain knowledge, learn from experiences, and gain synergistic effects from pools of resources when using networks. In fact, the strength of a firm's network in particular market would impact their market selection. According to network theory, the success of a company's internationalization is determined by the company's combined resources as well as its organizational and social networking in a specific market.

The network approach focuses on non-hierarchical systems where companies invest to strengthen and control their position in international networks in the case of internationalization of SMEs (Villena Manzanares, 2019). This would be impossible without accessing to the local knowledge and extended established supply chain (Alkahtani et al., 2020). An external intermediary or agent selling products in foreign markets can be considered as bringing relational capital to foreign trade. According to the findings of Ismail et al. (2017) that study Malaysian exporters show developing a trustworthy relationship and committing to it, are two crucial postures for a competitive advantage and successful foreign initiatives for SMEs. These findings also empirically indicate the requirement for SMEs in small emerging economies to establish cross-border connections prowess.

The intensity of network relationships serves as a conduit for the flow of information, according to this study. In a turbulent market, maintaining a positive connection via networking with intermediaries (importers) allows exporters to have better access to market-specific information, such as consumption patterns. Thus, a company's competitive edge grows when it can meet customers' needs while also cutting expenses (Ismail et al., 2017).

Thus, such connection facilitates fast decision making and speed of their internationalisation. According to Maciejewski et al., (2022) networks impact business-level internationalization's pace (speed), scale (degree) and basic features, including market selection and entry mode. Last not the least, an established network in a new market helps firms to deal with liabilities of outsidership. Knowledge gained through mutual learning and experience sharing enables firm to lessen concerns about entering foreign markets, which facilitates and accelerates the internationalization of businesses, especially SMEs (Głodowska et al., 2019). Although scholars highlight the positive aspects of networking for SMEs internationalisation, one cannot ignore the fact that too much dependency on network partners could be also problematic and put a firm in to a vulnerable power position (Partanen et al., 2020).

1.2.5 International entrepreneurship approach

Clark et al. (2024) proposes conceptual framework for entrepreneurial orientation family, where we can distinguish three different categories of entrepreneurial orientation including

individual, team and firm level entrepreneurial orientation (Figure 9). In this review, we would focus on the firm level and in particular, international entrepreneurship (IE). Oviatt and McDougall (2005) mentioned in their study that the term “international entrepreneurship” first appeared in a short article by Morrow (1988). According to Wach (2015), entrepreneurship involves identifying and exploring entrepreneurial opportunities, while international business refers to any cross-border activities conducted by a new company.

In other words, international entrepreneurship begins with a firm's interest in new ventures, which is its way of gaining competitive advantage in a foreign market through entrepreneurial behaviour. To understand better this theoretical framework, it is easier to understand three different foundation pillars. McDougall-Covin et al. (2014) mention that IE is emerged as a critical research area at the intersection of entrepreneurship and international business. The last important pillar is introduced by Zucchella and Sciabini (2007) which is strategic management. Figure 10 is extended version of Zucchella and Sciabini (2007) that is presented in Wach (2015b, p. 12) shows the three pillars and most importantly the involved theoretical concepts in the intersection.

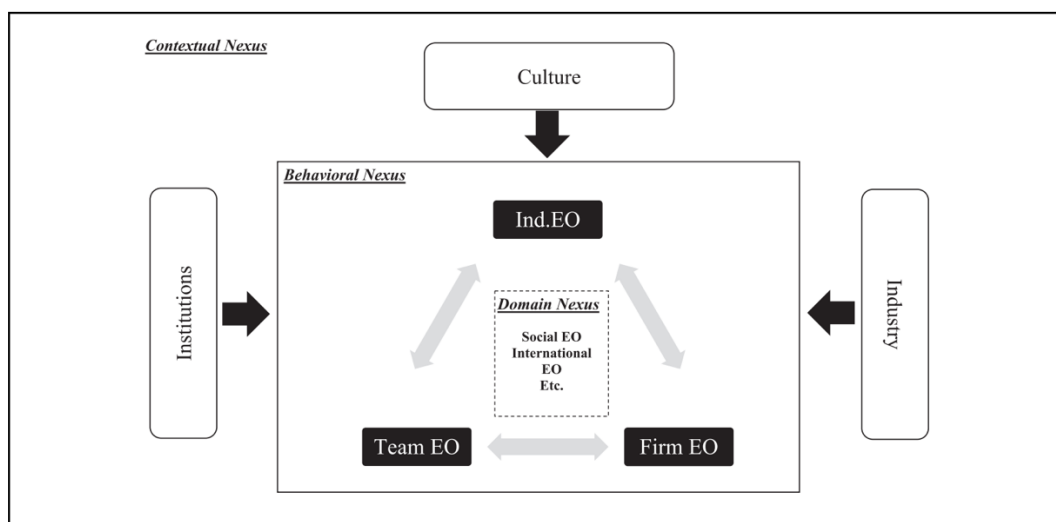


Figure 9: Conceptual framework of the EO family

Source: Clarck et al. (2024, p.6)



Figure 10: International entrepreneurship as the amalgamation of three fields

Source: Wach (2015a, p. 12) based on Zucchella and Sciabini (2007, p.22)

To elaborate on the entrepreneurial behaviour, different studies refer to variety of combination where Miller (1983) highlights innovativeness, proactiveness and risk taking and others consider additional dimensions such as competitive aggressiveness, autonomy (Lumpkin & Dess, 1996) and motivation (Kuivalainen et al., 2007). One can realise that the IE concept is a multifaceted and multidimensional activities, however it was always under debate.

Therefore, the definition suggest by Oviatt and McDougall (2005) “*International entrepreneurship is the discovery, enactment, evaluation, and exploitation of opportunities—across national borders—to create future goods and services*” (Oviatt & McDougall, 2005, p. 540) is widely accepted by many scholars as it encompassed most related dimensions. It is also worth to know, what it meant by new ventures in the said definition. In their study, Zahra et al. (2000) are examined “new ventures” and used the following criteria for choosing their sample: firms had to be under six years old and only 5% of their revenues had to be foreign. However, other studies use different definitions for their methodology, the important thing is to consider that it refers to liability of smallness and

newness of SMEs. Against the traditional Uppsala Model concept that consider internationalisation as an incremental process, IE concept focuses on the accelerated mode of internationalisation. As much as Uppsala approach is received enough attention after the WWII, development (late 80) and blooming (mid-90) to IE concept in late also is supported by rapid technological advancement and globalisation (Wach, 2015).

It can be argued that speed factor is one of the distinguishment factors in both networking and IE theoretical concept in comparison with other former presented models. Networking is not only an enabler for IE but an essence that helps SMEs to grasp opportunity, acquired strategic resources and of course gain legitimacy that is important in early stage of development (Favero, 2023). When a firm is part of a network, put its entity into the series of irreversible and unexpected events that might lead to a radical innovation. When this would be in a foreign market, not only facilitate entrepreneurial behaviour (speed) but also help a venture to deal with liability of outsidership. This can be seen as a internationalisation process, where an international venture would first scan and find an opportunity in a foreign market, mobilise or the required internal resources or acquired them via their network to export or sell their products (Zucchella & Scabini, 2007).

This also imply the concept of **dynamic capability** and organisational learning, when a firm need to innovate, proactively to adapt their products to match different market needs and deal with competition. In the mid-1990s, a new concept has emerged from IE, SMEs with limited sources or in early stage of internationalisation, aggressively challenge the Uppsala approach and are aiming for rapid internationalisation, they are called **born globals (BGs)**. Born Globals are known as entrepreneurial start-ups that intend to obtain a significant amount of their revenue from the sale of products in foreign markets from the start or near the start. This concept can be seen in the work of (Oviatt & McDougall, 1994, p. 49). *“Business organizations that from inception, seek to derive significant competitive advantages from the use of resources and the sale of outputs in multiple countries”* (Oviatt & McDougall, 1994, p. 49).

BGs are mostly SMEs and at least 25% of sales in born globals come from foreign markets during the first two years. Reviewing scholars in this discipline, expand the overview in the sense that born globals are mostly identified by their age (companies founded after 1990), international expansion in ranging from 2 to 15 years after their establishment, the

percentage of income from international operations (varying from 5–75%), and the number of markets they are operating in (Cahen et al., 2017). Their focus is mostly on the niche markets, where they could create distinguished values for the customers. Another important terminology that is developed in their study was **International New Ventures (INV)** that is an organization known for its resource constraints but using network and entrepreneurial mindset to speed up internationalisation. Three years is widely used as the criterion for early internationalization (Knight & Cavusgil, 2004).

Baskici et al. (2024) that study the development of BGs concept in the literature by reviewing more than 600 article between 2002 to 2020 report that for the first time, the concept of born global is mentioned in Rennie (1993)'s "Global competitiveness: Born global," which is entered the keyword list in 2005. Over a decade passed before researchers began to pay attention to the subject.

As a result, it's critical to consider what distinguishes BGs from companies that take a more steady and progressive approach to internationalization (Follows stages model or Uppsala). Internal and external elements or forces for early and accelerated internationalization are crucial in this process. One of the internal important factors is the founder's background and experience (Escandon-Barbosa et al., 2019), which refers to entrepreneurial aspects in the IE. In some scholars, it highlighted as entrepreneurs' social capital. Stam et al. (2014, p. 153) explain: *"We find broad agreement that entrepreneurs' social capital [i.e., the resources that entrepreneurs may access through their personal networks] constitutes a key asset for small firms."* This would link the concept to the individual entrepreneurship discipline, where researchers such as Clark et al. (2024) argues understanding of entrepreneurs' behaviour facilitate understanding of entrepreneurial firms and encourage researchers to study both level simultaneously. Networking is again an enabler for BG, that helps SMEs to acquired/access resources while not fully own them which is a pivotal move for accelerated internationalisation mode (Partanen et al., 2020). By combining networking and marketing, BGs can attract international customers with novelty.

Apart from that technological advancement such as the development of the Internet (Mid-90s to early 2000s) is greatly reduced the costs associated with doing business internationally for BGs. Another important motive for establishment of BGs was to deal with highly saturated domestic markets with established dominant plays and on the other had reaching

to economies of scale to produce more efficiently. There is a strong correlation between exports and BGs in the literature. BGs are defined as firms that are internationalized early via exports and therefore researcher are interested to explore the impact of different variables in BGs' international performance (Baskici et al., 2024). A similar conclusion was reached by Kundu and Katz (Kundu & Katz, 2003) who found that early export operations is determined by entrepreneur decisions rather than by a firm's characteristics or internal resources.

1.2.6 Strategic approach

Internationalisation of SMEs from behavioural school of the establishment chain (Stage) and relationship school of networking perspective has been discussed (Coviello & McAuley, 1999). It is also more comprehensive to consider the process of internationalisation and understand the decision-making pattern, strategies and structure of the companies that would bring us to the strategic Approach. It is cleared that SMEs internationalisation is a multidimensional and influenced by number of determinants.

The process-based perspective considers different approaches and elements such as the inward (e.g. export), outward (e.g. export) internationalisation pattern (Welch & Luostarinen, 1988), organisational capacity and structure. Knowing such perspective is important due to the nature of involved market players; MNEs and SMEs. Comparison to MNEs, SMEs have different managerial styles, ownership and scale and scope operations. Their flexibility and less complex structure create agility which is one the unique strategies of dealing with liability of smallness.

One can understand SMEs might follow different internationalisation pattern to deal with liability of outsidership in a psychically distant market. In the same vein, Bell et al. (2004) reported that "knowledge-intensive" and "traditional" manufacturing SMEs have also experienced different patterns, processes, and paces of internationalization. SMEs' corporative relationships were also a determinantal factor for market selection, entry and market commitments. The process-based perspective tries to answer the how questions in the internationalisation of SMEs and therefore shed light on the fact how entrepreneurs making decision in the company. It is important to consider most SMEs' assets might be challenged by formal and informal institutions in the host markets. Then, it comes to

founders/entrepreneur to save the operation with smart strategic decision. Thus, the strategic approach highlights the important role of entrepreneurs' decision making, attitudes toward internationalisation and models entrepreneurs follow. A variety of managerial cognitions, including risk perception, ambiguity tolerance, change resistance and self-confidence, are also affect decision-making and the internationalisation process (Schweizer, 2012). This view is introduced in the study of McDogaugall et al. (1994) where they report some INVs do not care much about the location cost factors or internalisation of process but instead try to build strategic alliance in their new markets.

A crucial element of this process is decision making. Different decision-making models are introduced so far. One of the oldest decision making method is muddling through that is introduced by Lindblom (1959). The muddling-through approach refers to a decision-making style characterized by incrementalism and pragmatism, particularly in complex situations where comprehensive solutions are challenging to devise. This approach involves making small changes and adjustments over time, rather than implementing large-scale, revolutionary changes. Decision-makers prioritize practicality and rely on their intuition and past experiences to address immediate challenges. Additionally, the muddling-through approach acknowledges the limitations of perfect solutions and focuses on finding workable solutions that address immediate needs. Muddling-through involves testing various options and learning from their successes and failures, allowing organizations to refine their strategies. When paths or guidelines are unclear or rapidly changing, this approach is helpful. The approach could to some extent relevant to SME's internationalisation process as it links decision making to unexpected external forces, high degree of ambiguity and uncertainties experienced by SMEs in the internationalisation process (Lindblom, 1959).

The strategic approach is one of the strategic adds-on to the international entrepreneurship theoretical literature and try to highlight the important strategic element such as opportunity seeking and taking action by an entrepreneur according to Wach (2012), taken from Wach (2018). Apart from that SMEs might follow different internationalisation strategies for their market entry. Taping to the psychically closed market or taking more risks by entering to a different market. However, there is always cases that SMEs do not follow such planned approach.

1.2.7 Expectancy disconfirmation theory

From theoretical perspective, expectancy disconfirmation theory (EDP) is rooted in cognitive dissonance theory (CDT) that is developed in 1957 by Leon Festinger. CDT defines inconsistency between cognitions of something and reality, that is called “dissonance”. In psychology, these discrepancies can create discomfort and change one's perception about a topic (Harmon-Jones & Harmon-Jones, 2012). For example, in a business study, the topic would be product or service, whereas in case of export performance, the topic is pessimistic feelings about company performance. *Individuals may have the least resistance to decreasing dissonance if their expectations and experiences are not fundamentally different (Staples et al., 2002)*. CDT focuses on psychological conflict within an individual, whereas EDT measures happiness by comparing expectations with actual experiences (Elkhani & Bakri, 2012).

Literature use two terminologies regarding this theory, some called it Expectancy Disconfirmation Paradigm (EDP) (Patterson et al., 1997) and some called it Expectancy Disconfirmation Theory (EDT) (Ahamed & Skallerud, 2015). In general, the theory suggest that satisfaction is not an obsolete determinant but a relative concept, which is always judged in relation to a standard. The standard in this is the predictive expectations of customer or in this research exporting managers' perception (Oliver, 1980). Once a customer uses the product, the comparison took place. Then, there will be three scenarios: (1) confirmed, when quality meets expectations; (2) negative disconfirmation when quality or experience is not as expected; (3) positive disconfirmation when product or service performance gets beyond one's expectations (Patterson et al., 1997). Scenarios 1 and 3 would lead to satisfaction and scenario 2 causes dis-satisfaction. This interaction is called disconfirmation process in the EDT. Oliver (1980, p. 462) suggests the model in Figure 11 to explain the process. In this model attitude is defined as a customer's impression of a product or service influences by their experiences that can be positive or negative disconfirmation. Intention in the model refers to customers' intention to do something, such as repurchase, recommend, or continue using a product. If the customer has a positive attitude (due to the positive disconfirmation), the chance is high to show positive intention by engaging in certain positive behaviour and vice versa. Accordingly, T1 is referring to the actual timeline before using a product or experiencing a financial year by a manager and T2 is referring to the time after the actual experience. Therefore, variables such as attitude or intention subjected to positive or negative disconfirmation from T1 to T2 could be different.

Inferred and direct approaches are the two main measurement methods that can be found in scholars. In case of Inferred or subtractive approach as it is obvious from what is called the performance perceptions will be subtracted from the expectations. Direct approach would use the subjective judgmental scale to estimate confirmation/disconfirmation, (i.e. “better than expected to worse than expected”). Both methods are received acceptable attention in scholars such as to measure customer satisfaction in the hospitality and tourism industries (Yüksel & Yüksel, 2001).

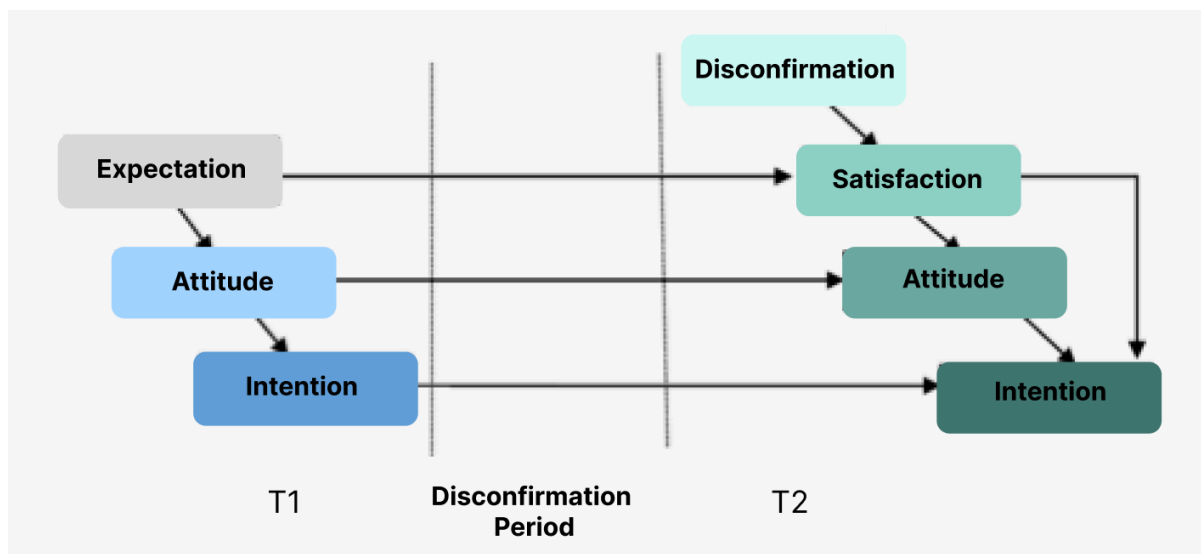


Figure 11: Cognitive model of antecedents and the consequences of satisfaction decision

Source: Oliver (1980, p. 462)

EDT is adopted in export performance discipline to explore the rational behind managers' satisfaction from the export operations (Patterson et al., 1997; Wang & Olsen, 2002). In this case, researchers subjectively measure managers' positive or negative disconfirmation expectations to estimate export satisfaction. It is well understood that the satisfaction would influence the future exporter behaviour to proceed or discontinue with export (Wang & Olsen, 2002). The assumption of the model is an export manager has certain expectation based on his expertise and experience and that would lead to his/her judgment toward the performance of a company. Patterson et.al (1997) believe even without having explicit set export criteria (i.e. sales or profit), researcher can be expected that an export manager has still an assumption for success. Therefore, this measurement could be complementary to

other financial and strategic dimension to study export performance (Sadeghi et al., 2021). This is also the overlap with the concept of de-internationalisation in the integrative approach, where managers alter their decision because of certain episodes or epochs (Bell et al., 2004). Thus, the EDT could be used as a complementary framework in IE to entrepreneurial behaviour. Same as other model, there are some critics in scholar for EDP (Wang & Olsen, 2002; Yüksel & Yüksel, 2001). One of the main issues is limitation of using EDP for measuring customer satisfaction in case of intangible goods or service. In fact, it is much easier to estimate satisfaction for a tangible product specially before the purchase transaction. On the other hand, some argued that subjective measurement of satisfaction might not be the most precise and of course applicability and measurement effectiveness might be varied over the industries (Churchill & Surprenant, 1982). Yüksel and Yüксе (2001) that review number of EDP model used in tourism and hospitality industries also highlighted the model faced limitation when the nature of expectations is dynamic. The research argued what if the basic expectation was far from being realistic and consumer expectation drastically changed after the usage of product or service. This might be more problematic, in case the customer has limited exposure to certain brand or limited experience of a certain service (Halstead et al., 1994). In case of the export performance, limited experience of a manager or manager who came from other field might develop certain wrong assumption and expectations that might create certain bias. Although, these unresolved issues question validity and reliability of data, the framework still one of the widely use in area of satisfaction measurement. The study would apply this theoretical framework to conceptualise export performance dimensions based on the EXPERF method (Zou et al., 1998).

1.2.8 Stakeholder theory

The ecological concern in the past few decades is pushing exporters toward some fundamental strategic changes in their supply chain and product development. Again, innovation orientation is introduced by many studies as one of the main solutions to this dilemma. Probably one of the most popular theoretical frameworks in sustainable development is the stakeholder theory (Freeman, 1984).

Parmer et al. (2010, p. 404) give one of the most insightful statement about the stakeholder theory: “*“stakeholder theory” or “stakeholder thinking” has emerged as a new narrative to understand and remedy three interconnected business problems—the problem of understanding how value is created and traded, the problem of connecting ethics and capitalism, and the problem of helping managers think about management such that the first two problems are addressed.*” . As such, this theoretical framework has very limited disciplinary boundaries and can be extended to any disciplines or business model components. While the economy and nations benefit from one of the important globalisation waves in the 80s, the downsides of this phenomenon gradually become evident. At that time, managers had to deal with the emerging ethical problems of their businesses. Stakeholder concept has emerged to assist researchers and managers in addressing such uncertainties. The theory for the first time is introduced in the famous book of Edward Freeman “Strategic Management: A stakeholder Approach” (Freeman, 1984). The stakeholder theory of Freeman has become a foundational concept in business ethics and corporate social responsibility. Stakeholder means anyone who negatively or positively might be influenced by decisions of a company in a market. The approach sheds the light on other important stakeholders such as employees, customers, suppliers, financiers, government and not only the shareholders. As networking paradigm is proposed, an organisation operates in a dependent relationship with other organisations or individuals, where the internal and external resources should be leveraged to achieve a competitive advantage. Morrison (2011) in Figure 12 shows the different categories internal and external stakeholders that are relevant within internationalisation of SMEs but called them “shareholders”.

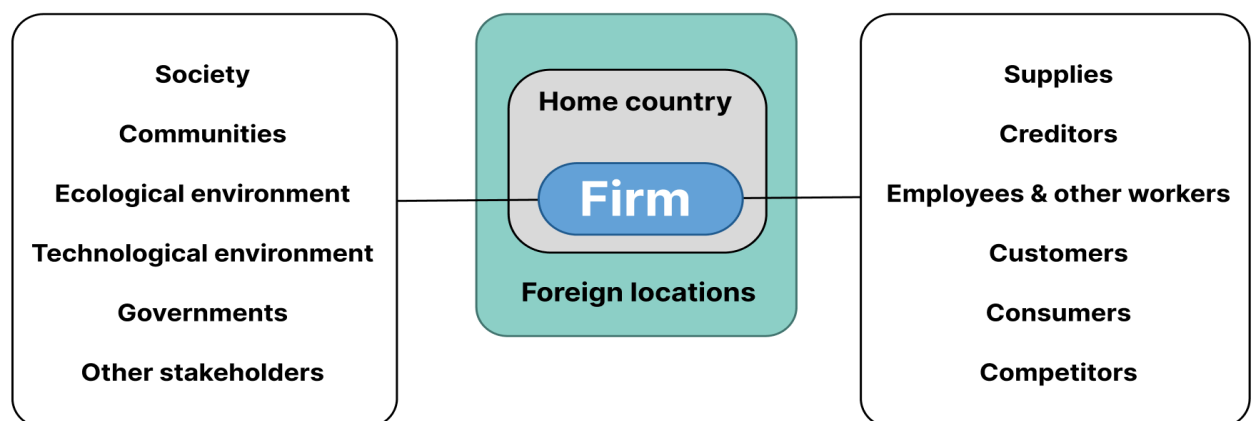


Figure 12: Domestic and international stakeholders of the internationalised firm

Source: own modification based on Morrison (2011, p.12).

Similarly, in the stakeholder model, a business needs to consider the interests or concern of various internal or external stakeholders in their decision-making process. Hence, it is the job of the manager to identify, firm' important stakeholder based on their priorities (Russo & Perrini, 2010), manage their relations to create and distribute the most value for all stakeholders. Mostly, in any business the problem is conflicts of interest among the stakeholders, where managers' task is to resolve it by re-think of their business model. In this sense, a new approach suggests where managers should not only think of increase the shareholder values but also avoid moral failure (Freeman, 1984). The stakeholder theories try to put a meaningful impression of a company's mission statement (Vázquez-Carrasco & López-Pérez, 2013).

The theory contributes to management decision making literature in three distinctive parts: descriptive, instrumental and normative. Descriptive is about what a manager or a company is doing (managerial behaviour). The outcomes of such behaviour are understood as instrument and what managers are expected to do is part of normative. The stakeholder theory is an informative tool to understand managerial attitudes, according to Knežević et al (2017)'s study of MBA students in Croatia. The researchers call these students future managers and group them into three cluster. Financial gain is a top priority for some managers, whereas CSR is a top priority for others. Generally, a management style driven by short-term profit focuses on profits, while a management style driven by ethical behaviour focuses more on long-term rewards.

The stakeholder theory is one of the extensive used theoretical frameworks in the CSR discipline. Bikefe et al. (2020)'s systematic review, explore 62 most important published articles in the CSR discipline to understand the theoretical adoption. The researcher reports stakeholder theory by far was the most frequent adopted theoretical framework (Figure 13). 27.4% of the studies uses this theoretical framework to justify their research. Surprisingly about 50% of the studies do not mention directly and theoretical framework that indicates that the research narrative in this area is quite young.

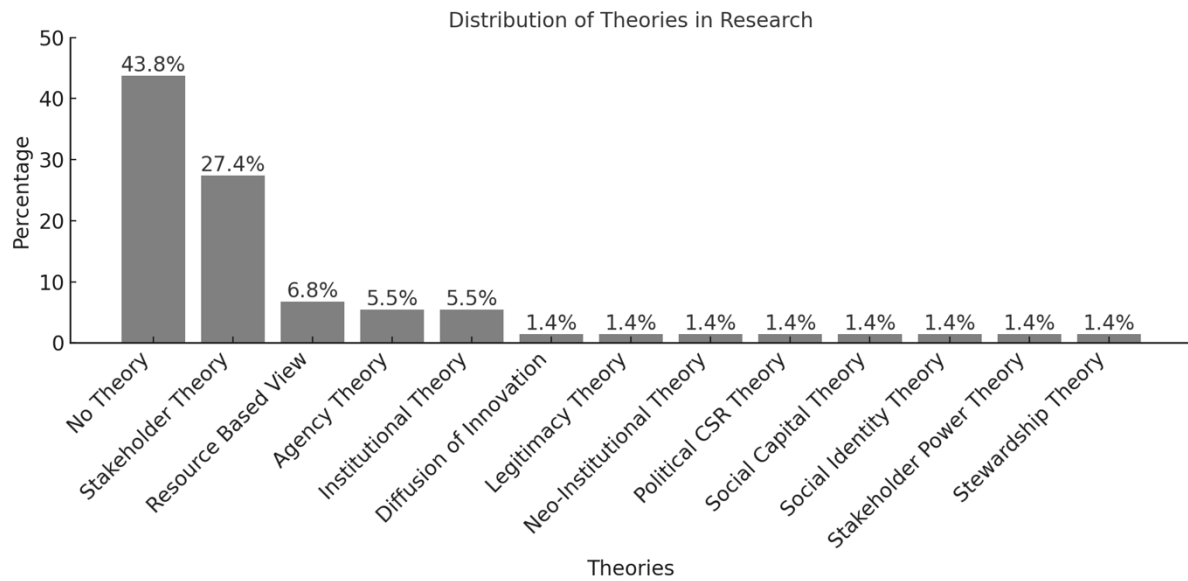


Figure 13: Overview of adopting related theoretical framework in the CSR related research

Source: own compilation based on Bikefe et al. (2020, p. 25).

According to framework that is proposed by Padilla-Lozano and Collazzo (2022), CSR initiatives are classified into four groups of stakeholder and their related activities as illustrates in Table 4. This theory tries to support the notion that a firm real objective cannot only be making profit but establishing the meaningful relationship these relevant stakeholders and therefore making an impact (Russo & Perrini, 2010). It is a necessity for SMEs to take stakeholder perspectives into account from two different viewpoints. Due to the liabilities of smallness and the importance of establishing a network, SMEs are expected to be closer to their stakeholders. In contrast to MNEs, SMEs are also expected to care more about their employees' satisfaction as a key internal stakeholder (Perrini, 2006; Vázquez-Carrasco & López-Pérez, 2013). The stakeholder theory together with the IE theoretical frameworks helps to understand why smaller firms benefit from sustainable behaviour and entrepreneurial orientation in the internationalisation as a response to customer demand. Smaller firms are better able to benefit from environmentally conscious niche consumers who are willing to pay more for green products or redirect their demand toward environmentally friendly firms.

Table 4: CSR related activities from stakeholder perspective

Stakeholders	CSR related activities
Environmental	Control, reduction and prevention of the firm's environmental impact.
Workplace	Supporting fairness, work-life balance, equity, and diversity management.
Community	Consider how business operations affect society and firm's innovativeness in social sectors.
Marketplace	Provide an indication of how the organization operates in terms of quality of the offer, ethical purchasing, procurement and green supply chain practices.

Source: Own compilation based on (Padilla-Lozano & Collazzo, 2022; Perrini et al., 2011).

1.2.9 Triple bottom line

Another important theoretical framework that could be consider as a complementary concept to **stakeholder theory** is the triple bottom line. All these forces and interests by different stakeholders well maps by the **Triple bottom line** framework (Elkington, 1998), where it lays the groundwork for the sustainability idea. As a triple goal, the researcher proposes the 3Ps designation for people, planet, and profits as the path to true sustainability. From the execution perspective, managers are expected to develop strategies in a way to have an even value creating for all these 3 important segments. This notion of holistic approach in value creation is also encouraged in the stakeholder theory (Russo & Perrini, 2010). According to Elkington (1998) sustainable development is impossible without long-term partnerships and knowledge sharing among all relevant stakeholders including private and public sectors. He calls this a win-win strategy where partners are committed enough to have problem solving orientation approach. Also, it intersects with stakeholder trade-off concept, which requires manager to figure it out, how to make such trade-offs (Parmar et al., 2010). To illustrate the triple bottom line framework, Willard (2012) adopts a nested spheres model, using venn diagrams to depict each of the dimensions (Figure 14). It illustrates that while each dimension has unique characteristics, they are also intersected and create shared value. In order to achieve sustainable business success, social, environmental, and economic factors must be balanced and integrated. (Ullah et al., 2021).

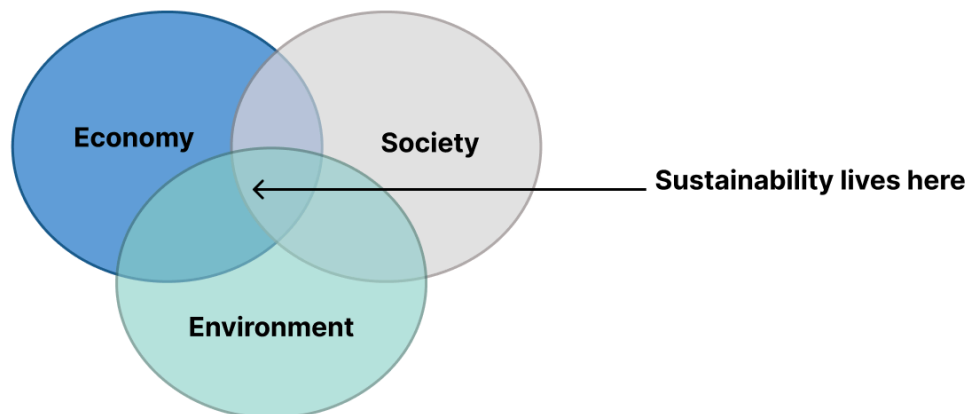


Figure 14: The nested spheres model

Source: own compilation based on Sandhu et al. (2014).

The other interesting development in the TBL is the concept of coopetition that also emphasised the important of such collaboration beyond market traditional rules (Lovicsek, 2021). The Triple-bottom-line approach lays the groundwork for the sustainability idea, which involves firms integrating social and environmental factors with economic benefits. Sustainable innovation is a broad notion that encompasses a variety of product, process, organizational, technological, and marketing advancements (Ullah et al., 2021). This concept can be also justified by IO and ecological modernisation theory. The ecological modernization theory is mostly promoted in the western Europe, particularly in Germany and the Netherlands. It is considered the most important theory of environmental policy and a framework for policy analysis. It is distinguished by its ability to promote a balance between environmental protection and economic growth by addressing environmental challenges within the context of political, economic, and social systems (Joo et al., 2018).

On the other hand, according to institutional theory, institutional constraints caused by institutional environments, such as coercive legislative mandates, can have a greater impact on the evolution of a firm's formal structures than market pressures. Institutional forces can help the firm embrace a shared definition of social reality—a conception whose validity is recognized as independent of the firm's own beliefs or activities but is taken for granted as defining the way things are and/or should be done. Although the concept extensively is used by scholar since 1998, with having its highest picks in 2018 and 2019 during the last two decades from 2000 to 2020 (Lovicsek, 2021). However, there are some shortcomings

reported. Predominantly, it is difficult to use the model form measurement and reporting tools. Thus, the researchers encourage to use complementary method such as SPA to enhance measurement tools (Ullah et al., 2021).

1.2.10 Integrated models

The former theoretical frameworks and approaches justify the firm's internationalisation process from stage (incremental) and networking (faster pace) perspective, the followed-up discussion including the re-visit Uppsala and international entrepreneurship also shows the evolution process and transformation toward the new roles of game in the more interconnected economy. By considering all the model, a curious mind could realise that one model or approach can't be alone explain and justify firms' process of internationalisation. Even the words of firms, can be challenged and linked to different approaches, so to say in the context of this research, traditional SMEs, BGs, Born Again Global and INV (S. A. Zahra, 2005). In a similar line, Oviatt and McDougall (1994) introduce four INV types; export/import start-ups, multinational trader, geographically focused start-ups, and global start-ups. This classification is based on coordination of value chain activities and the number of countries involved (Figure 15).

Coordination of activities in the value chain	Few activities in different countries	New International Market Makers	
		Export/ import startup	Multinational trader
		i	ii
		iii	iv
	A lot of activities in different countries	Geographically focused startup	Global startup
		Few countries	Many countries
		Number of engaged countries	

Figure 15: International new venture classification

Source: Oviatt and McDougall (1994, p. 59).

In addition, other terminology also introduced by scholars call **Hidden Champions** known as global niche players and operated into B2B sector (Witt et al., 2024). They use innovation and internationalisation as the main blocks of their competitive advantage. In the past two decades, hidden champions have made a significant contribution to the German economy, according to Audretsch et al. (2018).

More specifically one of the challenges that is imposed to the traditional model is regarding the high-tech, knowledge intensive or innovation driven SMEs. Thus, scholars are known to understand a sole model hardly can describe the process, philosophy and behaviour of these market player alone. In this vein Bell and Young (1998) and Bell et al. (2004) are suggested an integrative approach that justifies the different paths for the relevant market players. In other words, what changes impose to firms' internationalisation in the new millennium. Traditional business models become less effective as national borders blur and digitalization changes firms' business models. The changes could include forming an alliance or cooperating with local partners, particularly during difficult times (Puślecki et al., 2021).

It is well understood from staged model that firms follow different modes of entry within their timeline of internationalisation. Having this in mind, as shows in Figure 16, Fletcher (2001) proposes another integrative model to consider internal and external environment in SMEs' outward (exports), inward (imports), and linked (strategic alliances) international activities (Fletcher, 2001). Firms are forced to change their approaches, due to changes in external environment. They are needed to find new methods of coping with fixed costs, rising R&D expenditure, and shortened product life cycles. A digitalisation strategy takes shape during this period as internet usage persists along with cooperative agreements adopted by companies. The latter paves the way for the development of an internationalization theory based on networking. In the same line, it also highlight the concept of dynamic capability, as firms learn how to build new capabilities while reinforcing their old drivers of competitive advantages (Bartlett & Ghoshal, 2002).

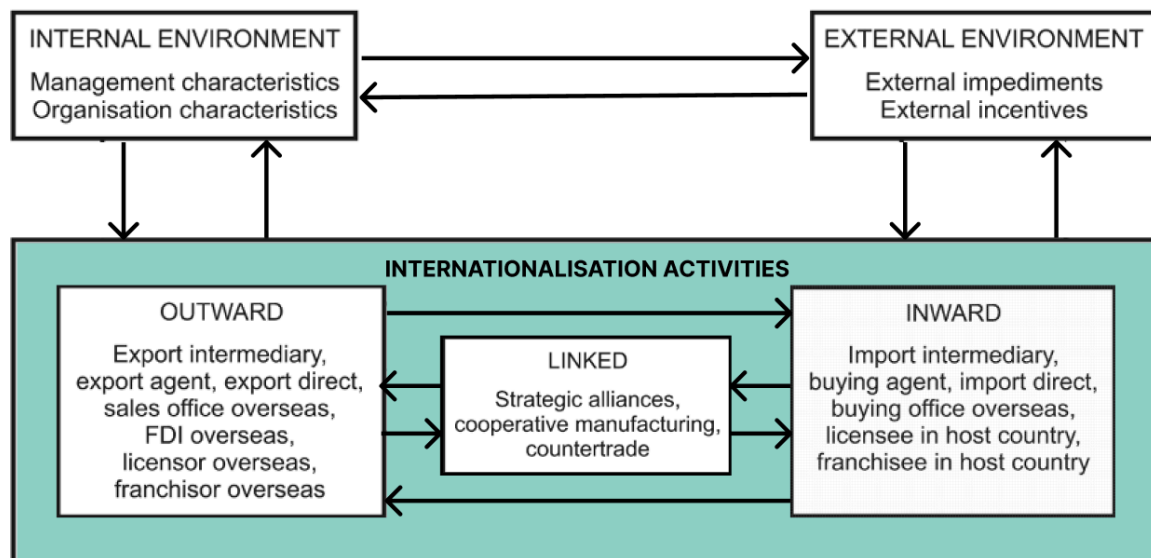


Figure 16: A holistic approach to internationalisation

Source: Fletcher (2001, p.30).

Although scholars name many motives for firms' internationalisation that could possibly lead to some economic benefits. The risks and challenges of operation in distance markets with certain instability in institutions are unavoidable. Cultural differences and change in host countries' government political perspective on one hand and changes global and sub-global layers of external environment force firms to review their internationalisation approaches (Wach, 2008). Some examples of such changes are changing of governments, or government policies such as changes in the taxation, receptive or unreceptive towards FDI, subsidising the domestic firms or even some extreme cases of expropriation or nationalising of certain industries. Fletcher (2001) considers these trends in his proposed holistic approach and argues that firms are required to adopt a more dynamic approach. Additionally, this approach is challenged the traditional idea of internationalization as an incremental progression and suggests that SMEs may also consider voluntary or involuntary de-internationalization. Restructuring could include downsizing, closing international ventures that are not profitable or less profitable, and **Export Market Withdrawals (EMW)**. Such strategies are seen as strategic manoeuvre to enhance the firm's performance in long or short term (Pauwels & Matthyssens, 2004). Three categories of internationalisation process are proposed by Kutschker et al. (1997). The study described that firms might experience in the process of internationalisation series of incidents call "evolution", "episodes and "epochs" based on their pace, scope and duration of changes. Evolution is referred to slow and small changes that impacted small units almost permanently. International episodes encompass a

wider range, including internal units, divisions or the whole enterprise. These types of changes are important, happening fast and caused discontinuities in the internationalisation process (months to several years). One of the recent episodes, was Covid-19 pandemic that pushed firms to adapt their business model. International epochs are slow or rapid changes imposed to the entire organisation in a longer periods of time (several years) (Araujo & Rezende, 2003). This approach also is known as 3E model. Companies may undergo "epochs" of internationalization followed by periods of consolidation or retrenchment, or they may undergo "episodes" in which they expand rapidly overseas or de-internationalize (Bell et al., 2004). In this context and based on the integrative approach firms are required to show their strategic flexibility to re-shape their business model and develop new basis to achieve competitive advantage. In this model, one cannot ignore the important role of knowledge (Mejri & Umemoto, 2010) and responsibility of managers to make appropriate decisions. In the same vein, knowledge based model on internationalisation as new integrative approach is introduced (Saarenketo et al., 2004). In Figure 17, Wach (2012) depicted the development process since 1970s to 1990s to show how all these theoretical impacts could possibly come under one umbrella of Integrative approach or Holistic models. Using an integrative approach, researchers can consider the complementary role of other theoretical frameworks in the internationalization process of SMEs (Bell et al., 2004).

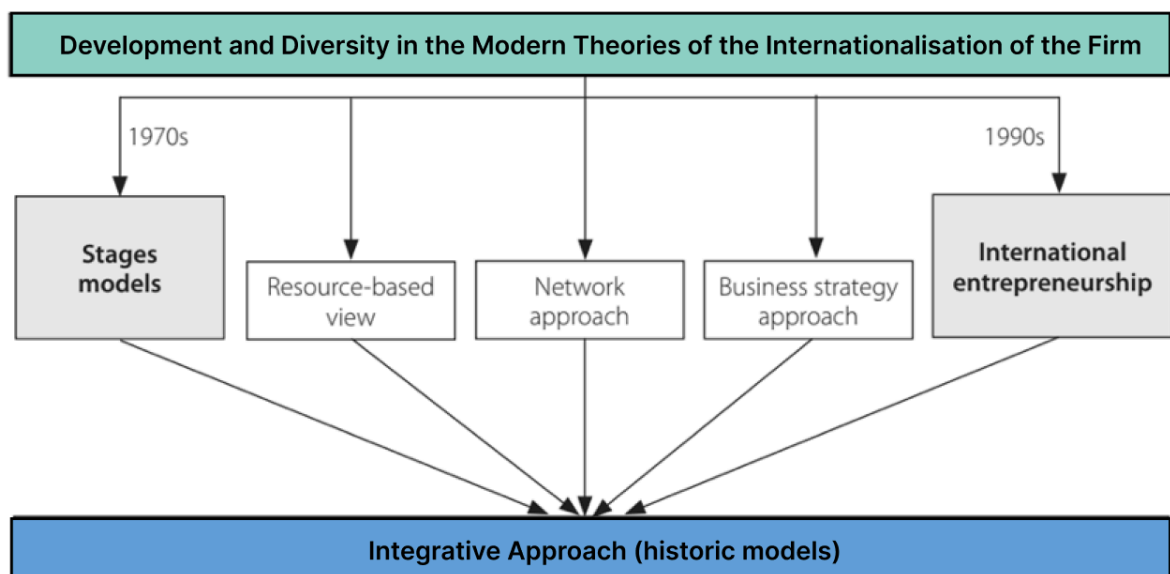


Figure 17: Main Approaches to firm-level internationalisation

Source: (Wach, 2018, p. 66).

According to Maciejewski and Wach (2019), the integrative model considers the following: (1) internal and external environmental factors that drive entrepreneurship, (2) international entrepreneurship, (3) different paths of the traditional stages approach are included, as well as the concept of knowledge and the importance of organization learning. A classification of internationalized enterprises provides by Hutschenreuter et al. (2009) (Figure 18). Type 1 is characterized by conventional progression through stages based on the U-model assumptions. As an alternative to this notion, there are companies that engage in early and rapid internationalization. Accelerated internationalization or rapid internationalization models pertain to conventional SMEs that do not initially are inclined to operate on the global market but probably starts with a regional market born Regionals (Type 2). Over time, some of these companies expand their international activity in global market (Type 3) (Hashai & Almor, 2004). Bell et al. (2003) describes, born-again globals (type 4) as companies that operate in their native market at first but rapidly internationalize as a result of identifying opportunities in foreign markets, progressing similar to born globals from the moment of their transition. This type of enterprise often comes from a conventional industry (Maciejewski & Wach, 2024).

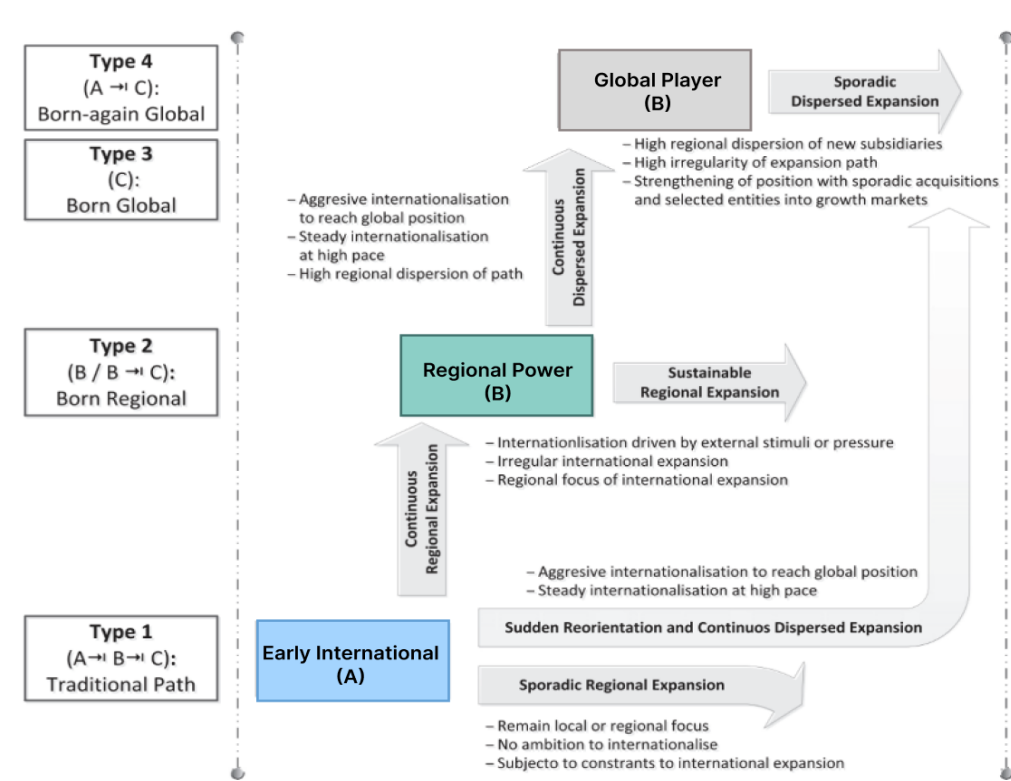


Figure 18: Four basic paths of internationalization of the firm

Source: Maciejewski & Wach (2024, p. 7) adapted and extended from Hutschenreuter et al. (2009, p. 65).

1.3 Overview of the empirical research on firm-level internationalization and sustainability

Studies in the field of internationalisation is as old as more than 5 decades. With growing the studies, the theoretical frameworks such as stage model (1960s), RBV (1970s), Uppsala (1977), networking (1980s), expectancy disconfirmation theory (1980s), Stakeholders (1980s) international entrepreneurship (1988), strategic approach (1990s), dynamic capability (1990s) integrated models (1990s), triple-bottom-line (1990) gradually emerges. In this section, we only mention these 10 theoretical frameworks as they are relevant to this doctoral research. Although some of these models are quite old but still relevant and mostly used by scholars. For instance, Dabić (2023) that reviews 762 articles published in leading journals from 1992 to September 2018 in the area of internationalisation of SMEs, is concluded that RBV is one the most expanded theory in research between 1992-2018. Similar findings are reported by Nuryakin, N. (2024) who says RBV concept grows and remain popular in strategic management literature since the mid-1980s. This theoretical framework is important for understanding of SMEs internationalisation because of two important facts; capture the informality in SMEs and focuses on the pivotal role of the owner-manager (Nolan and Garavan 2016). Still, some researchers such as Priem and Butler (2001) criticise RBV for oversimplify assumptions. Apart from RBV, Dabić (2023) identifies a dominance of five other key theories: Uppsala model, born global, network theory, transaction cost theory (TCT), and entrepreneurial theory. Jiang et al. (2023) that also reviews on SMEs early internationalisation also report that RBV, networking and BGs and industrial organization frequently cited. Although these researchers reached to slightly different opinions on the applied theoretical framework, but both emphasise on the role of knowledge and encourages the researcher to explore it. Dabić (2020) review highlights the importance of knowledge for SMEs, emphasised on the importance of inter-organisational Knowledge transfer as much as the external knowledge. From this research perspective, it means when SMEs uses their network (Puślecki, Czekajlo, et al., 2021) to acquire the business intelligence from the customers or their competitors in international market. They accumulate knowledge, analyse it but they also need to share withing the organisation to enrich it and consequently implement it as different types of strategies. These strategies could be in different levels; internationalisation such as certain market entry modes, or product levels such as innovative green products.

Alternately, it might lead to de-internationalisation from a market or dis-continuing certain product from a market. This process is perfect scenario for an integrated approach discussion. SMEs' resources justify by RBV model however, their limited resources will be compensated via their partners in their networks. Having such risk-oriented mindset to proactively looking into export opportunities in international market arguable from perspective international entrepreneurship. The process of establishing, developing, extending of their networks to acquired certain market intelligence is resonating not only the entrepreneurial orientation but also export market orientation. In addition, one could look it from the Uppsala revised model. The revised model highlighted the rule knowledge development, asynchronized non-linear development and learning via a firm's networks (Liesch & Welch, 2024). The network approach stems from the continuity of international research in the Uppsala school. This means that insiders have an advantage over outsiders to the access of the network knowledge and resources (Calheiros-Lobo et al., 2023).

Therefore, knowledge as an important factor in current era should be acquired proactively and retain systematically. Needless to say, market orientation cultural approach also includes inter-organisation coordination to empower knowledge retention and strategy development. Consequently, when SMEs realises that they must use their innovation capacity to develop product with sustainable attributes to fulfil the needs of one of the important stakeholder "customers" (pull factor) or to meet obligations required by legislation (push factor). Entrepreneurial orientation, marketing orientation theoretical frameworks meet sustainability discipline.

Interestingly, developing such agile system in respond to hypercompetitive market is a valuable, unique capability. Such organisational capability would create barriers for competitors (Nuryakin, N. 2024) as it would be costly or timely to be duplicated. This is the simple philosophy of the RBV model. These company over the time would learn from the market upgrade their capability deal better with liability of outsidership (Nguyen & Strange, 2025). Innovation driven SMEs by using such capability can internationalise faster and level-up to BGs. A BGs that benefits from layers of capabilities such as "entrepreneurial orientation", "market orientation" that leads by a "sustainable mindset" to meet new generation demands (Knezevic et al., 2019). It is important to consider Gawel (2022) argument on a shift in public attention toward sustainable development in recent years,

which takes economic, social, and environmental aspects into account. This is aligned with the triple bottom line theoretical concept that encourage firms to consider all stakeholders' value in their business model. Speaking of recent changes or trends, resonate well with the concept of dynamic capability. Liang et al. (2023) bibliographic study also shows researchers used dynamic capability to justify firms' reaction to changes in formal and informal institutions.

One cannot ignore the role of decision makers in SMEs within internationalisation or as Nolan and Garavan (2016) says the pivotal role of the owner-manager as part of RBV. Dabić (2020) found it as one of the key trends in their research and called it motivation. Managers decide based on their knowledge and judging of past experience and in some cases perceptions (if they have no past experience or sometime have experience but in an irrelevant industry). As RBV suggest, internationalisation is resource intensive process. SMEs liability of smallness always challenges managers on how to allocate their resources. According to EDT theory a manager's satisfaction and consequently decision on continue, expand or discontinue of their export activities could justify with the pas financial and strategic performance of an exporter. If managers positively disconfirm by generated results would continue their operation by allocating resources and in case of negative dis-confirmation would stop it that leads to de-internationalisation. Therefore, satisfaction of managers from their internationalisation depends on their realistic managerial perspective. It is crucial for SMEs with liability of smallness in the early stage of internationalisation. Jiang et al. (2020) emphasises on the role of knowledge in this perspective and encourage the researchers to address this gap by understanding the process for instance how INV/BG founders identify first international distributors, joint venture or joint marketing agreement partners.

2. Determinants of Small and medium-sized enterprises' export performance

2.1 Export performance from the theoretical perspective

Export performance is described as the evaluation of a firm's business activity in foreign markets, and it is used as mostly a dependent variable in literature to assess a firm's success or failure in meeting its export target goals (Chen et al. 2016). Due to the rapid growth of international trade compared to surviving in an increasingly saturated domestic market, a growing number of businesses are opting to go global and seek a competitive advantage anywhere on the planet. Export performance evaluates whether these businesses are on the right track (Chen & Nuangjamnong, 2022). A review of 379 articles about export performance is conducted by Trąpczyński et al. (2021), indicates that export performance is a new phenomenon (Figure 19).

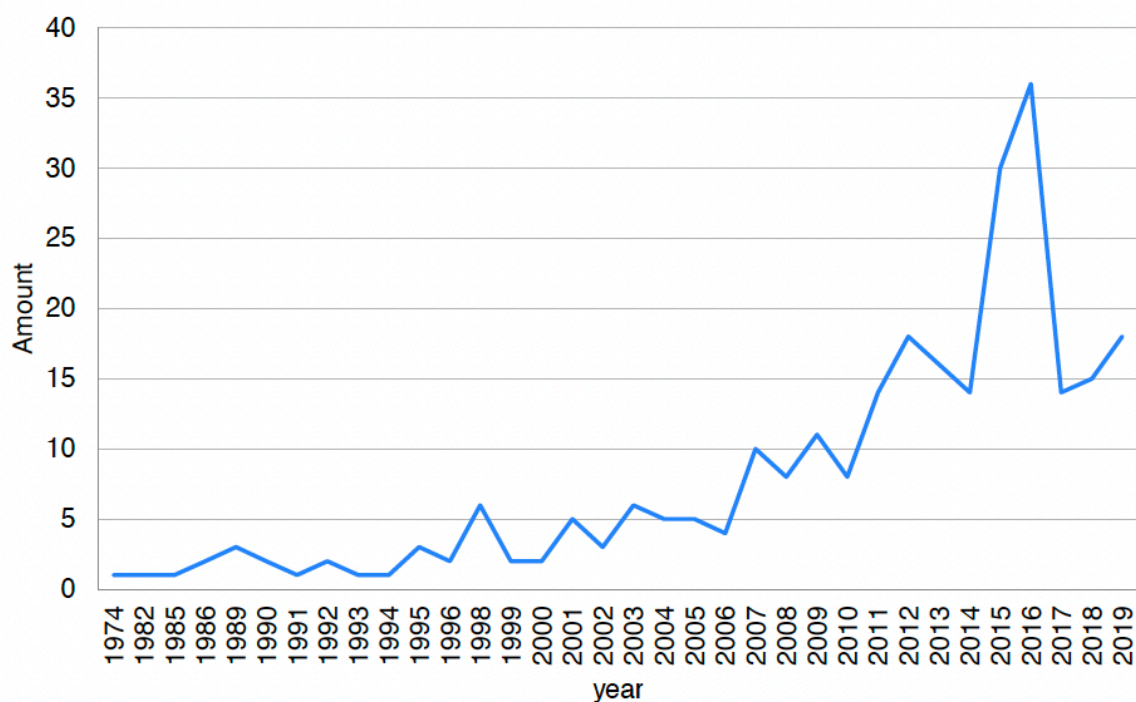


Figure 19: The evolution of export performance publications from 1974-2019

Source: (Trąpczyński et al., 2021, p. 61).

Scholars in strategic management are addressed various reasons behind the failure or success of firms within their internationalisation activities. However, export performance is a

commonly acceptable term by scholars to assess performance of a company in the context of internationalisation. The emergence of this research field backed to 1970s where Aaby and Slater (1989) review 30 articles and establish a profound foundation to link the concept of export performance and international business. One can see the development of export performance together aligned with changes in political environment after the second war and of course emergence of internationalisation theory such as Uppsala model (Johanson & Mattsson, 1987). The concept of export performance is not only interest micro level but also policy makers (Muis, 2020). As Zou et al. (1998) mention government are interested to boost of export performance as it is one of the driving forces behind the economic growth. It might be even more crucial for countries with large trade deficits.

In this line, Cavusgil and Zou (1994) provide the most valuable definition of export performance, which is defined as the extent to which a firm's economic and strategic objectives with respect to exporting are realised through the formulation and implementation of an export marketing strategy. After all, assessing export success is a difficult undertaking, and comparing the results can be challenging. This problem is exacerbated by the fact that researchers in this field are used different names for nearly identical variables (Zou & Stan, 1998) or utilised alternative measurement models such as Sadeghi et al. (2021). The determinants of export performance also vary from one industry to the next or from one country to another. For instance, the importance of quality certification in food industry and in some cases following certain standards such as Halal or Kasher (Najmaei et al., 2017).

Alternatively, some researchers measured export performance in multiple industries and argued that such approach could create better generalisation and broader coverage (Azar & Ciabuschi, 2017; Joo et al., 2018). Regardless of assessing performance in single or multiple level industries, it is crucial both for exporting firms and the economy as a whole to identify the antecedents of export performance (Trąpczyński et al., 2021). We also need to consider based on the integrative approach and changes experiences by exporters in different episodes or epochs, firms' priorities are changed. It means some older determinants lost their importance and new determinants have emerged. This phenomenon made this research field always dynamic and interesting.

As an important research discipline in the internationalisation field, a variety of theoretical frameworks are used by different researchers to justify the firm behaviour in conceptual models. Depending on the fields and determinants, a researcher aims to study, relevant theoretical framework is chosen. Chen et al. (2016) in their review mention about the four mostly used theoretical framework in this field, interestingly 15 articles out of 124 review papers do not mention any related theoretical framework. It can be also seen that in some cases such as Holz Müller and Kasper (1991) the export performance is called a theory. However, there are 109 papers in Chen et al. (2016) that examine 41 theories (or paradigms). The most frequently used theories (or paradigms) are resource-based (RBV) (50 studies), contingency theory (13 studies), institutional-based (IBV) (12 studies), and organizational learning Theory (OLT) (11 studies) (Figure 20).

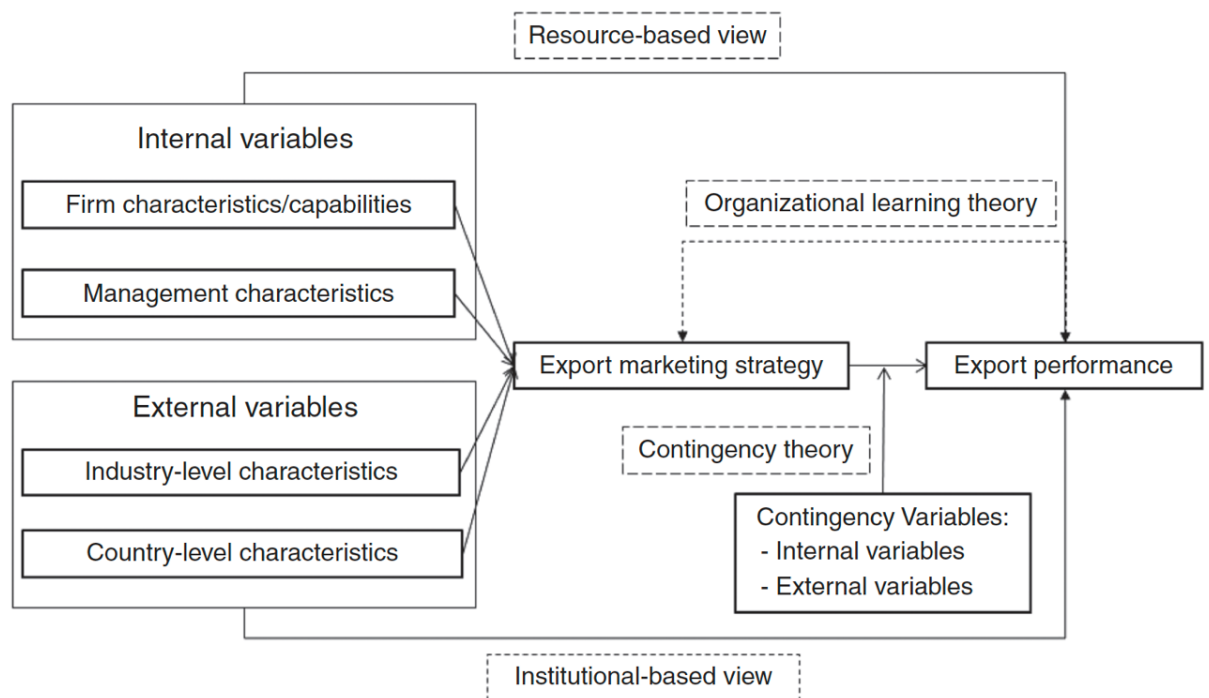


Figure 20: Conceptual framework of export performance

Source: Chen et al. (2016 p. 663).

RBV as an extensively used framework during last decade in this field justifies the internal determinants of export performance. Firm's level determinants or internal determinants of export performance are defined as those internal capabilities that lead to creation of products or service and an exporter benefit by exploiting them in the international markets. Some of

these determinants are a firm's capability (Cavusgil & Zou, 1994), management's characteristics (Leonidou et al., 1998), marketing strategy (Cavusgil & Zou, 1994), export marketing orientation (Cadogan et al., 2009), entrepreneurial orientation (Balabanis & Katsikea, 2003), innovation capacity (Hortinha et al., 2011), sustainable product attributes (Ullah et al., 2021), and many more. As follow, four group of internal drivers including marketing strategy, firm characteristics, firm capabilities, and management characteristics are mostly used in the literature. The resource-based theory has come a long way in the last 30 years, and will have a lot further to go in the next 30 (Barney et al., 2021). As a result, the most researched determinants of export performance are firm-level characteristics.

The industrial organisation (IO) and institutional based view (IBV) theories, in line with RBV, suggest that domestic and foreign institutions shape export strategies and performance, since enterprises must adhere to institutional requirements both in and out of the home nation (Peng et al., 2008, 2011). The **external determinants** are categorized as industry level and country level characteristics (domestic and foreign-market factors). The following determinants can be found among them: Technological developments, domestic demand, infrastructure, governmental support, competitive intensity and sociocultural factors (Sousa et al., 2008). However, according to the integrative approach only one theoretical framework or approach hardly can explain exporters' behaviour or managerial decisions in this field. As the research argued in the pervious chapter; with gradual or instance changes of external forces SMEs are reshaped their approaches. Within this transformation a firm' process of internationalisation or de-internationalisation can be studied with different theoretical models. For our research's conceptual model, the relevant theoretical frameworks and paradigms are discussed in the last chapter.

Jiang et al. (2020) systematic review also categorises determinants of export performance to external, internal, controllable and uncontrollable. Distinguishing between controllable and uncontrollable factors indicates whether they can be readily changed in the short term. The researcher believe that it is possible to change many internal factors in the long run such as team size (Figure 21).

	Internal	External
Controllable	Strategy Low cost strategy Product differentiation strategy Market differentiation strategy Fit between resource and strategy The scope of product line Niche market strategy Founder Values and Perceptions Value on INVs/BGs by entrepreneurs Attitudes and perceptions toward internationalization risk, cost, profit, potential and complexity Firm entrepreneurial orientation Innovativeness, risk-taking and proactiveness	
Uncontrollable	Founder (Team) Characteristics Founder international experience Founder international education Founder proprietary network relationships Founder industry experience Team size Team tenure Background heterogeneity Firm's Characteristics and Competences Firm's size Firm's technology Firm's relational/network resources Firm's financial capital Firm's organization structure and system (Centralization vs. decentralization, organic vs. mechanistic)	Industry Characteristics Industry's degree of internationalization Knowledge and technological intensity Industry dynamism and hostility Market Characteristics (Domestic and foreign) The market size, potential and degree of internationalization Geographic location Cluster dynamism and competition for resources

Figure 21: The determinants and performance of early internationalizing firms

Source: Jiang et al. (2020, p. 9).

2.2 Export performance measurement model

Measuring export performance is not a simple task and it is challenging to compare the findings. Additionally, this challenge is partly due to scholars that are using different unique names for almost identical variables or applied different measurement model in this area of research (Sousa et al., 2008). In the earlier wave of studies such as Moini (1995) export performance is estimated by a single variable such as export sales, export sales growth, export profits and export intensity. In the Chen et al. (2016) review study, relatively a large portion of researchers (41) are used such approach that can be argued that single indicator

assessment still acceptable in the measurement method. However, scholars gradually realise that export performance is a multidimensional concept. The multiple measuring approaches have increased the accuracy and validity of findings (Oliveira et al., 2012). Before making a deep dive to the measurement model, it is worth to know about the different types of performance.

Business model and level of analysis

Trąpczyński et al. (2021) review research provides a good illustration for researching export performance by showing different levels as well as impact of external and internal factors (antecedents) (Figure 22). The framework also elaborates on the outcome (continue or exit options) and the relevant process. Export performance can be measured at several organizational levels, including firm, country, market, export venture portfolio, and product line. Even though a consideration of other levels from a large organization's perspective may seem reasonable, researchers say that SMEs are particularly relevant at the firm level due to the fact that other levels of organization may not provide meaningful insight into their performance due to their smaller size. (Sadeghi et al., 2021). As a matter of fact, for smaller companies, distinguishing the performance of their export ventures - should they exist - is not as straightforward as measuring the whole export process (Styles, 1998).

Scholars use **financial and nonfinancial indicators** to measure performance. Financial export performance is measured by indicators such as international or export sales, profit, and market share (Sousa et al., 2008; Tan & Sousa, 2013) whereas, nonfinancial export performance is indicated by strategic measurements such as the contribution of exporting to the firm's reputation or positioning. Findings of most of studies suggested that financial and nonfinancial components of export performance are complementary and must be evaluated simultaneously (Sousa et al., 2008). According to Chen et al. (2016), export profitability (51), export sales growth (45), export sales (38), and export intensity (36), are among the most frequently used economic measures. There is less use of non-economic performance measures, of which satisfaction with export performance (25), and export goal achievement (15) are relatively common.

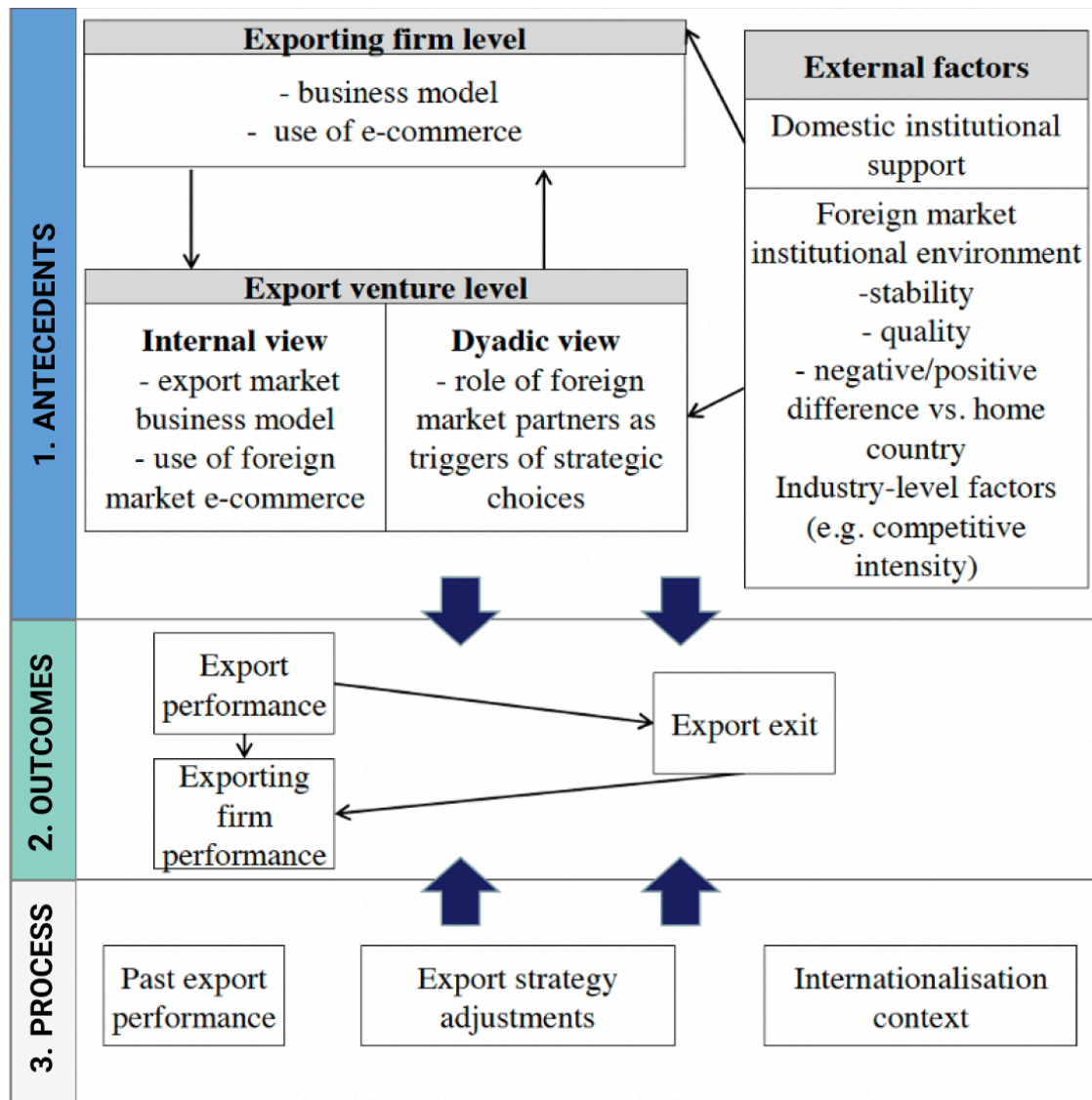


Figure 22: Export performance research framework by Trąpczyński et al. (2021)

Source: Trąpczyński et al. (2021, p. 66).

Type of performance: (financial and non-financial performance)

Due to financial transparency and probably centralized accounting system, applying financial categories might be applicable for large companies or MNEs, if they would be public listed or willing to share their information. In some cases, researchers extract the firm's financial performance from data base, for instance Ullah et al. (2021) use Asset4 and WorldScope databases in the United States. Such records might not be available in developing economies (Boso et al., 2019).

For smaller size company, it might be not relevant as mostly managers either set non-financial goal (Wach et al., 2020) or accessing to such information would be not easy. Similarly, Sadeghi et al. (2021) also report that as long as nonfinancial goals are met, SME managers can persist with financial underperformance. According to one of the interviews in their research *“We are prepared to lose some money in the short run, and we see it as an investment, not as a financial loss. What we cannot afford is losing our reputation”* (Sadeghi et al., 2021, p. 66).

Non-financial performance measurement is suggested indicator like contribution of exports to reputation of firms or firms’ strategic position (Sousa, 2008). Other researchers measure performance through general satisfaction of company about export activities (Zou & Stan, 1998) or against the set goal. Goals can be a wide range of firms’ short ideal circumstances such as entering to a market (without being profitable) or achieving certain strategic market leadership. Goal measurement might also have another advantage, which is trade-offs among different goals. In some case outperforming one aspect comes with cost of losing track on the other one. As an example, a company that aim for having a certain market share or initiation of operation in a new market, might not be reaching the high profitability records. This can be more relevant in Uppsala model, particularly non-innovation driven SMEs.

We can see this in the **EXPERF measurement model** that researchers propose three dimensions to measure export performance including; financial, strategic and satisfaction with export venture (Zou et al., 1998). The measurement model, still one of the most frequently used in the scholar and is based for the new development in this field. It is not only considering financial but also strategic aspect of firms’ operation. Alongside, the third dimensions, estimate the company performance according to the managers’ satisfaction. The same approach has been used earlier by Cavusgil and Zou (1994) that a firm’s satisfaction not reflected on the specific financial goal (e.g., export profitability, sales) but manager’s overall satisfaction with export performance. Katsikeas et al (1996) are measured managers’ perception of success in performance against the set objectives and called it goal achievement. Gradually studies develop slightly different measurement dimensions, e. g. Lages et al. (2008) estimated Portuguese exporters’ performance by measuring export intensity, export achievement and export satisfaction (Lages et al., 2008).

Obviously, this measurement model is almost **similar to EXPERF**. This type of measurements opens the doors to used more subjective mode of assessment that will be explained shortly. It is also important to consider the benchmark and time frame used by researchers when measuring export performance. For assessing a firm's performance, a scholar either look at past performance or **benchmark it against other firms**. Comparing the **firm's domestic performance** or other international ventures of the same company could also be used for this comparison.

Always a benchmark with previous years could consider as a bias due to the changes in external environment (Lages et al., 2008). In some case, researchers are used couple of criteria such as benchmarking toward the competitors, plans and their domestic performance. On the other hand, studies also are asked managers' perception about certain performance indicators for number of years (Al-Ghwayeen & Abdallah, 2018). The study also highlights the role of management commitment on the performance that might be different from one year to another year. They also find that satisfaction of managers with previous year operation positively influence the performance in the next year (Lages et al., 2008). The relations among the measurement variables of export performance are a topic that received the least attentions in the scholars. This is linked to the EDT concept that is discussed in the last chapter.

As a conclusion, probably benchmarking firms' performance with its competitor may neutralise the positive or negative impact environmental forces. For instance, in order to evaluate export performance, Heredia et al. (2019) use a seven-point Likert scale comparing export sales profitability over the past three years to the three main competitors, where (7) is very high performance, while (1) shows deficient performance. To balance short-term fluctuations in export performance with the following items in their most important export market: overall export performance, export sales growth, and export profitability, He et al. (2018) are evaluated the level of satisfaction over the past three years. However, we should also be aware that the goal for a company from internationalisation might be different to the others. This can be arguable from the perspective majority of theoretical framework like stages or Uppsala model of internationalisation. Therefore, as Chen et al. (2016) conclude, having a longitudinal mindset that explore firm's performance over time is essential, but it might be only doable for publicly listed company where research would have access to data. Still, considering such approach for SMEs is really challenging.

For measuring export performance, the researchers are traditionally used two main forms of assessment: subjective and objective. Export performance that is measured using objective or "hard" measures is based on disclosed financial parameters. Subjective indicators, on the other hand, are subjective and reflect the respondent's judgments of performance, both financial and non-financial. Although objective measurements could be more precise for measuring export success, past researches are indicated that using objective indicators has some limitations as discussed earlier (Chen et al., 2016; Lages et al., 2008; Sadeghi et al., 2021).

Using objective measurement particularly is challenging for SMEs and raised certain concerns about validity of measurement criteria. The major challenges when it comes to obtaining financial data, particularly for smaller companies is unavailability or accessibility. Obviously, secondary information on SMEs' export activities is not available publicly, and many privately held companies are reluctant to share financial information with researchers. Even publicly listed firms do not usually report specific export information. Finally, firms often evaluate export performance differently, and differing accounting standards complicate comparisons of results (Sadeghi et al., 2021).

Subjected to exporter' goal, some firms put more weight on their financial objectives, while others place more weight on their strategic objectives. Researchers must consider a firm's objectives when evaluating export performance. It is imperative to identify and prioritize the objectives that are most critical to their exporting activities. It appears to be particularly relevant for SMEs to measure subjectively their export performance.

Three dimensions model of measuring export performance developed by Zou et al. (1998) is one of widely accepted concept as it tackles the measurement from different perspective of financial, strategic and satisfaction. Objective and subjective measurement indicator are used in this model (Chen et al. 2016). Majority of the scholar reviewed so far consider export performance as a dependent variable and try to estimate the impact of relevant external and internal determinants on firm's performance. In this study we use SPA, EO and EMO as internal determinants of export performance. However, only few researches try to estimate the interrelationship among export performance dimensions and consider them as variables (Ahamed & Skallerud, 2015; Siddiqui et al., 2023; Wang & Olsen, 2002).

Financial performance correlated directly with satisfaction, according to Siddiquei et al. (2023). For example, it is demonstrated that export sales as part of financial dimension and satisfaction are positively correlated (Patterson et al., 1997). A similar finding is also reported by Ahamed and Skallerud (2015) showing that profitability (export volume and growth rate) is significantly associated with satisfaction among managers of Bangladesh's ready-made garment industry (Figure 23).

As discussed in the theoretical chapter, this relation can be understood via management EDT (Oliver, 1980; Wang & Olsen, 2002). In this sense, there are three types of manager expectations: (1) confirmed when performance meets expectations; (2) negatively disconfirmed when performance is not as expected; (3) positively disconfirmed when performance gets beyond the managers' expectations (Patterson et al., 1997).

Once again, the concept reiterates the crucial role that entrepreneurs or managers play in the decision-making process, which is also aligned with international entrepreneurship. The satisfaction dimension of export performance also reflected by general satisfaction with export venture, success factors, and whether the current performance meets managers' expectations. Therefore one can see managers' judgments about export performance are part of an "iceberg" of indicators (Madsen, 1998).

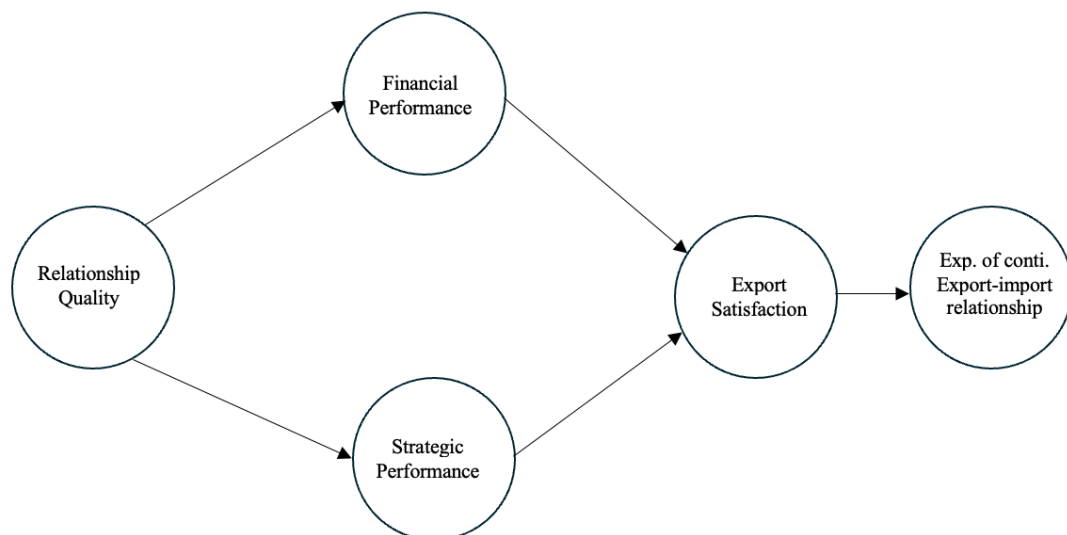


Figure 23: Research model of by Ahamed and Skallerud (2015)

Source: Own compilation based on Ahamed and Skallerud (2015, p. 24).

Strategic performance is another dimension that is proposed by Zou et al. (1998) to estimate firms' performance via checking a firm global competitiveness, strategic positioning and market share. The way the questions are developed, check these aspects from the perspective of a manager that needs to judge if they have changed and in case how positively or negatively, they have been developed. Again, this model of measurement borrowed the concept from disconfirmation expectancy theory. Therefore, having reasonable level of satisfaction is important. Wang and Olsen (2002) conclude that this might be problematic for smaller company with limited export experience. Managers in this scenario might have unrealistic expectation that might lead to dissatisfaction. The study reports, when profitability criteria met by exporters or exceed their planned figure, exporters are satisfied. It can be argued that for those that sacrifice the short-term profitability to achieve long-term competitive advantage, making lost in short term does not necessarily would lead to this satisfaction.

2.3 Entrepreneurial orientation and its measurement

Corporate Entrepreneurship (CE) coexists with **entrepreneurial orientation (EO)** in the entrepreneurship literature. A firm's CE (strategic renewal, innovation, corporate venturing) as a firm level phenomenon reflects its entrepreneurial actions, whereas its EO reflects its potential entrepreneurial attitudes and intentions (Wach et al., 2023; Zur & Walega, 2015). To investigate the effect of EO on SMEs' export performance, having a deep knowledge of EO, its dimension is a must. Researchers like Patricia McDougall (McDougall 1989, McDougall & Oviatt 2000) and Benjamin Oviatt (Oviatt & McDougall 1994, 2005) have laid the foundation for international entrepreneurship as a distinct field. Gupta et al. (2021) conduct a biometric analysis of 86 papers since 2001 in IEO field and report IEO research probably is gaining momentum in the current decade. More and more researchers showing interest in this field, where three most productive authors are Dimitratos, P (five papers) follows by Hernandez Perlines, F and Wach, K (four publications each) (Gupta et al., 2021).

From the theoretical chapter, we have understood that this important determinant of export performance would be supported with fast-paced internationalisation theoretical frameworks. An entrepreneur and its entrepreneurial behaviour coupled with his/her networking capability is the core skeleton of this phenomenon. EO can be studied in a firm's level across different industry or countries. Firms follow entrepreneurial approach to create

new product, service, process via novelty and innovation to meet customers' demand. The concept is applicable in **various types** of market players regardless of their size and scope of their operation (domestic or international). In fact, entrepreneurial dynamism and flexibility to react to changing internal and external environment are among SMEs' strengths (Jusufi et al., 2020). Knowing the importance of SMEs for national economy and fundamental impact of entrepreneurial approach for SMEs, policy makers also support entrepreneurship. In the context of SMEs, Fadahunsi (1991) is one of the first to connect SMEs to entrepreneurship by encouraging governments in the Commonwealth to support entrepreneurship. Therefore, it can be deduced that EO approach supported by policy makers of different kinds.

Although entrepreneurship is a multifaceted notion, it is commonly known as entrepreneurial orientation (Wach, 2015a), take it from (Gaweł, 2013, p. 17). Several scholars have studied the relationship between market and entrepreneurship. For instance, Atuahene-Gima and Ko (2001) note that management discipline is studied the orientation to entrepreneurship, while marketing discipline is studied the orientation to the market. In this research, we would distinguish these two variables and analyse each of them as internal determinants of export performance. Kuivalainen et al. (2007) and Lumpkin and Dess (2001) are among the first that classify entrepreneurial orientation and international entrepreneurship orientation as internal predictors of export performance. However, from the theoretical perspective, entrepreneurial orientation could be considered also as strategic capability according to RBV (Barney et al., 2021).

SMEs could merge it with their networking capability to scan the opportunity and turn it to a tangible product and service with a born global approach (Singh et al., 2022) which is a strategic capability. Following firm's journey in export markets, some researchers such as Kuivalainen et al. (2007) link a firm's EO to the domestic market and use the term international entrepreneurial orientation (IEO), that is entrepreneurial attitudes and resource allocation to international activities. As can be seen in Figure 24, the role of entrepreneur reflected mainly in opportunity exploitation and making opportunistic decision in the international markets. It is called opportunity-based internationalisation by Oyson and Whittaker (2010).

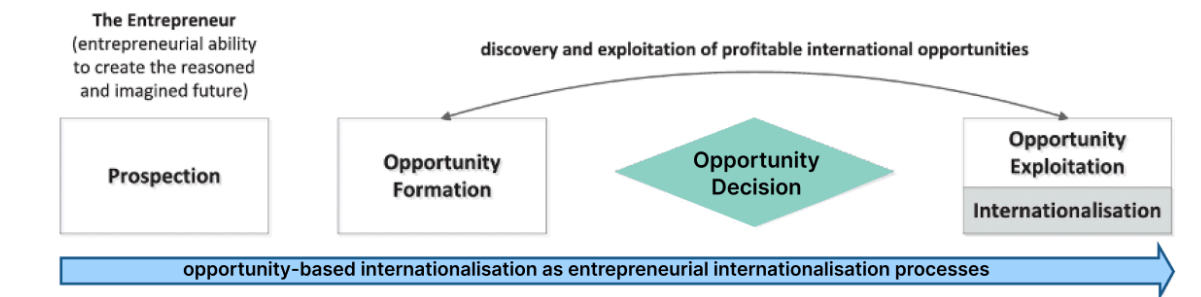


Figure 24: The internationalisation process in international entrepreneurship

Source: Wach (2024, p. 4).

Similarly, Wach (2015) review research shows common agreement among the researchers in terms of conceptualizing IEO. Firm's IEO can be reflected in a firm's proactiveness, risk taking behaviour, aggressiveness and the capability to innovate creative solutions to fulfil international costumers' needs. As an example, a BG's innovative capacity facilitates its international orientation and export performance (Escandon-Barbosa et al., 2019). In this case, BG's innovation capacity, empowers exporters to modify their offerings to match the market without extreme cost or time. Proactiveness is also a fundamental reason behind the radical innovation. Risk taking is also a crucial capability in a dynamic market, where it encourage firms to be more flexible and adapt their strategies (Jambulingam et al., 2005). The fact is that by proactively pursuing a risk-taking internationalisation strategy, exporters have the potential to turn a potential market into a strategic source of income in their portfolio, because this is the nature of international entrepreneurship. This shows that the EO is a multidimensional construct. Research also concludes that level of firms' innovativeness would be associated to firm's risk taking and proactiveness. Thus, EO dimensions are quite interrelated, and some researchers treated them separately (Özsomer et al., 1997; Wach et al., 2023). Next, the review will examine how EO concept developed over time and what measurements different researchers used to evaluate it.

Table 5 shows the history of evolution of EO and related dimensions. This shows how much this research field is dynamic and encouraged the researchers to explore this topic. As follow Miller (1983), Covin and Slevin (1989) and Wiklund and Shepherd (2005), many researchers apply the three dimensions based of EO including innovativeness, proactiveness, and risk-taking ability to measure a firm's Entrepreneurship orientation capability (Wach, 2015). The concept of the EO has also been conceptualized in other studies, such as Lumpkin and Dess

(1996), who add additional dimensions such as competitiveness, and autonomy to the concept. Different scholars with considering the context of their research applied different measurements to investigate the EO. For instance, Smart and Conant's (1994) exclude competitive aggressiveness dimension in their research. Scholar such as Jambulingal et al. (2005) add motivation as the sixth dimension. Motivation dimension estimates a firm's employees towards face challenges. In other words, how much a firm is able to develop or enhance such a capability or attitude in their employees with considering the entrepreneurial challenges. In their study firms that show a better attitude and moral belief toward hard working had better benefited significantly from motivated employees. In contrary to Covin and Slevin (1989), Kuivalainen et al. (2007) measure EO via three dimensions while using competitive aggressiveness instead of innovativeness. Later on Boso et al. (2017) propose two new dimensions of product innovation intensity and product innovation novelty together with proactiveness, risk taking and competitive aggressiveness and autonomy to measure EO. In the upcoming sessions, the review provides an overview on three dimensions of innovation, proactiveness and risk taking and later adopt this three-dimensional measurement model to estimate the impact of EO on firm's performance.

2.3.1 Innovativeness

The success of a business is increasingly dependent on its innovation and/or technological capabilities, in today's knowledge-based economy (Lejpras, 2019). To seize opportunities, organizations continually need to be renewed and innovated to keep up with growth and complexity (Miller, 1983). Inventiveness comes from the willingness to abandon old habits and ideas to embrace new ones (Ayoub & Abdallah, 2019). In the context of company, the term "innovation" refers to the successful and practical implementation of innovative ideas within a company. It encompasses a broad range such as creativity in process and product (Dess & Lumpkin, 2005), service innovation, and technological innovation. **Product innovation** refers to the launch of a new or significantly better product or service in terms of features or applications, whereas process innovation refers to the adoption of a new or significantly enhanced manufacturing or delivery system (Zastempowski et al., 2020). Along-side of creativity, novelty is another aspect of innovation that is considered by Boso et al. (2017) as a new measurement dimension of EO called product innovation novelty. The novelty scale measures how distinct a new product is from the existing product as well as its competitors' new product.

Table 5: Measurement of entrepreneurship orientation

NO	Study	Basic Dimensions	Items	Scale
1	Miller's (1983)	Innovativeness	12	5-points
		Proactiveness		
		Risk-taking		
2	Covin and Slevin's (1989)	Innovativeness	9	7-points
		Proactiveness		
		Risk-taking		
3	Lumpkin and Dess's (1996)	Innovativeness	18	5-points
		Proactiveness		
		Risk-taking		
		Competitive Aggressiveness		
		Autonomy		
4	Smart and Conant's (1994)	Innovativeness	32	5-points
		Proactiveness		
		Risk-taking		
		Autonomy		
5	Wiklund and Shepherd (2003)	Innovativeness	12	5-points
		Proactiveness		
		Risk-taking		
6	Jambulingal et al. (2005)	Proactiveness	24	7-points
		Innovativeness		
		Motivation		
		Risk-taking		
		Competitive Aggressiveness		
		Autonomy		
7	Kuivalainen et al. (2007)	Proactiveness	12	7-points
		Risk-taking		
		Competitive Aggressiveness		
8	Boso et al. (2012)	Product Innovation Intensity	23	7-points
		Product Innovation Novelty		
		Risk-taking		
		Proactiveness		
		Competitive Aggressiveness		
		Autonomy		

Source: Own study.

When analysing innovation in a corporate setting, a wide range of perspectives can be taken into account, such as innovative capacity (Escandon-Barbosa et al., 2019), organizational innovation (Chen et al., 2020), open innovation (Puślecki, Czekajlo, et al., 2021),

environmental innovation capacity (Joo et al., 2018). As a result, literally the more one company can innovate (innovation capacity), the more innovative it will become. Therefore, the more one company can invent, the more innovative it is. Innovation is not limited to the size of company or the activity of a company in a domestic market but also important for export business model. The first time a small company adds a new product to its export basket is when it innovates at the product level, even though other SMEs may already export that same product.

An analysis performed by Jusufi et al. (2020) on 100 exporting Kosovo SMEs find a positive and significant correlation between their product innovation activities and their financial performance as exporters. The researchers conclude that new items play a greater role in SMEs' export baskets than in large enterprises. Thus, SMEs with radical innovation can differentiate themselves by leveraging their creativity to take advantage of emerging trends and gain an export foothold. Escandon-Barbosa et al., (2019) report that performance for Colombian exporters significantly diminish due limited innovation capacity although the management have an international orientation. Therefore, strategic resource allocation by considering investing in new technologies and equipment could reinforced the effect of innovation. According to Zastempowski et al. (2020), when Polish SMEs are assessed in relation to their technological innovations, modern research and development equipment, modern machines and devices enable the introduction of new products and processes by Polish SMEs.

As a new emerging trend, **environmental innovation capability** is identified as firm-specific capabilities that enable them to offset all negative environmental repercussions from commercial activities. It could be achievable by leveraging environmental know-how from both within and outside the organization. According to Joo et al. (2018), export performance does not correlate well with environmental innovation capacity of exporting firms. It can be concluded firms with a high level of innovation can develop many new products for worldwide markets. As a result, such a corporation is more likely to arrange higher export performance than companies that do not engage in innovation (Kazemi et al., 2021). The market must, however, be analysed for how many of these new inventions are accepted (Chen et al., 2020). In this respect McKinsey defines innovation in a corporate setting, not only as product creativity or novelty but need to be consider impact. Innovation need to be delivered net new growth that is sustainable, repeatable and substantial (Brown, 2021).

2.3.2 Proactiveness

The other dimension of entrepreneurial orientation is **proactiveness**. There is a consensus among scholars on this dimension, as shown in Table 5. This means that a proactive firm anticipates changes in the future by actively tracking the market for those changes in the future (Rauch et al., 2009) as well as playing an active role in shaping the state of the external environment by playing an active role in building it (Keh et al., 2007). By taking such a strategic position against all their competitors, they will be able to set the rules of the game on the market so that they can take a leadership position against all their competitors. For instance, there can be a first mover advantage where a new product/service is introduced a few steps ahead of competitors in an international market to achieve greater international reach (Pérez-Luño et al., 2016).

Proactiveness by nature is quite costly, especially for SMEs. Proactive companies must plan to devote resources. Proactive behaviour is associated with high search, learning, and retaliatory costs. Kreiser et al. (2013), that explore the impact of entrepreneurial orientation on SMEs' performance by studying 1668 SMEs in nine different countries across 13 different industries and finds that high level of proactiveness maximized potential benefits, while low proactiveness level maximized costs. For this reason, proactive firms must be more aware of foreign market needs and are consequently better equip to take advantage of overseas opportunities that best match their capabilities (Morris et al., 2011).

Lumpkin and Dess (1996) find that a higher level of proactive behaviour is positively correlated with increased levels of business innovation, while a lower level of proactive behaviour is associated with lower levels of innovation. Furthermore, it has been found that proactiveness was predictive of higher firm growth and profitability, as well as higher overall firm performance, along with innovativeness. Isichei (2020) research that examines the relationship between SMEs' performance and entrepreneurial orientation among Nigerian SMEs, reports that proactiveness is strongly associated with SMEs' performance, but it is also mediated by structural infrastructure capacity. By effective allocation of internal resources, SMEs have realized greater proactiveness. Thus, as Escandon-Barbosa et al. (2019) argue that firms' innovativeness is related to their allocation of resources to new technologies, proactiveness could also be determined by resource allocation.

2.3.3 Risk-taking

Risk taking is one of the pivotal characteristics of an entrepreneur, where a person risks their time, capital, and reputation to change old rules with some new one. Thus, this dimension is related to willingness and commitment of managers toward making decisions (Paulus & Hermanto, 2022). Risk taking approach is bonded with decision making within uncertainty (Dess & Lumpkin, 2005) where there is a significant chance of failure (Yu et al., 2021). Apparently, willingness of a manager to make risky decision and dedicate enough resource to support the process within internationalization may distinguish a firm with international entrepreneurial orientation from the rest of market players (Wiklund & Shepherd, 2005). Thus, firms' risk tolerance associate with an entrepreneurial spirit (Al-Mamary & Alshallaqi, 2022). It is needless to mention risk-oriented managers, would commit firm's resource without ignoring failure chance. Developing new products/service may lead to high return and vice versa, therefore the approach considered to be risky.

No matter what size a market player is, operating in international markets is risky. However, liability of outsidership, liability of smallness and possibly newness, differentiate the concept of risks for SMEs in international market. Nevertheless, SMEs' risk taking capability is a tool to scan the market for internationalisation opportunities and turn it to a tangible competitive advantage (Kropp et al., 2008).

Paulas and Hermanto (2022) study 84 SMEs in Java and report that their success is associated with firms' proactiveness, innovativeness, aggressiveness and autonomy but not to their risk-taking behaviour and conclude that studied furniture business are quite conservative and probably the SMEs were not prepared enough for this risk-taking approach. Civelek et al. (2022) that investigate SMEs' innovativeness and competitiveness behaviour in three countries (Czech, Slovak, and Hungarian) conclude, the perception toward risk-taking varies from one culture to another. The research links the firms' level risk taking behaviour to countries' culture and concludes Hungary's firms avoid uncertainty more than Czechia and Slovakia's, they behave less innovatively and are more risk averse.

2.3.4 Other measures and concepts

As stated in the beginning, other dimensions such as competitive aggressiveness and autonomy are marked as additional aspect of EO in some literature such as Gawel (2012). **Competitiveness** and aggressive behaviour are characteristics of a successful

entrepreneurial firm, according to Covin and Slevin (1989). As describe in the same study, **autonomy** is one of the most important characteristics of successful entrepreneurial businesses, as it allows them to make quick and efficient decisions. In the next table Wach et al. (2015) summarises and elaborates all five dimensions of EO (Table 6).

This research will end up focusing on the three-dimension approach due to the possible overlap with the dimensions of EMO. Measurement scope of Kuivalainen et al. (2007) and Boso et al. (2012) support this decision as the researchers are measured the competitive aggressiveness based on Slare's (1990) competitor orientation scale and Jaworski and kohli's (1993) responsiveness scale.

Table 6: Five dimensions of EO

No.	Basic Dimensions	Composite Qualities
Three-dimensional Construct of EO		
1	Proactiveness	- predicting future market changes (Rauch et al., 2009) - opportunity creation vs. opportunity identification (Sundqvist, Kylaheiko & Kuivalainen, 2012; Covin & Slevin, 1989)
2	Innovativeness	- openness to new ideas (Frishammar & Horte, 2007) - process and product creativity (Dess & Lumpkin, 2005) - pursuit of creative or novel solutions (Knight, 2001)
3	Risk taking	- decisions in uncertainty (Dess & Lumpkin, 2005) - implementation of projects entailing significant chances of costly failure (Davis et al., 1991; Khandwalla, 1977; Miller & Friesen, 1984)
Multi-dimensional Construct of EO		
4	Competitive aggressiveness	- competitive advantage over competitors (Dess & Lumpkin, 2005) - aggressive posturing relative to competitors (Knight, 2001)
5	Autonomy	- independent human activities (Dess & Lumpkin, 2005) - self-acting (Lumpkin & Dess, 1996)

Source: Wach (2015, p. 15).

Although a market-oriented organization strives to meet its customers' needs, it may struggle to design products or services that they cannot imagine. It is at this point that entrepreneurship become more fundamental, so these two variables are complementary. Combined with responsive market orientation, eggers and Kraus (2011) argue that marketing can be lean and flexible. The complementary setting would be paid off when the business experience certain type of episodes like covid-19 according to the integrative model. 69 manuscripts are reviewed by Eggers (2020) to investigate how SMEs responded to crises in covid. During a crisis, the study reports that entrepreneurial characteristics, such as

innovativeness and proactiveness, assisted companies in finding and exploiting opportunities. In this vein, by merging entrepreneurial and marketing orientations Morrish and Jones (2020) develop a post-disaster business recovery framework. Although businesses are surrounded by crisis, they have been able to adjust their business models, organize resources, and create customer value in different ways. As can be seen MO and EO could work in a complementary manner for SMEs.

2.4 Sustainability and sustainable product attributes

2.4.1 Sustainability and green innovation

Sustainability is rooted in a Latin word “sustinere” that resonates with the expressions like endure, maintain or support (Onions, 1964). The key word sustainability as we know right now was introduced almost three decades ago in the report of Keeble (1988) at a press conference in London. The report is produced by the Commission led by Doctor Gro Harlem Brundtland for the UN to highlight critical concerns around conducting business. According to the World Commission on Environment and Development (WCED) (1987) sustainable development is defined as development that fulfils current needs without compromising the wellbeing of future generations. It was in the beginning of the third wave of globalization (Palley, 2018), while previous trade barriers have crumbled because of globalization and free trade tendencies, governments had to deal with negative social and environmental aspects of business (Joo et al., 2018). Within the last two waves, the planet Earth has experienced an extraordinary cycle of unprecedented heat waves, cold spells, droughts, floods, and wildfires (Choi et al., 2018).

Some experts fear that unless this pattern is stopped, it would eventually ruin the livelihood of all species and might lead to severe food shortages (Safont et al., 2012). The topic receives more attention and in the year 2000 the United Nations Global Compact (UNGC) is established to encourage sustainable practice among the business in a non-binding manner. As follows, **17 Sustainable Development Goals (SDGs)** are introduced in 2015 and adopted by all members of UN (Håk et al., 2016). Since then, the term has been developed further and has drawn the attention of researchers in different fields (Figure 25).

Continuously and in lined with economic development, sustainability issues have become top priority of corporate leaders, as companies have faced increased scrutiny from their main stakeholders (Chabowski et al., 2011) to reduce the negative impact of manufacturing activities that some researchers such as (Villena & Souto-Pérez, 2016) is called green production. As these two terms are interchanged in studies, it is better to distinguish their meaning and definition. In fact, sustainability is a path responsible firms are expected to follow, by that changing the traditional rules of doing business worldwide, those might by any chance harming environment or host communities, which means full responsibility for the footprint enterprises generated (Seuring, 2004).



Figure 25: The 17 sustainable development goals (SDGs)

Source: United Nations (2015).

Differently, word “green” that is now linked to different concepts/constructs such as green innovation (Xue et al., 2019), green supply chain (Al-Ghwayeen & Abdallah, 2018; Emmanuel et al., 2021), green business strategy (Bıçakcıoğlu et al., 2019), green production (Villena & Souto-Pérez, 2016) and green trust (Hang et al., 2022) refers to execution and possible outcome of such sustainability practices. For example, **green product** is the development of a new ecologically friendly product or **green process** is about adaptation of manufacturing processes via the use of green technology and designs that reduce environmental risks (J. Chen & Liu, 2018).

Probably in the beginning of sustainability movement, the governments that has adopted many environmental laws like regulation for the protection of air quality, soil protection, protection against pollution of the environment in emergency situations, management of solid waste and others (Al-Ghwayeen & Abdallah, 2018) are the push factor for companies to rethink of their strategies. However, the pull factors are raised when demands for sustainable products appears in the markets (Ullah et al., 2021).

In the Global Sustainability study (2021) which collected data from more than 10,000 consumers in 17 countries, including all different generations, 63% of consumers have changed their preferences in favour of sustainable practices, and 34% of the study samples indicated that they would pay a higher price for sustainable products. It is for this reason that firms with a sustainable reputation change their strategies and implement marketing practices, policies, and procedures that address social and environmental concerns, while simultaneously generating revenue and delivering outcomes (Zeriti et al., 2014).

All these forces and interests by different stakeholders well mapped by the TBL framework (Elkington, 1998), where it lays the groundwork for the sustainability idea. As follow, Dyllick and Hockerts (2002) model elaborates some further details and linked it to the concept of corporate sustainability. According to Dyllick and Hockerts (2002), corporate sustainability can be determined by evaluating six key factors (Figure 26). In this case, an organization's eco-efficiency and socio-efficiency is its economic value added in relation to its ecological and social impact. Accordingly eco-effectiveness and socio-effectiveness is referring to implementing strategy that to restore and regenerate natural resources, beyond efficiency while contributing to the well-being and empowerment of individuals and communities. In this model sufficiency means meeting basic needs rather than accumulating material goods. As result, **ecological equity** creates a fair distribution of natural resources for the current and future generations, who are more concern about the environmental and health issues. (Knezevic et al., 2019)

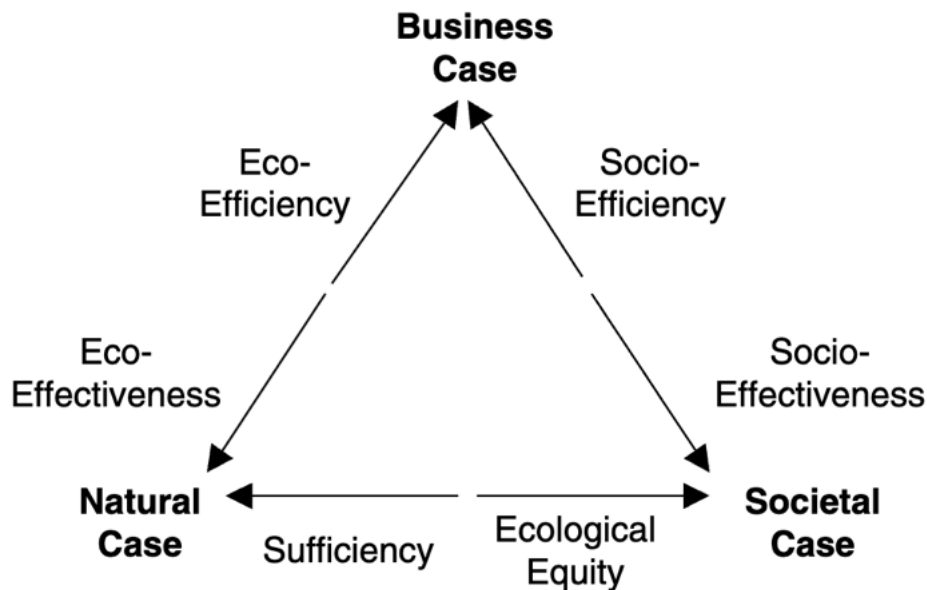


Figure 26: Overview of the six criteria of corporate sustainability

Source: Adopted from Dyllick and Hockerts (2002, p. 9).

An organization's operations must integrate economic performance, environmental stewardship, and social responsibility. To achieve long-term sustainability, companies must balance short-term profit with environmental and social considerations. In order to achieve sustainable business success, social, environmental, and economic factors must be balanced and integrated. (Ullah et al., 2021). Another important theoretical framework that could be considered as a complementary concept is the stakeholder theory (Freeman, 1984). Scholar suggests four stakeholders' groups related to CSR activities including environmental, workplace, communities and market place (Padilla-Lozano & Collazzo, 2022; Perrini et al., 2011). These theoretical frameworks are basis for sustainability in this doctoral research.

Focusing on greening projects, frequently creates a dilemma and in that environmental friendliness hardly comes for free, and the payoffs are not always evident (Choi et al., 2018). Execution of such strategy depends on a firm resources, capability and business level strategy (Leonidou et al., 2017). Adding sustainability features to products often necessitates significant changes in manufacturing operations, putting a significant financial burden on the product (Zeriti et al., 2014). Thus, it is pivotal to estimate the cost and availability of related resources and principally if the product would be affordable enough for a firm's target group. By considering this key assumption, Bıçakcıoğlu et al. (2019) investigate the direct

effect of green business strategy of Turkish exporters on their export financial performance by considering the resources and exporters' business level strategy as moderators (Figure 27). **Green business strategy** has a positive and significant relationship with export financial performance and internal environmental orientation is found to have a substantial moderating effect on green business strategy. Their research shows assigning green human resources is a costly process that reduces the profitability and negatively impacted export financial performance. Similarly, green product differentiation also moderates green business strategy, but it has a negative effect on exporters' financial performance. The study concludes that green differentiation is a costly proposition for Turkish exporters, as it reduces profitability. However, when companies from the sample pursue a green business strategy and follow integration strategy -combine with both a green product differentiation and cost leadership- exporters reached to a higher level of financial performance. One can argue that exporters from emerging economies might experience different level resources and target different segment groups, thus differentiation position might not be an optimum approach for them.

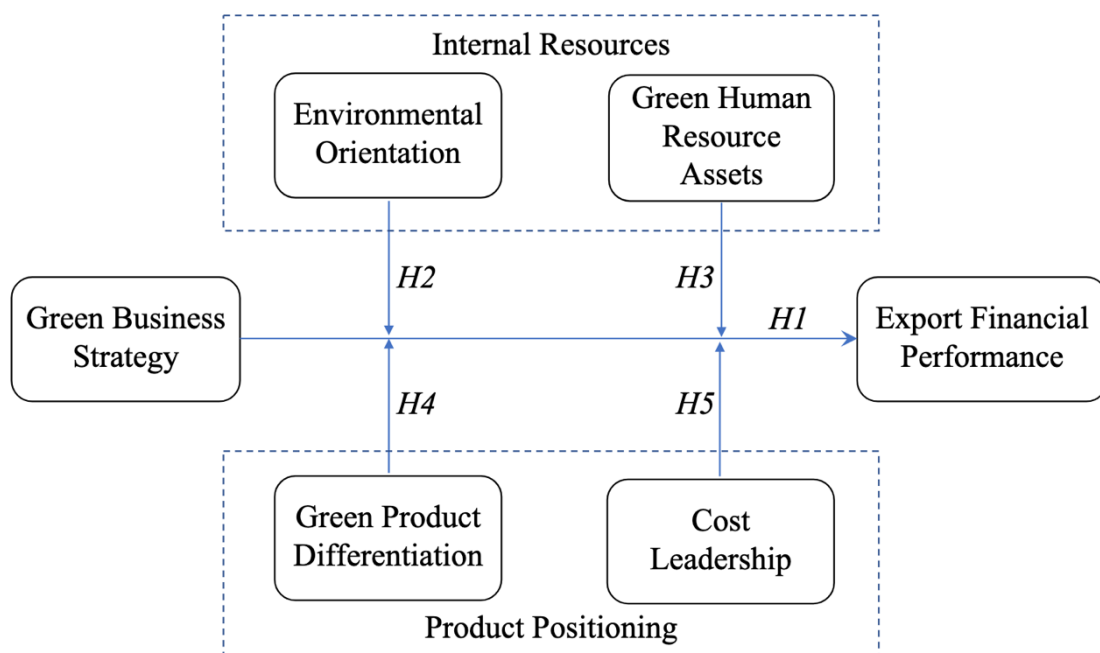


Figure 27: Research model of Bıçakcıoğlu et al. (2019)

Source: Bıçakcıoğlu et al. (2019, p. 58).

The moderation effect of competitive strategy is also considered by Chen and Liu (2018), who collect data from 195 Chinese manufacturing companies to investigate the direct

relationship among green products and green process innovation on firm financial performance (Figure 28). In this setting, innovation that uses physical and virtual technology to improve products and processes is known as **green innovation** (Padilla-Lozano & Collazzo, 2022). It includes technologies related to energy conservation, pollution prevention, recycling, packaging, and environmental management. In Chen and Liu (2018) research, green innovation enhances firm performance, according to the findings. Differentiation, cost leadership strategies and competitive intensity positively moderate the association among green innovation and firm performance. Their results are in lined with findings of Xue et al. (2019) who report green innovation does, in fact, increase organizational and environmental efficiency for companies that incorporate it into their strategic plans.

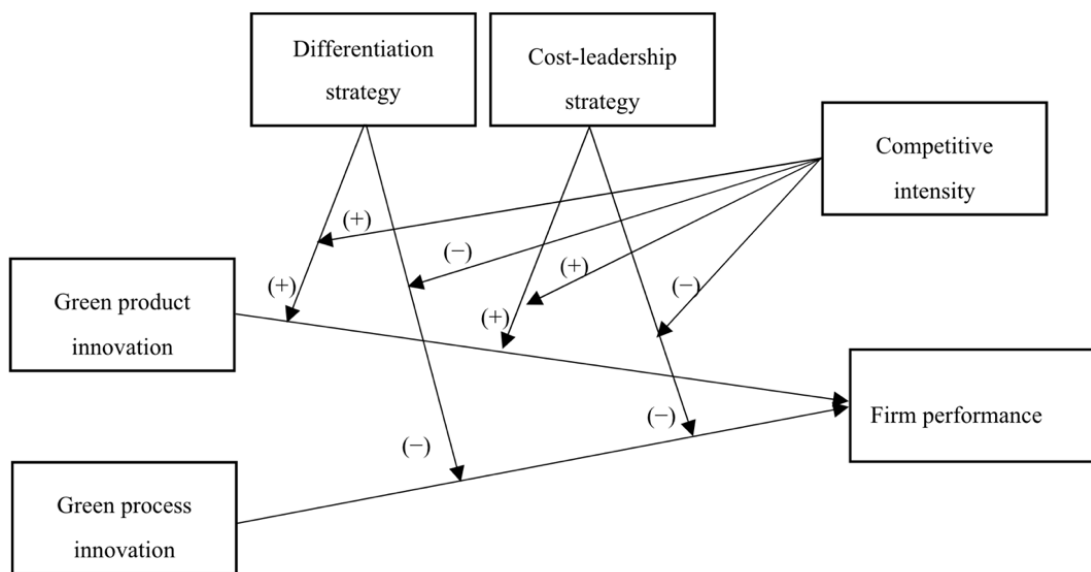


Figure 28: Research model of Chen and Liu (2018)

Source: Chen and Liu (2018, p. 2).

This study concludes that, in order to realize the expected performance, implications of green innovation, competitive strategy is necessary, especially when competition is fierce (Chen & Liu, 2018). To deepen our understanding of green innovation as a facilitator, the review would explore the outcomes of this determinant, such as the sustainable product attributes, as outlines in Ullah et al (2021).

2.4.2 Sustainable product attributes

A growing awareness of social and environmental concern in the global markets has led firms to incorporate these aspects and develop sustainable products (Cheng et al., 2021). Concisely, firms that aim to follow the new sustainability practice need to understand the related consumer demand. Not only that but how to fulfil this demand by offering green products and/or adopting green process (Emmanuel et al., 2021).

Thus, it is essential to understand the **SPA** framework that satisfy the needs of consumers. According to Chen and Liu (2018) a company's CSR strategy should satisfy all stakeholders. As competition levels, product positioning, and resources availability become increasingly important, organizations must embed CSR dynamics into their decision-making matrix to remain competitive (Ullah et al., 2021).

Recently, new determinants have emerged in scholars, such as environmental customers (Nguyen et al., 2023), green export strategies (Singh et al., 2024), environmental sustainability orientations (Yaghoubi Farani et al., 2024), etc. In most cases, these are exclusively environmental, ignoring social aspects. In this regard, researchers are suggested a performance-oriented SPA mix, along with customer-specific CSR initiatives, which convert consumers' needs into products (Ullah et al., 2021). This study aims to contribute to closing this gap by considering social dimensions along with environmental factors.

2.4.2.1 *Environmental sustainable product attributes*

Environmental Sustainable Product Attributes (ESPA) are attributes of environmentally friendly products that include (but are not limited to) eco-design, dematerialization, and reduced emission in a product (Ullah et al., 2021). A closer look at the mentioned ESPA dimensions shows the concept of **Circular Economy (CE)** is closely aligned with them. CE that is introduced by Pearce and Turner (1989) taken from Geissdoerfer et al. (2017), is defined as a concept that promotes reuse, refurbishment, recycling, and sharing of products and materials in order to reduce waste.

Alhawari et al. (2021) that made a systematic review to identify the main driver of circular economy highlighted the importance of reusing and recycling materials as a source of other industrial products. Alongside the concept of reusing, the concept of reducing is also proposed, which is resonate with efficiency. Another attribute is elimination of waste through the optimisation design of process, material, and products within existing business models which is again one of the general concepts of circular economy. The concept also is called as eco-efficiency by different scholar such as Hu et al. (2011). In this case, emerging trend for company is how to reduce emission through optimising the process in their business model (Emmanuel et al., 2021). Geissdoerfer et al. (2017) put it in his definition of circular economy and Alhawari et al. (2021) call it regenerative system. This is not achievable without close collaboration among a firm and its suppliers in the supply chain. Such arrangements could be supported by the networking and stakeholder theory. Having environmental certification or award is another important aspect for business. Particularly, smaller companies distinguish them self by such certification from others (Leonidou et al., 2017). Papagiannakis et al. (2019) that explore the effect of environmental management system such as ISO 14001 on firms' business model reported that such certifications enhance firms' overall innovation capacity.

Andries and Stephan (2019) that examine the impact of environmental innovation on the performance of 4901 Flemish companies found that 1569 out of the enterprises in their sample, or around 32%, had implemented an environmental innovation between 2006 and 2008. SMEs may benefit from environmental innovation when they offer tailored products based on customer needs, but it may not be universal and may not be applicable to all SMEs from various industries. In a similar vein, Padilla-Lozano and Collazzo (2022) results suggest that export capacity could play an important role in inducing SMEs to embrace both the green process strategy and the innovation of organic products. Singh et al. (2024), results also confirm a link among institutional support and SMEs' CSR strategy such as green innovation and green export activities. These results imply that SMEs should consider environmental variables that could maximize financial return.

In contrast to SMEs, larger organization have mostly adopted environmentally friendly innovations in response to institutional pressure and have reaped the rewards for doing so (Andries & Stephan, 2019; Emmanuel et al., 2021). These legislation can be divided into

three categories; greenhouse gas emission regulations, energy efficiency regulations and hazardous materials regulations (Joo et al., 2018).

Likewise, Choi et al. (2018) report the direct relationship among **eco-design practice** and manufacturing performance of Korean multinational company, conversely, it does not impact their marketing performance. Businesses are still reluctant to produce eco-friendly products, despite the growing popularity of environmental sustainability. Some reasons might contribute to this: it is difficult to determine how green consumerism affects brand sales, organizations may be reluctant to change their management in order to develop eco-friendly products, lack of proper political instrument (Horská et al., 2015) or environmental operations may incur extra R&D costs or resources (Joo et al., 2018).

2.4.2.2 Social sustainable product attributes

The improvement in product and process factors that impact human safety, welfare, and wellbeing is referred to as social sustainability performance (Awan et al., 2018). Ullah et al. (2021) defines the **social sustainable product attributes** (SSPA) as it involves positive social characteristics such as reliability & durability, warranty/ guarantee, labelling, fair trade, customer health, and safety in a product.

Boehe and Barin Cruz (2010) link the reliability and durability of products/services to product quality and argued that social sustainable oriented firms could distinguished themselves with such attributes in the customers' mind. Similar findings report by other researchers that firms could differentiate themselves via CSR based quality products in the market (Padilla-Lozano & Collazzo, 2022), thus enhancing their long-term competitiveness in the global market. Another ever increasing demand by customers is transparency (Mor et al., 2015). A few examples are transparency of firms' supply chains (Alkhdary et al., 2020) by using novel technologies like blockchain, as well as providing enough information in a variety of ways, such as labelling. In this regard, labelling has been classified as part of export marketing tools in export performance literature (Chen & Nuangjamnong, 2022). The inclusion of certain information in products'/services' complementary documents or on the labels could satisfy customers' requests, such as information on raw materials and recycled and used materials (Papagiannakis et al., 2019). Considering fair trade items is another trend in both B2B and B2C markets (Bangsa & Schlegelmilch, 2020; Ullah et al., 2021). A

company's philosophy towards fair treatment of its employees and considering the impacts on the host community that are categorised as an enterprises' code of conduct (Padilla-Lozano & Collazzo, 2022). The other goal of social performance is to improve and balance health and safety, child labour, and societal challenges in order to ensure intergenerational equity (Awan et al., 2018). Raut et al. (2019) highlight insufficient awareness among the workforce regarding the safety and health practices as one of the main challenges in textile and apparel industry in India and Bangladesh. It is part of social responsibility of companies, especially those that using the service of contractors in such countries to implement safety and health standards. Padilla-Lozano and Collazzo (2022) research findings indicate that exporters health and safety prevention initiatives for their employees positively impact exporters' image, productivity and reputation in Ecuador. Such activities can be shown by acquiring related certificates to encourage consumers toward **green purchasing**.

The combination of social and environmental attributes is not new; however, customer demands have made it crucial for firms to integrate them into their products. For this reason, it is crucial to satisfy customers' expectations in order to enhance export performance. Evidence from recent studies shows that green strategy implementation directly improves a firm' performance in an international market (Tatoglu et al., 2014). Such practices yield benefits such as efficiency via enhanced productivity, lower operating costs, retention of employees, also boost up sale revenue and customer loyalty. Christmann and Taylor (2001) that studied determinant of firm self-regulation reported, adaptation of voluntary environmental management practices by Chinese firm, was the only regulatory pressure that improved exporters' financial performance. Therefore, how firms manage social impact out of their value chain is likely to become a core driver of competitiveness (Padilla-Lozano & Collazzo, 2022).

Awan et al. (2018) collect data from 239 manufacturing firms, located in Pakistan to investigate effect of social sustainability on firm performance. The findings of the study shows that any attempts to improve the social sustainability of export manufacturing firms should scrutinize commitment to sustainability. The researchers also conclude that social sustainability can be explained by placing a greater emphasis on commitment to sustainability to reach utmost socially sustainable performance (Awan et al., 2018). Reaching to an optimum position in international market by offering socially and environmentally products and services may need exporters to scout business intelligence.

2.5 Export market orientation

Market orientation is emerged as one of the determinant of firm performance in the literature since the early 1990s (Kohli & Jaworski, 1990; Narver & Slater, 1990). This capability became more critical for the companies due to the globalisation of the market, when firms realize with being more informed about the changes of the market, they could have better performance. Wijesekara et al. (2016) has described marketing orientation as a fundamental part of a firm's marketing strategy when firms probably customise their products or services based on the target market values. Firms could address customer values in different ways such as offering high quality products with distinguishing features or a low price in a response to consumers purchasing power. Porter (1990, p. 39) introduces these two approaches as part of "generic strategies" in his book and highlighted it as a mean to achieve competitive advantage. Considering this, market orientation supports a firm decision toward achieving competitive advantage via providing more marketing insights.

Reviewing scholar shows two interchangeable terminologies of market orientation (Cadogan et al., 2009; İpek & Bıçakcıoğlu-Peynirci, 2020) and **marketing orientation** (Lučić, 2020; Papadas et al., 2019) that were linked to an enterprise performance. Faroque et al. (2020) argued that these two terms have different theoretical meaning. The term market orientation is a concept beyond marketing department, includes market and surrounding forces, while marketing orientation is more associated with the market and marketing practice. Although, some departments such as marketing plays a pivotal role in a market oriented firm but value creation will be an organization wide issue (Crick, 2021). The best justification for this perspective would be for those organizations that lack financial resources to implement strategies in a functional level. Malhotra et al. (2017) also distinguish market and marketing research terms and used same argument, where market research terms linked to the European approach and marketing research is allied with the American approach.

From the theoretical perspective, market orientation is justified by many theoretical frameworks. According to the İpek and Bıçakcıoğlu-Peynirci (2020) that review 80 articles on EMO published between 1998 and 2018, RBV was frequently (36.3%) used by researchers to support the association among EMO and export performance. This theoretical framework could be also a right fit for this research as also used by other researcher such as

Boso et al. (2019) to explain the effect of a firm's strategy such as innovativeness on its performance. Other researchers such as Makri et al. (2017) justify the relationship between the EMO and export performance with the **contingency theory**, where the study links a firm's innovativeness in export activities as a firm's response to export market needs. The export marketing orientation activities would go beyond the firm's internal competency and encompass all related external environment stakeholders such as competitors. In fact, contingency theory describes three types of variables: variables that represent the circumstances that the firm and its decision makers should deal with; variables that represent the strategic decisions managers make in response to the current and foreseeable contingency factors; and variables that represent organizational effectiveness, which is an indicator of the effectiveness of a firm's strategic decisions (Makri et al., 2017).

Apart from the said theoretical frameworks, EMO related literature justifies this construct with organizational learning (Mac & Evangelista, 2016) or relationship marketing (Freng Svendsen et al., 2011). The market orientation variable could be justified by organizational learning theory (Huber, 1991) as the research insists on the role of different organizational functions in generating and managing marketing knowledge (Pérez-Luño et al., 2016). Accordingly, a learning architecture in an exporting oriented firm plays a crucial role in enhancing processes of knowledge acquisition, transferability, and information interpretation, which highlights the importance of organizational structure (Grant, 1996).

From the conceptual perspective, literature follows two different streams. On one hand, the term "market orientation" that is conceptualised as a firm level behaviour by Kohli and Jaworski (1990) that refers to the three main activities: generation, dissemination and responsive activities that is known also as the MARKOR scale (Figure 29). In this case, accumulating data covers all strategic activities lead to generating intelligence on the customer's current and future values, extent of rivalry and other external environment related information such as changes in institution or innovation diffusion.

Firms would accumulate these data by using formal channels such as internet, governmental reports alongside with informal ways such as discussion with trade partner or other local contacts. Next, is about the process, a market-oriented organization would implement to disseminate the collected intelligence (Faroque et al., 2020) that is fully interconnected with firm's capability to analyse data. Lastly, a market-oriented firm uses the analytical data to

respond and formulate new products or services to cope with the competitors and meet current or future customers' desires. Some researchers add more weight to a firm's responsiveness and linked it to the availability and deployment of firm's resources and capabilities that likely has strong positive impact of their performance (Crick, 2021). In contrast with the behavioural approach Narver and Slater (1990) research are conceptualized market research as a corporate culture that encompassed of three dimensions of a **competitor orientation** (level of knowledge of their competitors' strengths and weaknesses), a **customer orientation** (Familiarity with their customers' values and needs), and **inter-functional coordination** (the extent a firm's internal

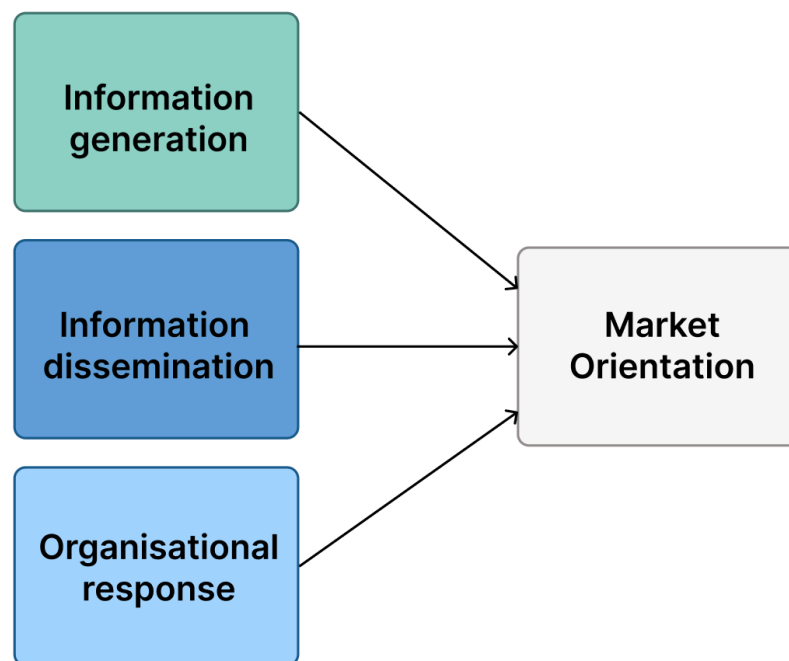


Figure 29: Multi-item scale of market orientation – MARKOR

Source: Kazakov (2019, p. 8) based on Kohli and Jaworski (1990).

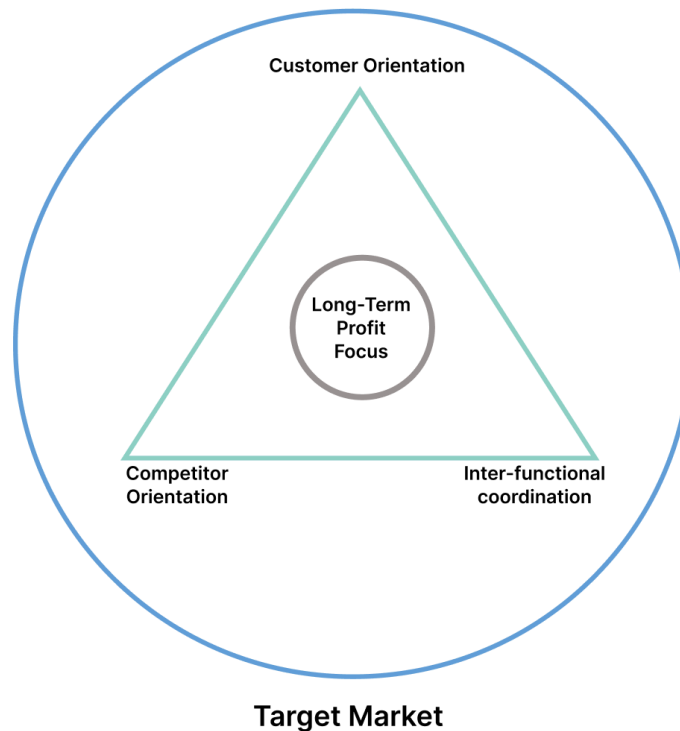


Figure 30: Multi-item scale of market orientation – MKTOR

Source: Narver and Slater (1990, p. 23).

departments collaborate to create value). This multi-item scale of market orientation is called MKTOR that validated and adopted by different researchers (Figure 30). Thus, an organisational that encourage value creation culture for their customer within the firm are more likely to develop a better performance (Deshpandé et al., 1993). In this sense, market orientation is more linked to corporate culture and as describe by Wines and Hamilton (2009) it is like an iceberg. The small icy mass on top of the water representing a company's wide ranges of output (e.g., product, services, and strategies) that are visible to external stakeholders while broad types of activities an organization should implement to execute and implement their strategies are not kind of invisible. Regardless of which approaches been implemented or adopted by a company, the ultimate aim of market orientation is to transform generated knowledge into a firm marketing capability (i.e., product development, price adjustment, distribution and marketing communication capability) (Murray et al., 2011).

Importance of export marketing orientation practice is underlining on the fact that a firm's excellent market orientation in its domestic market can't guarantee the repetition of such behaviour in the international or better to say export market. This might be rooted in the

environmental differences among international market and a firm's domestic market. Evidence shows that it is not easy for a firm to access to information and competitor's data in an international market. This type of information might be more critical for exporters that are involved in more turbulent markets with fierce competition (İpek & Bıçakcıoğlu-Peynirci, 2020). Therefore, In the late 90th, a new stream of research in this discipline has emerged that was market orientation in the export market (Cadogan, 1996), where the term is only associated with the marketing oriented activities in a firm's host countries (Cadogan et al., 2009). This was the time that **Export Market Orientation (EMO)** as a new segment of research is introduced to the market orientation discipline.

From conceptual perspective İpek and Bıçakcıoğlu-Peynirci (2020) review study report both approaches continue to gain importance over the years. Additionally, the proportion of studies using both approaches simultaneously almost doubled over the time frame from 1998-2007 to 2008-2018. In behavioural approach, EMO is seen as a firm's behavioural approach, where it includes an exporter activity for generating and diffusion of marketing insights. EMO has been proved to have a favourable impact on firm's innovation capability. In the process, firms implement (generation, dissemination and responsiveness), that enables them to establish an innovative culture centric approach. Therefore, firms are strongly committed to offer/improve products to satisfy the needs of export market (Makri et al., 2017).

Moreover, EMO firms are more likely to take the initiative because market orientation entails attempting to develop new strategies in response to changing client needs and wants, hence promoting international market innovation (Kazemi et al., 2021). In cultural approach, EMO also considered as a fundamental contributor to an exporter performance. Different studies such as Muis (2020) and Tjahjadi et al. (2022) use this model to measure market orientation effect on export performance. The researchers are examined market orientation as an independent variable linked to a firm' ability to assess competitors, assess customers, and coordinating inter-functionally.

Regardless of how an exporter implement and conceptualise their marketing orientation, this process is relatively a costly activity, as firms have to invest on market research and promotion to create value for customers (Slater & Narver, 1994). Therefore, firms need to create a balance to find the optimum level of market orientation activities. This might be one

of the important justification of estimating non-linear or quadratic relationships of marketing orientation (Crick, 2021). A broad range scholar such as Kumar et al. (2011) believe that the effect of marketing orientation on a firm will be moderated through turbulent time. In this case, collected longitudinal data from 261 companies show, technological turbulence dilutes the relation among firms' market orientation and firms' sales and profitability in long and short term.

Abdul-Talib et al. (2023) meta-analysis of 51 researches conducted in 15 countries reveals a significant impact of the MARKOR or MKTOR scale on EMO. However, the cultural approach that used to measure exporters' EMO yields a stronger relationship between the EMO and exporter performance than the behavioural. Therefore, this research would adopt the cultural (MKTOR) to assess the effect of export market orientation on firms' performance.

2.5.1 Customer orientation

Customer orientation in simple means to appropriate understanding of customers' value to create products or services. Knowing that this value subjected to certain changes over the time, a customer orientation firm, need to implement certain culture to monitor changes in the whole customers' value chain over the time to react in a timely manner (Narver & Slater, 1990). Dynamism in the market is the result of customer and competitor demands. Companies that operate in a dynamic international market should assess their clients' demands and preferences (Escandon-Barbosa et al., 2019). Here is a statement from Narver and Slater (1990): *"A seller must understand not only the cost and revenue dynamics of its immediate target buyer firms, but also the cost and revenue dynamics facing the buyers' buyers, from whose demand the demand in the immediate market is derived"* (Narver & Slater, 1990, p. 21). This illustrates the depth to which customer orientation can be taken.

As a result of this organisational culture approach, the company will be able to produce a product that is oriented towards the needs of its customers, resulting in higher performance (Acikdilli et al., 2020). As long as the organization is aware of its target customers, it can continuously provide superior value to them (Muis, 2020). Customers' characteristics should also be known by firms in this case. A key part of international success is being able to access the intelligence of customers. Thus, the more dynamic a market becomes, the more a firm

needs to upgrade its knowledge in order to provide customers with products or services tailored to their needs. One of the current trend in the market is “sustainability” that is a consequence of changing customers characteristics, and customers’ need for sustainable products or service (Ismail et al., 2017).

The increasing awareness of the social and environmental impacts of business and the demand for more sustainable products have prompted firms to consider customers' environmental demands more seriously (Krippes et al., 2024). Customers check the company background to determine a company's environmental responsibility reputation (Zeriti et al., 2014). Similarly, Choi et al. (2018) argue that in response to changing customer attitudes, businesses are considering environmental friendliness as one of their major selling points or as a criterion for securing orders (Zeriti et al., 2014). This trend toward more environmentally friendly and socially responsible business conduct is growing in many countries specially in the Europ (Nguyen et al., 2023).

For firms that are sustainability-oriented, customers’ characteristics refer to customer sensitivity to sustainability-related marketing strategies such as product evaluation criteria, product usage patterns, and purchasing criteria (Zeriti et al., 2014). Having an export marketing-oriented organization enables firms to implement certain structures that follow a consistent path to satisfy customer demands through effective export marketing strategies. In case of customer needs toward product with sustainable attributes, a market-oriented firm, would adjust their production to change and possibly innovate new product. Customers' changing attitudes (Horská et al., 2023) have pushed businesses to consider using environmental friendliness as a major selling element or a criterion for securing consumer orders (Choi et al., 2018).

Businesses take environmental actions as a means of better matching their images and targeting to changing consumer demands (Al-Ghwayeen & Abdallah, 2018). Sustainable customer-oriented firms, dedicate more resource to innovate products with sustainable product attributes (green product or green service) (Kazemi et al., 2021; Padilla-Lozano & Collazzo, 2022). This strategy also is called as **socially responsible corporate behaviour**. By combining it with an entrepreneurial orientation, businesses can capture market opportunities and fend off threats of their competitors (Muis, 2020).

2.5.2 Competitor orientation

In this dimension of market orientation, the underlying philosophy is that a firm is not alone, except in a monopolistic competitive market. How attractive the export market is, depends a great deal on how competitive it is. Whenever there is intense competition, exporting businesses are at risk of competition from copycats, quickly taking away their competitive advantage (Fuchs & Köstner, 2016; İpek & Bıçakcıoğlu-Peynirci, 2020).

In this sense, competitor orientation is a process of identifying the strengths, weaknesses, and capabilities of both current and future competitors (Narver & Slater, 1990). Competitor-oriented companies not only identify but also react quickly to threats posed by competitors. Failure to do so can put the company's competitive edge at risk (Muis, 2020). Acikdilli et al. (2020) argue that knowledge about the competitors is informational organisational resources and might lead to a comparative advantage. SMEs with a limited international footprint, may find it more difficult to compete in dynamic markets since they may not yet have adequate response mechanisms to changes. As a result, they will often need to analyse their competition's actions and build organizations that are suited to international activities (Escandon-Barbosa et al., 2019). Some researchers such as Kazemi et al. (2021) associate competitor orientation with learning orientation. For exporters to shape better export strategies, it is vital to learn from their competitors. They conclude that companies with a high learning orientation are more likely to exhibit innovative behaviours that improve employee productivity and company performance. This capability is partially seen as export market responsiveness in behavioural approach where a company respond to competitor moves in its key export markets (Boso et al., 2019). In strategic management literature, the concept has been well highlighted in late mover approach. The late mover strategy has been well explored in strategic management literature. In a market, a late mover can sometimes gain an advantage over first movers by avoiding their mistakes. Nevertheless, this advantage cannot be achieved without a competitor analysis. SMEs can benefit from such a system by allocating resources more efficiently, compensating for limited resources.

As well as product modification, the concept of competitor orientation encompasses other aspects of marketing, such as price adjustment (Chen & Nuangjamnong, 2022) or **green product innovations** (Emmanuel et al., 2021). According to Zeriti et al. (2014), If firms

want to maintain legitimacy, they should emulate their domestic competitors' environmental practices. Therefore, alongside customer orientation, matching with competitor strategies is one of the fundamental reasons for company to develop product with sustainable attributes.

2.5.3 Inter-functional coordination

As the name implies, inter-functional coordination refers to the coordinated use of company resources in order to create superior value for customers (Narver & Slater, 1990). A strong organizational capability is essential to enable international expansion by effectively coordinating and redeploying internal and external resources (Azar & Ciabuschi, 2017). The last two elaborated dimensions of market orientation are somehow related to external environment but inter-functional coordination is categorized by some researcher as an exporter internal organizational factors (Murray et al., 2011). It is evident that generating market intelligence about customers and competitors on its own will not help a business. Rather, it needs to be analysed in order to be turned into an effective marketing tool. The philosophy behind inter-functional coordination, is that value creation is an activity beyond a marketing department. According to Narver and Slater (1990): *“Creating value for buyers is much more than a “marketing function;” rather, a seller's creation of value for buyers is analogous to a symphony orchestra in which the contribution of each subgroup is tailored and integrated by a conductor—with a synergistic effect”* (Narver & Slater, 1990, p. 22).

Lin et al. (2014) link the concept to the “social interaction”. A competent firm can create most inter-organisational activities, in that all departments in a company collaborate to fulfil customers’ needs. Creating such capability to generate and transfer knowledge is often complex and resource intensive and time consuming (Makri et al., 2017). Using cross-functional teams as a means to exploit most tacit knowledge is critical for any export-oriented organization engaged in value-creating marketing activities (Pérez-Luño et al., 2016). An organization's inter-functional coordination is the process of synchronizing its resources to deliver superior value to its customers. There are several themes intertwined with the coordination mechanism, including collaboration, teamwork, communication, and common goals.

An organization that is market-oriented must encourage employees to collaborate and coordinate their efforts across departments with smart reactions to customers' and

competitors' intelligence (Kohli & Jaworski, 1990). Inter-functional teamwork leads the organization to provide superior customer value (Muis, 2020) and innovative product. Considering the sustainability trend, fuels by customer requests and competitor strategies, the coordination facilitates a fast and smooth transition towards products/services with sustainable attributes. As a result, the coordination mechanism appears to play a vital role in the effectiveness of export market-oriented activities.

2.6. Overview of the empirical research on determinants of export performance of SMEs

Determinants of export performance according to a classical approach in scholars are divided into external and internal variables. With evolving of environment some determinants receive less attention, some more and more likely new determinants emerging. The export performance concept one of the most dynamic in the research by its nature. Categorization of Cavusgil and Zou (1994) that proposes internal, external and marketing strategy as the main determinant of export performance changes still one the fundamental approach. In this setting, marketing conceptualised it as mediation variable, that means that firms' internal determinants together with external environment shape marketing strategy and accordingly export performance. Similar conceptualisation shows in Chen et al. (2016) review where internal determinants classify as firm characterise/capabilities and industrial and country level characteristics grouped as external environment determinants. Again, firms' success pledges to the contingency among export marketing strategy and environmental factors. The researchers point out the fact the export performance literature is shifting toward using more specific determinants. Interestingly, the review realizes of a shift towards environmentally oriented strategic behaviour and used the term "sustainable marketing strategies" as reaction to environmental regulation. Researchers such as Zeriti et al (2014) applies "sustainable export marketing adaption" and "stake holder pressure" as a variable in its research model. Similarly, Chabowski et al. (2011) also proposed sustainability as the basis for future research. Gradually new determinants use to conceptualise exporter performance in the era that sustainability gets the attention of different stake holders. Variables such as "**environmental orientation**", "**green human resource assets**", "green strategy" comes to the pool of determinants (Bıçakcıoğlu et al., 2019), where the first two group into internal

resources. Some researchers, tests “green product differentiation” versus “cost leadership strategy”. Werner (2002) reviews 271 articles between 1996 and 2000 to analyse the trend in the area of international management proposes these five categories as determinant of export performance: “Market size, income, size, and imports”, “Market orientation”, “Home/host location factors and ownership advantages”, “Existing interpersonal links” and “Review of process and determinants”. In the systematic literature review (SLR) of about 2000 articles by Calheiros-Lobo (2023) between 1920-2023, findings confirms proposal of Werner (2002) on the classification of export performance. In this vein the SLR provided expanded version. The expanded includes categories developed by Andersson and Fredriksson (1996) including the number of countries where the company has affiliates, the size of those affiliates, industry dummy variables, time variable, and the size of the host market to expand the market size. Campa and Guilléen (1999) classification on determination of advantage is used to expand the ownership, home and host location factors. Finally, Cadogan et al. (1999) measurement scale is adopted to extend the model on export market orientation and export performance.

During the literature review phase in this doctoral research and to explore the state of art in the literature, the study narrows down the search to investigate the determinants of firm’ performance in international market. Additionally, the focus is given to the firm’ level determinants that closed to the gap of the research. Table 7 shows the distribution of determinant of export performance in the articles review in this doctoral research according to the expanded version on Werner (2002) propose in Calheiros-Lobo (2023).

As can be seen in Table 7, determinants such as EO and EMO are still in the focus of researchers and the area would look in to emerging variables such as **green entrepreneurial invention** (Le et al., 2023), **export entrepreneurship** (Kazemi et al., 2024), **green export strategy** or **Co-creation of marketing strategy** (Sima et al., 2024) as part of part of firm variable. One can see clear shift from classical firm characteristics determinants listed in Chen et al. (2016) to said emergent determinant in response to the recent market trend.

Table 7: Evolution of determinants of export performance from 2010-2025 according to this review

Category	Determinants	Articles		
		2010-2014	2015 - 2019	2020-2025
Firm variable	entrepreneurial orientation	(Boso et al., 2013) (Kreiser et al., 2013)	(Zehir et al., 2015) (Hossain & Al Asheq, 2019) (Hussain et al., 2015) (Wijesekara et al., 2016)	(Nuryakin, 2024) (Yaghoubi Farani et al., 2024) (Yu et al., 2021) (Rehman, 2025) (Isichei et al., 2020)
	export entrepreneurship		(Mac & Evangelista, 2016)	(Kazemi et al., 2024)
	international entrepreneurial orientation		(Jin & Cho, 2018)	
	strategic network resources			(Partanen et al., 2020)
	business networks, network ties, networking structure, network identity	(Boso et al., 2013)		(Urbański et al., 2025) (Alkahtani et al., 2020) (Partanen et al., 2020)
	Innovation strategy		(Heredia et al., 2019)	(Edeh et al., 2020)
	firm innovativeness:		Lejpras (2016)	(Zouari & Khemakhem, 2024)
	innovation orientation		(Villena & Souto-Pérez, 2016)	(Kazemi et al., 2024)
	technological innovation capabilities, innovation capability, innovation		(Jin & Cho, 2018) (Azar & Ciabuschi, 2017) (Udriyah et al., 2019)	(Chen et al., 2020) (Adeoti et al., 2025)
	international orientation		(Escandon-Barbosa et al., 2019)	
	export innovativeness		(Makri et al., 2017)	
	product innovation			(Jusufi et al., 2020)
	open innovation			(Tjahjadi et al., 2022)
	business model innovation			(Merin-Rodrigáñez et al., 2025)

	organizational innovation		(Azar & Ciabuschi, 2017)	(Chen et al., 2020)
Export Market Orientation	market oriented environmental sustainability			(Chishty & Sayari, 2024)
	export market orientation, market orientation, global market orientation,	(Lin et al., 2014) (Murray et al., 2011) (Boso et al., 2013)	(He et al., 2018) (Mac & Evangelista, 2016) (Udriyah et al., 2019) (Wijesekara et al., 2016)	(Abdul-Talib et al., 2023) (Acikdilli et al., 2020) (Muis, 2020), (Tjahjadi et al., 2022)
	marketing capability	(Murray et al., 2011)	(Boso et al., 2019)	
	green export strategy, environmental customer, environmental orientation		(Andries & Stephan, 2019)	(Singh et al., 2024) (Nguyen et al., 2023)
	green business strategy, sustainable export marketing strategy	(Zeriti et al., 2014)	(Bıçakcıoğlu et al., 2019) (Leonidou et al., 2017),	
	export marketing		(Cunha & Rocha, 2015)	(Obadia & Vida, 2024)
	marketing strategy, marketing mix		(Erdil & Özdemir, 2016)	(Muis, 2020)
	adaption strategy, discretionary adaptation		(Westjohn & Magnusson, 2017)	(Dassouli et al., 2024)
	differentiated marketing strategy	(Boehe & Barin Cruz, 2010)		(Chen & Nuangjamnong, 2022)
	co-creation of marketing strategy			(Sima et al., 2024)
	organizational learning, internal knowledge, external knowledge		Lejpras (2016)	(Sima et al., 2024)
	market intelligence			(Rehman, 2025)
	domestic market competition		(Jin & Cho, 2018)	
	marketing capabilities		(Jin & Cho, 2018)	
	Export Market Performance	environmental performance		
business sustainability performance			(Ng & Rezaee, 2015)	

	firms' sustainability strategic performance	(Parisi, 2013)		
Firm variable	firm size		(Andries & Stephan, 2019)	
Ownership factor	structural infrastructure capability			(Isichei et al., 2020)
	intellectual capital readiness			(Tjahjadi et al., 2022)
	competitive advantage		(Ismail et al., 2017)	
	motivation		(Andries & Stephan, 2019)	
	green reputation pressure			(Nguyen et al., 2023)
	CSR, sustainability	(Boehe & Barin Cruz, 2010) (Miron & Petrache, 2012)	(Villena & Souto-Pérez, 2016) (Flammer, 2015) (Rajnoha et al., 2016)	(Ullah et al., 2021) (Hang et al., 2022)
	corporate image:		(Villena Manzanares, 2019)	
	continuing of Exporter-Importer Relationship			(Siddiqui et al., 2023)
	trust, commitment, export relation quality		(Ismail et al., 2017) (Ahamed & Skallerud, 2015)	
	green trust			(Hang et al., 2022)
	ecological product design		(Hartmann & Germain, 2015)	
	green supply chain		(Al-Ghwayeen & Abdallah, 2018) (Choi et al., 2018)	
	green innovation, green product innovation, environmental innovation strategy, environmental management		(Xue et al., 2019) (Yu et al., 2017)	(Hang et al., 2022) (Nguyen et al., 2023)
	export commitment		(Di Fatta et al., 2019)	

Host location factor	environmental pressures		(Yu et al., 2017)	
Home location factor	government intervention, governmental support, Competitive market, competitive intensity		(Choi et al., 2018) (Joo et al., 2018)	(Kazemi et al., 2024) (Alkahtani et al., 2020)

Source: own study.

Organisational knowledge and how knowledge accumulated, disseminated also received attention of scholars. Jiang et al. (2020) and Marina Dabić (2020) both mentioned the pivotal role of knowledge for SMEs internationalisation and their performance. In the same vein, Lejpras (2016) divides knowledge into external and internal knowledge and investigate their impact on the export performance via innovativeness. Same approach can be seen in other levels such as ownership factors where **green reputation pressure** (Nguyen et al., 2023) or **green trust** (Hang et al., 2022) as a new set of determinants arises. Even in home and host location factors, determinants such as environmental pressure (Yu et al., 2017) appears in the model. Interestingly, researchers also proposes different dependent variables such as environmental performance (Pham et al., 2025) and business sustainability performance (Ng & Rezaee, 2015) to measure export performance.

3. Research methodology linking sustainability and export performance of SMEs

3.1 Hypotheses development

Based on the literature and prior empirical research, we will retrieve and develop the research hypotheses.

The one-stage model is used by many researchers, to evaluate companies' export performance without considering their interrelationships (Al-Ghwayeen & Abdallah, 2018; Escandon-Barbosa et al., 2019). However, some scholar argues satisfaction is reflect of financial and strategic performance (Ahamed & Skallerud, 2015; Wang & Olsen, 2002). In support of such hypothesis, expectancy disconfirmation theory is utilised. This study maps the general satisfaction resulting from a firm's financial and strategic performance as per some researchers such as Wang and Olsen (2002). Based on this theoretical framework, the research is aimed at evaluating whether the company's performance is changed in terms of its dimensions in appositve or negative directions.

Subjective measurement is used to measure the performance of the export performance from the perspective of decision makers. Thus, one can be expected a decision maker has a benchmark from a good or poor performance. Such benchmark will be used to answer performance related questions. This benchmark could be aligned with the enterprise's set goals or a comparison with competitors (Yüksel & Yüksel, 2001).

Regardless of what benchmarks or set of indicators, a decision maker used, measuring satisfaction as whole will be beneficial as export goals of exporters are varied. While profitability and market share are crucial for one, gaining a foothold in a new market is all that matters for the other. Zou et al. (1998) argued that performance can be measured via an aggregation effect of three dimensions of export operations (referred to as EXPERF). The three dimensions are enterprise financial performance, export satisfaction, and strategic performance. As Chen et al. (2016) review suggest that the EXPERF method is well adapted by a variety of researchers and could be estimated both subjectively and objectively.

Therefore, one the gap that this research intends to fill is to provide more insights on the internal relations of export performance namely, financial performance, strategic

performance and satisfaction with export activities. Thus, the study is designed to understand how managerial satisfaction from export operation influences by financial (short term goal) and strategic (long term goal) of exporters SMEs in Germany. Consequently, the study has the following hypotheses:

- H1:** SMEs' financial performance impact on satisfaction with export operation in the German manufacturing industry.
- H2:** SMEs' strategic performance impact on satisfaction with export operation in the German manufacturing industry.

We also intend to examine the effect of sustainable product attributes on financial performance, strategic performance, and satisfaction with export operations. To justify the relationship between the constructs, stakeholder theory and triple bottom line are used. Stakeholder theory, one of the most used theoretical frameworks in the field of corporate social responsibility, suggests that companies should consider the interests of both internal and external stakeholders when making decisions so as to create and distribute the most value (Bikefe et al., 2020). Since SMEs are expected to have a closer relationship with their customers than multinational corporations, the theory is more relevant to SMEs internationalization. Through this, they can differentiate themselves and create greater value. Stakeholder theory helps to explain why SMEs benefit from sustainable behaviours as a response to customer demands. By using eco-conscious niche consumers who are willing to pay more for green products or redirect their demand towards environmentally friendly companies, SMEs are better positioned to benefit. Similarly, in TBL's view, a sustainable company maintains economic, social and environmental stability. An environmentally and socially responsible company strives to achieve economic advantages. The results of Chen & Liu (2018) and Biscakolu et al. (2019) propose that CSR strategies should be planned in a smart way to have competitive advantage without losing environmental oriented customers. Thus, complying with international environmental standards, green reputation (Nguyen et al., 2023), and green trust would facilitate exports.

Examining the literature will help screen different related terms, such as eco-product (Hartmann & Germain, 2015), green product (Hang et al., 2022), or environmental product (Rehfeld et al., 2007) and etc. In most cases, however, these refer to the environmental aspect like circular economy, while the social aspect is largely ignored. Accordingly, researchers

have proposed a performance-oriented SPA mix, which is a customized CSR initiative based on customer needs (Ullah et al., 2021). It is built on the premise of separating environmental and social aspects, while combining them to create a sustainable product (Ketata et al., 2015). That is the second gap in the sustainability internationalisation literature that this study is aimed to address. In addition, the other problem this review encounter was lack of a comprehensive measurement model that assesses both aspects. This study finds SPA model introduce by Ullah et al. (2021) as one of the relevant measurement models that the researchers are encouraged to test in the future research. Consequently, this study adopts SPA as the measurement model and hypothesizes there is a direct and significant relationship between SMEs' SPA and their performance.

- H3:** Sustainable product attributes impact on financial performance in the German manufacturing industry.
- H4:** Sustainable product attributes impact on strategic performance in the German manufacturing industry.
- H5:** Sustainable product attributes impact on general satisfaction with export operation in the German manufacturing industry.

In addition to SPA, this doctoral research intends to examine the effect of entrepreneurial orientation on financial performance, and strategic performance. To justify the relationship between the constructs, RBV, networking, international entrepreneurship, strategic and integrative approach are adopted.

As reflects in the term EO, the concept is linked to international entrepreneurship with entrepreneurial behaviour in focus. SMEs' entrepreneurial characteristics such as risk taking, innovative orientation and proactiveness enable them to screen the opportunities in the international market to innovate. We could see all this as certain type of capability for the SMEs that is justifiable via RBV model (Barney, 1991; Barney et al., 2021). If such capability would lead to exporting product or service in a way to be valuable, rare, inimitable and non-substitutable would create a sustainable competitive advantage. The concept of international entrepreneurship is introduced in the 3rd revision of Uppsala (Schweizer et al., 2010) following the second version that highlighted the importance of networking (Johanson & Vahlne, 2009). Entrepreneurs as decision-makers should react to internal and external

relevant factors that is also reflected in the concept of strategic approach. Due to the constant changes in the orientation of customers, researchers also argued that SMEs need to adjust such capability that is reflect in the dynamic capability and new-Uppsala model (Vahlne & Johanson, 2013).

Not to forget networking as an enabler for entrepreneurship. SMEs with liabilities of smallness and newness implement networking approach to trade-off for their incompetencies or used their partners' competencies to reach to their international customers (Puślecki, Czekajlo, et al., 2021). Networking approach is a strategic tool for BGs, INV and innovation driven SMEs that all are part of this research samples (Favero, 2023; Oviatt & McDougall, 2005). Finally, integrative approach could justify the combinational and complementary effect each of the discussed perspective. In this new era of transition, it is undeniable that entrepreneurship plays an essential role in SMEs' performance (Wach., 2024). Consequently, researchers in academia and industry have studied entrepreneurship and related incidents, determinants, drivers, as well as their impact on SMEs (Faroque et al. 2020). EO has been considered by many strategists as a driving force for SMEs to follow an innovation-oriented path into a greener economy. Several researchers, including Le et al. (2023), call it green entrepreneurship and consider it essential for preserving ecosystems. The impact of EO on export performance of manufacturing SMEs is therefore crucial.

Several scholars have pinpointed exporting as one of the principal entrepreneurial moves made by small businesses (İpek et al., 2023). Ibeh (2003, p. 51) in his research used the key word of "export entrepreneurship" to bind this concepts and defined it as *"the process by which individuals, either on their own or inside organizations, engage in the proactive and aggressive pursuit of exporting-related product-market innovations and opportunities without regard to the environmental disincentives they face"*.

One of pioneer meta-analysis in this vein is Bahadir et al. (2009). The researchers analysed internal drivers of firms' organic sales growth among the research published between 1960-2008 and concluded that EO is one of the main driving forces behind firm' sales growth. The authors also noted that innovation (as one of the dimensions of EO) has been one of the most frequently studied factors determining organic sales growth. Several studies have been carried out over the past few decades that have highlighted the importance of dynamic capability in incorporating and developing new capabilities, such as product innovativeness,

to increase the performance of businesses in international markets. A SME innovates at the product level when it adds a new product to its export basket, regardless of whether the same product is already exported abroad by another SME. In regard to new items, SME export baskets are more important than large companies (Jusufi et al., 2020). As noted by Yaghoubi Farani et al. (2024), environmental orientation and EO were both positively correlated with firms' performance. Apparently, SMEs, taking risks to proactively innovate products and services to fulfil their commitments in this evolving trend. By doing so, they would not only improve their financial performance but also strengthen their strategic position on the global market (Gupta et al., 2021). However, scholars that investigate the impact of EO on different dimension of export performance are limited. As can be seen, economical side of export performance have been explored but the impact of entrepreneurial orientation of exporters on the other dimensions such as strategic or general satisfaction have received comparatively less attention in the German scholars particularly. Therefore, this research hypothesizes that there is an association among EO and EP.

- H6:** Entrepreneurial orientation impacts on financial performance in the German manufacturing industry.
- H7:** Entrepreneurial orientation impacts on strategic performance in the German manufacturing industry.

Another internal determinant in this research is export market orientation. The relation among a firm's EMO with its performance will be justified by RBV, stakeholder theory, dynamic capability and networking paradigm. It is well understood that firm's interaction with their stakeholders such as customers, suppliers and competitors make the meso business environment. Thus, successful firms are distinguished by their capability to constantly collect and analyse business intelligent from their customers and competitors to decide about their next move. The more dynamic is the market the more a firm needs to be market oriented. Such capability would be justified with the RBV model and of course dynamic capability perspective. For instance, Nguyen and Strange (2025) investigate the impact global dynamic managerial capabilities and conclude that it is one of the antecedents of their de-internationalisation decision. It highlights again the importance of organisational learning and decision making that is also reflected in the concept of strategic approach (Calheiros-Lobo et al., 2023). Such behaviour is costly and sometimes not viable without having supports from partners (particularly in international markets). Hence, firms need to rely on their network to

receive such knowledge which is one of the critical attributes of born global firms (Khan & Cavusgil, 2025). Apart, from that SME's networking capability will also support firm in the early stage of internationalisation. The business intelligent provided by networks will facilitate decision making and reduce market entry risks. Up to now a wide range of scholars that studies EMO in different industries, report positive linear association among market orientation and various company performance and strategy attributes (Faroque et al., 2020; Kohli & Jaworski, 1990; Muis, 2020; Wijesekara et al., 2016), while few studies reported negative or insignificant or reduced impact (Murray et al., 2011; Voss & Voss, 2000). The comprehensive framework that is developed by İpek and Bıçakcıoğlu-Peynirci (2020) illustrated all dependent and independent relationships (Figure 31).

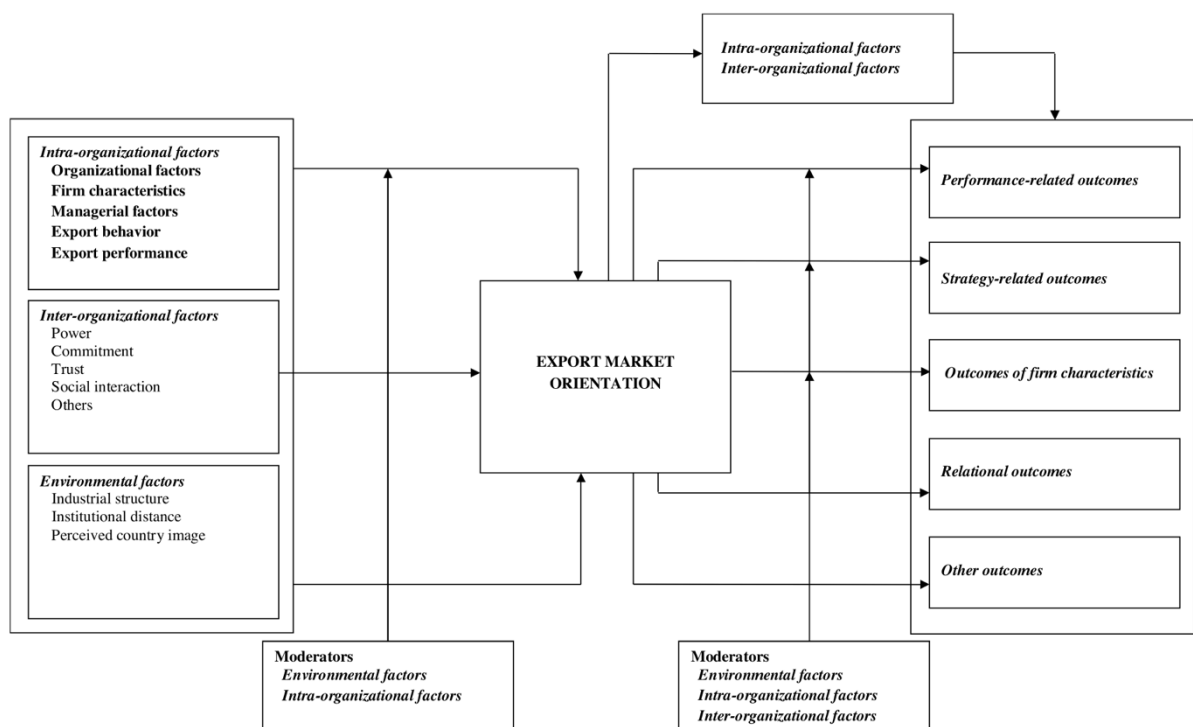


Figure 31: İpek and Bıçakcıoğlu-Peynirci comprehensive framework on EMO

Source: İpek and Bıçakcıoğlu-Peynirci (2020, p. 6).

As Figure 31 shows EMO could serve the role as dependent, independent and mediation in research model. In case of reduced impact, firm's market orientation effect diminished due to the other mediators such as competition intensity. Murray et al. (2011) that evaluated effect of Chinese exporters marketing orientation on the performance, also report this association is mediated via exports' marketing capabilities. In some studies, such as Faroque et al. (2020), export marketing orientation has been used as a mediator and the variable

positively mediates the relation between international entrepreneurial capability and export performance.

Two of the constructs the model illustrated is the relation among EMO and strategy related outcome and performance-related outcome. These two relations attracted more than 76% of researchers interested according to 127 papers reviewed papers. Accordingly, the share of strategy related outcome papers (includes marketing strategy, export decision-making, strategic orientation, export commitment and generic strategies) showed an increase in the duration from 2008-2018. Yet, the performance related outcome (encompasses Export performance, innovation performance, business performance and client perceived performance) received the highest research interest (50.5%) in the same duration, experienced slight decline from earlier (1998-2007). Therefore, in order to enrich literature to know how managerial decision in the context of market orientation influence firms' sustainable product attributes and therefore different export performance dimension (indirectly), the research made the next hypothesis.

H8: Export market orientation impacts on the SMEs' SPA in German manufacturing industry.

In summary, it is important to mention all the variables in the conceptual model except export financial performance, strategic performance and satisfaction with export activities would be considered as internal determinants of export performance. Therefore, export financial performance, strategic performance and satisfaction with export activities will be considered as outcomes of firm's strategic decision and would serve the model as dependent variables. All three performance related variables would be linked to firms' entrepreneurial orientation and sustainable product attributes. Finally, the research also investigates the relationship between firms' export market orientation (independent) and sustainable product attributes (dependent variable). At the end the research also investigates the interrelationships among export financial performance, strategic performance and satisfaction with export activities.

3.2 Research questions and objectives

The following research questions are posed in order to fill the research gap in understanding the impact of SPA and EO on export performance, exploring the interrelationships among the export performance dimensions, and determining if EMO influences SPA:

- RQ1.** How does German manufacturing SMEs' financial and strategic performance influence managers' satisfaction?
- RQ2.** How does German manufacturing SMEs' sustainable product attributes influence its export's performance?
- RQ3.** How does German manufacturing SMEs' entrepreneurial orientation influence its export's performance?
- RQ4.** How does German manufacturing SMEs' export market orientation influence its sustainable product attributes?

In order to address the research gap, the **main objective** of the doctoral dissertation is:

to identify key internal determinants within Entrepreneurship Orientations (EO), Sustainable Product Attributes (SPA), and Export marketing Orientation (EMO) that contribute to the successful export performance of German SMEs in manufacturing through the application of empirical methods. Within the main objective, the following research assumption and **detailed objectives** are established in the below table:

- O1:** to present and discuss of the firm-level internationalization and sustainability empirical research (Chapter 1).
- O2:** to prepare a review of prior knowledge on internal determinants export performance of SMEs and its academic discussion (Chapter 2).
- O3:** to develop the research framework for empirical studies linking SPA, EO & EMO to SME's export performance including the selection of the variables and data analysis approach arising from the results of the preceding analysis of research fields (Chapter 3).
- O4:** to present results of statistical analysis and identifying the main determinants among the researched variables that significantly enhance German SMEs' export performance in manufacturing industry (Chapter 4).

- O4.1:** to understand the interrelationship among the export performance different dimensions.
- O4.2:** to explore the impact of SPA on different dimensions of EP.
- O4.3:** to explore the impact of EO on EP
- O4.4:** to explore the relation between EMO and SPA
- O5:** to explore and discuss relevant research limitations of the study as well as making suggestions for further studies (Chapter 5).

3.3 Research hypotheses and design

As we retrieved and developed in the previous part of this dissertation, the following **research hypotheses** are tested:

- H1:** SMEs' financial performance impact on satisfaction with export operation in the German manufacturing industry.
- H2:** SMEs' strategic performance impact on satisfaction with export operation in the German manufacturing industry.
- H3:** Sustainable product attributes impact on financial performance in the German manufacturing industry.
- H4:** Sustainable product attributes impact on strategic performance in the German manufacturing industry.
- H5:** Sustainable product attributes impact on general satisfaction with export operation in the German manufacturing industry.
- H6:** Entrepreneurial orientation impacts on financial performance in the German manufacturing industry.
- H7:** Entrepreneurial orientation impacts on strategic performance in the German manufacturing industry.
- H8:** Export market orientation impacts on the SMEs' SPA in German manufacturing industry.

Table 8 presents this doctoral research assumption, including the theoretical frameworks that support the related research questions, objectives and finally the relations that this research would like to investigate.

Table 8: The empirical research assumptions

Theoretical perspective and research model	Integrative approach			
	EDT	Stakeholders, TBL	IEO, Networking, Strategy approach, RBV	RBV
Research questions	RQ1. How does German manufacturing SMEs' financial and strategic performance influence managers' satisfaction?	RQ2. How does German manufacturing SMEs' sustainable product attributes influence its export's performance?	RQ3. How does German manufacturing SMEs' entrepreneurial orientation influence its export's performance?	R4. How does German manufacturing SMEs' export market orientation influence its sustainable product attributes?
Research Objectives	<p>The objective of this study is to identify key internal determinants within Entrepreneurship Orientation (EO), Sustainable Product Attributes (SPA), and Export marketing Orientation (EMO) that contribute to the successful export performance of German SMEs in manufacturing through the application of empirical methods.</p> <p>O1: to present and discuss the firm-level internationalization and sustainability empirical research (Chapter 1).</p> <p>O2: to prepare a review of prior knowledge on internal determinants export performance of SMEs and its academic discussion (Chapter 2).</p> <p>O3: to develop of the research framework for empirical studies linking SPA, EO & EMO to SME's export performance including the selection of the variables and data analysis approach arising from the results of the preceding analysis of research fields (Chapter 3).</p> <p>O4. to present results of statistical analysis and to identify the main determinants among the researched variables that significantly enhance German SMEs' export performance in manufacturing industry (Chapter 4).</p> <p>O4.1: to understand the interrelationship among the export performance different dimensions.</p> <p>O4.2: to explore the impact of SPA on different dimensions of EP.</p> <p>O4.3: to explore the impact of EO on EP</p> <p>O4.4: to explore the relation between EMO and SPA</p> <p>O5. to explore and discuss relevant research limitations of the study as well as making suggestions for further studies (Chapter 5).</p>			
Impact	SPA → EP	EO → EP	EMO → SPA	FP→EP / SP→EP

Source: own study.

Previous studies in general applied mostly two types of research design for export performance studies which are quantitative survey and qualitative interview. However, there is a tendency towards using more the quantitative method. On the other hand, some researchers such as Heredia et al., (2019) use mix method and argue that the in-depth expert interview helps to have a better understand the quantitative findings. Nevertheless, a small sample size would raise doubt on the external validity of qualitative studies (Sousa, 2004).

An analysis of 178 German manufacturing SMEs forms the basis of this doctoral dissertation. A judgemental sampling technique is used to collect data during various international fairs and events in Germany during the period of February to May 2024. The Computer Assistant Self-Interview (CASI) questionnaire is administered via iPad to collect data. A smartPLS4 based structural equation modelling approach is used to test hypotheses. In this study, the research approach includes several stages. Initially, secondary data are extracted from scholar to screen the determinants related to the scope of the research. Accordingly, the first draft of the research instrument (questionnaire) is developed and tested via a pilot test to check the validity and the reliability of the questionnaire.

Then the questionnaire is examined based on questionnaire's length, format, clarity, reliability scale, and content validity. Next, based on the result of the pilot test, the draft questionnaire is revised to generate the final draft of the questionnaire. As follows, the data collection, the study would use Structural Equation Modelling (SEM) technique to test the research hypothesizes and report findings.

3.4 Research model

This study is planned to explore the effect of five independent variables including SPA, EMO, SP, FP and EO on German SMEs' managerial satisfaction (SAT) in the manufacturing industries. Apart from SAT, there are three dependent variables including SPA, SP and FP. In fact, these variables serve the model and dependent and dependent variables. Thus, the research model in stage 1 is designed based on the eight hypotheses (Figure 32). The results of the study will be used to determine if any of these independent variables have a significant effect on the export performance of German manufacturing SMEs. However, due to the number of indicator and the formative context of some of variables such as EO, EMO and SPA, the research need to develop a hierarchical component model.

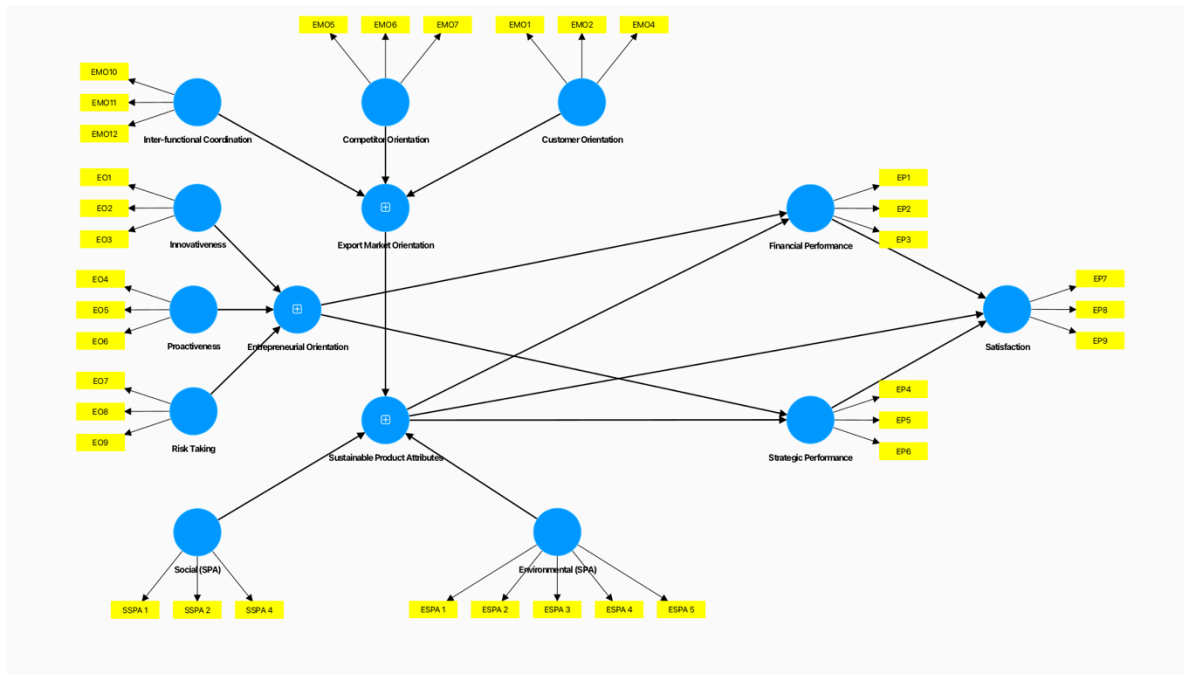


Figure 32: The research model in stage 1

Source: own study.

Hierarchical Component Model - Stage 2

Hierarchical component model has four types including reflective-reflective (Type I), reflective-formative (Type II), formative-reflective (Type III) and formative-formative (Type IV). In these types of models, higher order components (HOCs) represents the more abstract entity, whereas lower order components (LOCs) represent the sub-dimensions of the abstract entity. There are different relationships between HOCs and LOCs, constructs, and their indicators for each of the HCM types (Afthanorhan, 2014). Lower order constructs are causally connected to higher order constructs in reflective-formative type II. So, higher order constructs can be used as formative constructs in structural models to play a double explanation that consists of reflective and formative measurement models. Lower order constructs are causally connected to higher order constructs in reflective-formative type II. So, higher order constructs can be used as formative constructs in structural models to play a double explanation that consists of reflective and formative measurement models (Figure 33).

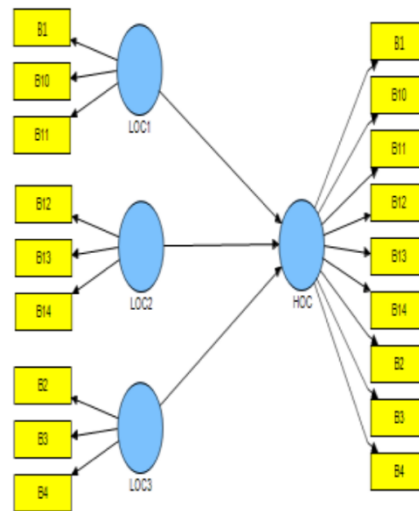


Figure 33: Type II: reflective -formative - hierarchical component model

Source: Afthanorhan (2014, p.59).

This study aims to validate EO, SPA and EMO as reflective-formative Type II second order constructs using latest PLS-SEM approach. Therefore, initially, operationalisation of variables has been implemented as illustrated in the upcoming tables. Many measurement models in entrepreneurship literature are formative due to their underlying concepts or domains (Tehseen et al., 2019). Therefore, in this research EO also is formed via innovativeness, proactiveness, and risk taking. As follow, EMO also is created from integration of customer orientation, competitor orientation and inter-functional relations. Lastly, SPA also is a formative variable that include social (SPA) and environmental product attributes (ESPA). Therefore, this study aimed to validate EO, SPA and EMO as reflective-formative Type II second order constructs using latest PLS-SEM approach. By aggregating the LOCs, the number of relationships in the structural model is reduced, making it easier to understand and more compact. For the HOC analysis Hair et el. (2017)'s two-stage methodology is followed. As a result, HOCs are developed after the validations of the first model were completed (Figure 34).

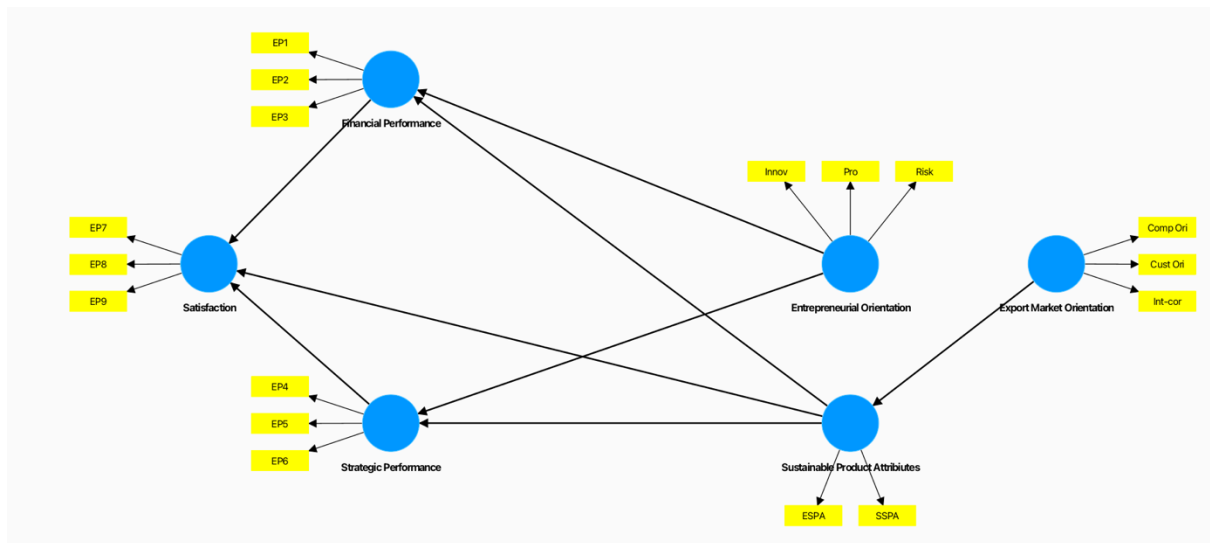


Figure 34: The Research model in stage 2

Source: own study.

3.5 Operationalization of variables

3.5.1 Export performance

Export performance is considered as an only dependent variable in this research. Different approaches had been used to measure performance of a company in the international export market. For instance, using objective variables such as company revenue generated from export or profitability, however it is difficult to receive all these data from sampled firms (Chen et al., 2016). Therefore, researcher is replaced subjective measurement by checking the managerial satisfaction toward certain economical or non-economic performance. Trusting the fact that a firm's strategic decision makers have the optimum overview of their firm performance linked to their set organization purposes.

From the categorical perspective, a firm' performance in international export market could be assessed form economical or non-economical perspective. Economical dimension has been exemplified in the literature review but an example for non-economical perspective could be strategic performance or managerial satisfaction. The said category recently is adopted from the literature to link a firm's performance to its sustainable approach. In this

research, the study used one of the most common measurement methods developed by Zou et al. (1998) to estimate the economic export performance of manufacturing SMEs in Germany. The following Table 9 is explained the overview of the measurement questions.

Table 9: The construct of export performance

Construct dimensions	Operationalize variables	Source
Financial export performance	<i>This export venture</i> has been very profitable. has generated a high volume of sales. has achieved rapid growth.	Zou et al., (1998)
Strategic export performance	<i>This export venture</i> has improved our global competitiveness. has strengthened our strategic position. has increased our global market share.	
Satisfaction with export venture	The performance of this export venture has been satisfactory. This export venture has been successful. This export venture has fully met our expectation.	

Source: own study.

3.5.2 Entrepreneurship orientation

This research will end up focusing on the three-dimension classical approach due to the possible overlap with the dimensions of EMO. The measurement scope of Kuivalainen et al. (2007) and Boso et al. (2012) support this decision as the researchers measured the competitive aggressiveness based on Slare's (1990) competitor orientation scale and Jaworski and Kohli's (1993) responsiveness scale (Table 10).

Table 10: The three-dimensional construct of EO

Innovativeness items	
EO1: In general the top managers of my firm favour	
... a strong emphasis on the marketing of tried-and-true products and services.	1 2 3 4 5 6 7 ... a strong emphasis on R&D, technological leadership and innovations.
[Item originally proposed by Khandwalla [1976/977]]	
EO2: How many new lines of products or services has marketed in the past 5 years (or since its establishment)?	
No new lines of products or services.	1 2 3 4 5 6 7 Very many new lines of products or services.
[Item originally proposed by Miller and Friesen (1982)]	
EO3: Changes in products or services lines ...	
...have been mostly of a minor nature.	1 2 3 4 5 6 7 ...have usually been quite dramatic.
[Item originally proposed by Miller and Friesen (1982)]	
Proactiveness items	
EO4: In dealing with its competitors, my firm ...	
...typically responds to actions that competitors initiate.	1 2 3 4 5 6 7 ...typically initiate actions to which competitors then respond.
[Item originally proposed by Covin and Slein (1989)]	
EO5: In dealing with its competitors, my firm ...	
...is very seldom the first business to introduce new products/services, administrative techniques, operating technologies, etc.	1 2 3 4 5 6 7 ...is very often the first business to introduce new products/services, administrative techniques, operating technologies, etc.
[Item originally proposed by Covin and Slein (1989)]	
EO6: In dealing with its competitors, my firm ...	
...typically seeks to avoid competitive clashes, performing a "live0an-let-live" posture.	1 2 3 4 5 6 7 ...typically adopts a very competitive, "undo-the-competitors" posture.
[Item originally proposed by Covin and Slein [1989]]	
Risk-taking items	
EO7: In general the top managers of my firm have	
...a strong proclivity for low-risk projects (with normal and certain rates of return).	1 2 3 4 5 6 7 ...a strong proclivity for high-risk projects (with chances of very high returns).
[Item originally proposed by Khandwalla (1976/1977)]	
EO8: In general the top managers of my firm believe that	
...owing to the nature of the environment, it is best to explore it gradually via cautious, incremental behaviour.	1 2 3 4 5 6 7 ...owing to the nature of the environment, bold wide-ranging acts are necessary to achieve the firm's objective.
[Item originally proposed by Miller and Friesen (1982)]	
EO9: When confronted with decision-making situations involving uncertainty, my firm ...	
...typically adopts a cautious "wait-and-see" posture in order to minimize the probability of making costly decisions.	1 2 3 4 5 6 7 ...typically adopts a bold aggressive posture in order to maximize the probability of exploiting potential opportunities.
[Item originally proposed by Covin and Slein (1989)]	

Source: Covin and Miller (2014, p. 36).

3.5.3 Sustainable product attributes

In order to measure sustainable product attributes, the study is adopted the main variable from Ullah et al. (2021) with the two dimensions of environmental sustainable product attributes and social sustainable product attributes. Then, the research used five measurement questions in each dimension to measure perception of managers toward environmental and social aspects. The following Table 11 presented each dimension and the related questions.

Table 11: The construct of sustainable product attributes

ESPA	Environmental Sustainable Product Attributes	Sources
ESPA 1	Possessing the environmental product certificate	Leonidou et al. (2017)
ESPA 2	Using reusable, recycle and biodegradable or organic material in packaging/process	Alhawari et al. (2021)
ESPA 3	Recycling of leftover	Villena and Souto-Pérez (2016)
ESPA 4	ISO certificate for environmental management	Villena and Souto-Pérez (2016)
ESPA 5	Reducing Emission with process optimization	Emmanuel et al. (2021)
SSPA	Social Sustainable Product Attributes	Sources
SSPA 1	CSR-based quality products sold by firms	Giallonardo and Mulino (2012) Papagiannakis et al. (2019)
SSPA 2	Reliability & durability of products	Boehe and Cruz (2010)
SSPA 3	Labelling & Info products	Bangsa and Schlegelmilch (2020) Papagiannakis et al. (2019)
SSPA 4	Offering fair trade products	Bangsa and Schlegelmilch (2020)
SSPA 5	Customer Health & safety	Bangsa and Schlegelmilch (2020)

Source: own study.

3.5.4 Export market orientation

Historically, market orientation has been measured in two ways. According to Kohli and Jaworski (1990), Market Orientation is a firm-level behaviour that consists of three main activities: generation, dissemination, and responsiveness, referred to as MARKOR. As opposed to behavioural approaches, Narver and Slater (1990) conceptualise market research as a corporate culture that encompasses three dimensions: competitor orientations (knowledge of their competitors' strengths and weaknesses), customer orientations (knowledge of their customers' values and needs), and inter-functional coordination (collaboration among internal departments to create value), referred to as MKTOR. This

research would adopt corporate culture approach to measure the market orientation. The following Table 12 presents each dimension and the related questions.

Table 12: The construct of market orientation

	The customers' needs are the main objectives of the company	Source
Customer Orientation	The company always analyses customers' needs	(Muis, 2020)
	The company evaluates the effort of meeting customers' needs	
	The company has met the customers' needs	
	The company improves the effort of meeting customers' needs after evaluation	
Competitor Orientation	The company improves its added values of the products	(Muis, 2020)
	The company identifies the strengths and weaknesses of competitors	
	The company implements a competition strategy by issuing product policies	
	The company encourages initiatives to formulate competition strategy based on knowledge of competitors	
Inter-functional Coordination	The company identifies competitors in the industry	(Muis, 2020)
	The employees in work units coordinate to deliver services and to meet customer needs	
	The company has had communication media to communicate across work units	
	The company has had standard operational procedures for customer service	
	the company updates information on customers during customers' engagement	
	The company improves the competency of employees to serve the customers	

Source: own study.

3.6 Research methods and data analysis

3.6.1 SEM Modelling using SmartPLS

In this study, the validity of the constructs will be tested by the content and construct validity. The construct validity will be tested by applying the convergent and discriminant validity. In this respect, the determinants and their relation will be studied via in depth literature review. The articles will be selected from high rank and peer review journals, those article that focused on SMEs export performance and related determinants subjected to the scope of the research model. The research instrument (questionnaire) will be design by borrowing the question with highest validity from the related articles (Malhotra et al., 2017).

After selecting the items in the questionnaire, a group of academic experts will be selected to review the questionnaire to guarantee the maximum possible content validity. Next and after data collection, different tests such as factor loading, Average Variance Extracted (AVE) and composite reliability (CR) will be applied to evaluate convergent validity. The Cronbach alfa value also will be checked to test the reliability of the research (Zikmund et al., 2013).

Structural equation modelling or regression analysis will be used to test the direct and mediated effects. The approach is one of the most common data analysis techniques which is recently are adopted by different researcher in the export performance studies. According to Chen et al. (2016) review research which is one the most valuable studies in the field that 63 out of 123 researches between 2006 and 2014 conducted SEM analysis to test their research models. SEM is a multivariate technique, which provided different capabilities of factor analysis and multiple regressions to test a number of direct and indirect relationship when the research model is complex (Hair *et al.*, 2011). A structural equation model is employed in data analysis for two main reasons. First, this model allows for the estimation of latent (unobserved) constructs with multidimensionality. Different aspects and/or measures can be used to describe firm' export performance. Secondly, the approach also allows us to include mediation effects because it is highly flexible in modelling various relationships (Akter et al., 2017). Finally, SmartPLS 4 software is used to analyse the collected data. The software is recommended by many researchers such as Ringle et al. (2015) for its power in modelling that helps researchers to organize final report and most importantly run mediator or moderator analysis.

3.6.2 Data tabulation, triangulation, validity, and reliability

In order to use the data collected from the survey for final estimation, a set of preparation steps, such as data cleaning, must be undertaken. An important part of data cleaning is reviewing raw data for obvious errors (for example, out of range responses or duplicate reports) and non-normality. Quantitative research requires a high level of validity and reliability of the instrument. A questionnaire will be considered valid when it is measuring the subject of a study using respectable indicators and questions. A reliability study examines whether future research can replicate the results (Rubio et al., 2003). Each concept is briefly reviewed in this section.

A study's objectives and theoretical hypothesis that are strongly supported by empirical data are regarded as having maximum validity (Zikmund et al., 2012). In the literature, validity testing is often referred to as content, criterion, or construct validity, though terminology differs. A measurement's content validity is the ability to cover the research questions via the literature appropriately. Criteria validity refers to its ability to accurately predict or test the variables. Zikmund et al. (2012) define construct validity as the precision with which a measurement question measures the construct it was meant to be measured.

Structural equation modelling and factor analysis are used to determine construct validity (Hair et al., 2011). Construct validity will be measured by convergent and discriminant validity (Colliver *et al.*, 2012). To test convergent validity, scholars are suggested that factor loading (0.5 or higher and ideally 0.7 or higher), average variance extracted (0.5 or higher) and composite reliability (0.7 and higher) (Hair *et al.*, 2011). It is also suggested to consider a CR value between 0.60 and 0.70 in exploratory research. A multiple-item scale's reliability is most measured by cronbach alpha. It is recommended that the cronbach alpha value be 0.7 or higher for reliability estimations (Hair et al., 2011). A complementary methodological concept to convergent validity is discriminant validity (Hulland, 1999). Discriminant validity can be measured by the Fornell-Larcker criterion and by cross loading (Henseler et al., 2009). According to Fornell and Larcker (1981), latent variables share the most variance with their assigned indicators. If the AVE of each latent variable is greater than the squared correlation of all other latent variables, validity is determined. An additional test of discriminant validity, cross loading, requires that each indicator's loading be greater than its cross loading (Henseler et al., 2015).

This doctoral research will evaluate the construct's validity based on its content and construct validity. Constructs validity will be examined based on its convergent and discriminant validity. To check the validity of the variable, the entire variable items are extracted from previous research. To ensure the research instrument's accuracy, apart from the supervisor, two university professors in the field of strategic management and one related filed expert reviewed the items. In the first stage model, convergent validity will be evaluated through factor loading, AVE, and composite reliability. The study also adopts Cronbach alpha to test the reliability of measurements.

In the second stage model, researchers also suggest checking the discriminant validity and multicollinearity of measurements. In the first step the model needs to be tested for the convergent validity. The higher-order construct has convergent validity, when the path coefficient does not deviate significantly from the threshold of 0.7 (Hair et al., 2017). As a second step, the model needs to be tested for collinearity to determine if HOC measurement is negatively affected by collinearity, which will lead to an assessment of the VIF of the LOCs for the HOC. Then the model needs to be tested for discriminant validity among the LOCs that contribute to HOCs. In this case, Heterotrait-Monotrait Ratio (HTMT) test should be applied. HTMT values below 0.85 are generally indicative of good discriminant validity (Hair et al., 2017). In the last stage, the study needs to check the loading of items onto construct (LOCs and HOCs), that outer loading test will be applied. The outer loading of 0.70 and higher would be considered as ideal loading, that means that the item is reliable and makes a significant contribution to the construct (Sarstedt et al., 2019).

3.6.2.1 Assessing model fit

As the study would use SEM technique, therefore the proposed model of the research needs to be tested to check to what extent the variance of the dependent variables can be justified by the model independent variables. As follow Henseler et al. (2009), the coefficient of determination (R^2) will be used to check the inner model. Based on the research, R^2 value should be interpreted as follows; 0.75 and above: significant explanatory power, 0.50 to 0.74: moderate explanatory power, 0.25 to 0.49: weak explanatory power, below 0.25: very weak explanatory power.

3.6.2.2 Hypothesis Testing

A bootstrapping function in SmartPLS 4 is then applied to test the hypotheses. The t-values and P-values are the most important outputs. For a two-tails relationship, a t-value of 1.96 or higher indicates statistical significance for a 5% significance level, and a t-value of 2.576 for a 1% significance level. In terms of the P-value, a score of less than 0.05 indicates statistical significance at the 5% level, whereas a score less than 0.01 indicates significance at the 1% level (Sarstedt et al., 2019). This research uses the latest version of SmartPLS software for assessment of the proposed conceptual model (Ringle et al., 2015). Partial least

square structural equation modelling (PLSSEM) is applied to analyse the collected data. In business and social sciences research, PLS SEM is a powerful tool for small sample size and non-normal data in a timely manner (Hair et al. 2017). It consists of two phases: measurement model specification and structural model assessment. Only constructs with acceptable indicator loading, convergent validity, composite reliability (CR), and discriminant validity will be selected for hypothesis testing. A structural model assessment includes estimating path coefficients and evaluating their significance.

3.7 Sampling and research sample

In 2021, the manufacturing sector in Germany contributed 26.6% of gross value added. Among German industries, automotive, mechanical engineering, chemical and electrical are the four most important. According to the Statista report published in (2022) there are about 202,893 SMEs in manufacturing sectors Germany. As of 2021, 48.4% of manufacturing products were exported. German exports in 2022 are dominated by motor vehicles and motor vehicle parts, which generated a total of 244.4 billion euros and accounted for 15.5% of German exports (Orth, 2023). Therefore, this research focus on multiple industries like most of research in this field (Trąpczyński et al., 2021). Consequently, it is possible to generalize the research findings without relying on sectoral specificity (Chen et al., 2016).

Furthermore, Germany, with the best record on green innovation among the European countries (Apak & Atay, 2015), will be an appropriate location to conduct this study as sustainability is another important factor. To ensure the individual respondent has enough knowledge on the company's export to the target market, the respondents are limited to those decision makers who have adequate information about the company's trading activities.

This doctoral research adopts a non-probability random sampling approach called "Judgement/purposive Sampling" (Quinlan et al., 2019). By using this method, the researcher determines what needs to be known and finds people who can and are willing to provide the information. As the researcher should distinguish the exporter from non-exporter SMEs, therefore the random sampling can't fit into the research design. Non-probability sampling allows the researcher to choose which company/manager to include in the final sample based on his own judgment (Etikan, 2016). Having a nonprobability sample makes

it impossible to generalize the population), but researchers still determine which participants are most useful to achieving study objectives. The use of this sampling method is beneficial for this doctoral research because reaching participants only online is time-consuming and difficult. It is most common for quantitative research to have a high number of non-response errors. There could be several reasons for this, including old email addresses or the researcher's emails getting redirected to spam folders. It is also unlikely that recipients of email will have a very high response rate (Malhotra et al., 2017). By attending the international exhibition and identifying German exporters SMEs, the research will not only be able to control samples but also speed up data collection. In addition, the researcher used Computer Assistant Web Interviewing (CAWI) and Computer Assistant Self-Interview (CASI). CAWI is a technique that respondents follow a questionnaire on a website. CAWI, data collection method is relevant to our research as some of the data collected directly via online survey. To collect the data via CAWI, we contacted the firms via the LinkedIn and other professional network such as German Trade & Invest (GTAI) or by approaching exporters in different exhibitions. CASI is operationalised by using iPad during the events. The CAWI and CASI method are replaced the old paper-based questionnaire and simplify the data collection process (Fabbris, 2013). Researchers also consider donating to charity per sample and sharing the results of the research if participants share their email addresses. The participants will also be asked some control questions to ensure that they are eligible.

Regarding the sample size, export performance studies have used different sample sized. In those studies that collect primary data, the sample size is varied, ranging from 52 samples in Coudounaris (2011) research to 3141 Orser et al. (2010). A quantitative research's sample size also is influenced by the analysis method. As recommended by Chin (1998, p. 296) *"If one were to use a regression heuristic of 10 cases per predictor, the sample size requirement would be 10 times [the most complex regression relationship in the model]."* With considering the research model presented in Figure 29, the proposed research model has six variables, thus it needs minimum 60 samples.

4. Empirical findings linking sustainability and export performance of German SMEs

4.1 Research sample profile

The PhD thesis's sample consists of manufacturing SMEs operating in Germany. This choice is mainly due to the accessibility of the primary data within the planned timeframe of the PhD. The data collected mainly online via a Google Forms questionnaire, through professional social networks and attending international trade fairs and events in different city in Germany. Table 13 shows the name of the events and number of samples taken from each event. In total, the researcher is attended in more than 10 events and used judgement/purposive sampling to collect data via CASI questionnaire.

Table 13: Overview of data collection events

Date	Name of events	No. of samples	Data collection method
02.2024	IHK Bonn	6	CASI
03.2024	Zukunftstag Mittelstand Berlin - 2024	40	
04.2024	Hannover Tech fair -2024	27	
04.2024	FAF Trade Fair Cologne 2024	13	
04.2024	Fibo 2024 - Cologne	21	
04.2024	Tube 2024 - Düsseldorf	41	
02-05.2024	other events	30	CAWI
Total		178	CASI, CAWI

Source: own study

In the trade fairs and events apart from checking the company before data collection by asking questions regarding the size of the company, scope of exporting activities, some control questions are also implemented to check the eligibility if company and knowing about the role of each participant in the company and if they have relevant knowledge about the company's export activities. At the end 178 usable cases in the sample have been collected within 4 months of data collection. With considering the minimum sample size needed according to the by Chin (1998, p. 296), the collected samples are sufficient to run the research model in the SmartPLS.

4.2 Results of descriptive analysis

4.2.1 Respondents' & firms' profile

Participant's organizational profile

Table 14 shows the distribution of responses within a sample of categorical positions. 30.9% of respondents are founders, CEOs, CFOs, and other top managerial positions. There are 23% of responses from managers and department heads, while 19.7% are from sales and marketing managers. 16.3% of roles are technical and engineering, and 10.1% are consulting and advisory.

Table 14: Participant's organizational profile

Categorical positions	Number of Responses	Frequency
Founders & CEO & CFO	55	30.90%
Managerial position & Department Head	41	23.00%
Sales & Marketing Manager	35	19.70%
Technical/Engineering Roles	29	16.30%
Consulting and Advisory Roles	18	10.10%
Total	178	100%

Source: own study.

Firm's operating industry

In the following table, you can see how responses were distributed across different categories of industries. In total, 41% of respondents were manufacturing or industrial products. Products or services related to technology follow closely behind with 35.9%. Pharmaceuticals and healthcare take up 9%, while construction and building materials take up 8.4%. 5.6% goes to consumer goods and retail (Table 15).

Table 15: Firm's operating industry

Category	Number of Responses	Percentage
Manufacturing and industrial products	73	41.00%
Technical product or service	64	35.90%
Healthcare and pharmaceuticals	16	9.00%
Construction and building materials	15	8.40%
Consumer goods & retail	10	5.60%
Total	178	100%

Source: own study.

4.2.2 Export performance

Perceived profitability of export venture

According to the survey results, 67% of respondents believe the export venture has been profitable. It appears that most people support the profitability of the export venture, with only a small minority (12%) disagreeing to some extent (Table 16).

Table 16: Perceived profitability of export venture

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	1	1%
2	Moderately Disagree	2	1%
3	Slightly Disagree	15	10%
4	Neutral	34	22%
5	Slightly Agree	35	23%
6	Moderately agree	49	32%
7	Strongly agree	19	12%

Source: own study.

Perceived sales volume of export venture

Among all respondents, 61% believed their export venture generated high volumes of sales. Approximately 20% of respondents are neutral, while 19% disagree to varying degrees. Most of the positive feedback indicates a moderate level of agreement. Most responders perceive the export venture's sales volume as positive, although some remain uncertain or disagree (Table 17).

Table 17: Perceived sales volume of export venture

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	3	2%
2	Moderately Disagree	11	7%
3	Slightly Disagree	16	10%
4	Neutral	31	20%
5	Slightly Agree	40	26%
6	Moderately agree	38	25%
7	Strongly agree	16	10%

Source: own study.

Perceived growth rate of export venture

As shown in Table 18, 55% of top managers believe the export venture has achieved rapid growth, while 22% disagree or remain neutral. 23% of participants are expressed some level of disagreement. Based on the study results, most participants are perceived the venture's growth as positive.

Table 18: Perceived growth rate of export venture

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	5	3%
2	Moderately Disagree	14	9%
3	Slightly Disagree	17	11%
4	Neutral	34	22%
5	Slightly Agree	33	21%
6	Moderately agree	34	22%
7	Strongly agree	18	12%

Source: own study.

Improvement of global competitiveness

A survey showed that 68% of respondents agreed that the export venture had improved their global competitiveness, while 30% disagreed or were neutral. Generally, respondents view the venture positively, indicating that it enhances their global competitiveness (Table 19).

Table 19: Improvement of global competitiveness

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	5	3%
2	Moderately Disagree	5	3%
3	Slightly Disagree	16	10%
4	Neutral	24	15%
5	Slightly Agree	46	30%
6	Moderately agree	36	23%
7	Strongly agree	23	15%

Source: own study.

Strengthening strategic position in international markets

Approximately 76% of respondents believe that the export venture has strengthened their strategic position (Table 20). Only 11% of participants expressed any level of disagreement, as 12% are neutral. Results indicate a strong positive perception of strengthening the company's international strategic position.

Table 20: Strengthening strategic position in international markets

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	3	2%
2	Moderately Disagree	3	2%
3	Slightly Disagree	11	7%
4	Neutral	18	12%
5	Slightly Agree	41	26%
6	Moderately agree	55	35%
7	Strongly agree	24	15%

Source: own study.

Enhancement of global market share

Survey results indicate that 63% of respondents have gained greater global market share as a result of export venture operations (Table 21). In total, 17% of participants are neutral, while 20% disagree. Positive responses have outweighed negative responses significantly. Generally, respondents perceive the export venture as successful in enhancing global market share.

Table 21: Enhancement of global market share

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	6	4%
2	Moderately Disagree	12	8%
3	Slightly Disagree	12	8%
4	Neutral	27	17%
5	Slightly Agree	36	23%
6	Moderately agree	39	25%
7	Strongly agree	23	15%

Source: own study.

Satisfaction with export venture performance

63% of respondents to the survey are satisfied with the export venture's performance at different levels, as shown in Table 22. A mere 13% of participants report dissatisfaction, while 24% remain neutral. Almost all responses indicate that participants are satisfied with the export venture's performance.

Table 22: Satisfaction with export venture performance

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	1	1%
2	Moderately Disagree	5	3%
3	Slightly Disagree	14	9%
4	Neutral	37	24%
5	Slightly Agree	36	23%
6	Moderately agree	41	26%
7	Strongly agree	21	14%

Source: own study.

Perceived success of export ventures

Approximately 63% of respondents view the export venture as successful to various degrees. 23% remain neutral, and 14% express varying levels of disagreement. Managers' perceptions of venture success are largely positive (Table 23).

Table 23: Perceived success of export venture

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	2	1%
2	Moderately Disagree	5	3%
3	Slightly Disagree	16	10%
4	Neutral	35	23%
5	Slightly Agree	43	28%
6	Moderately agree	36	23%
7	Strongly agree	18	12%

Source: own study.

Alignment of managers' expectations and outcomes in export ventures

The export venture met the expectations of 56% of respondents. About a quarter of respondents are neutral, while 18% express disagreement. Over 50% of respondents report that the venture aligns with their expectations, but a significant number are either uncertain or think expectations have not been met (Table 24). In other words, managers are still believed that the venture could have achieved more.

Table 24: Alignment of managers' expectations and outcomes in export ventures

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	2	1%
2	Moderately Disagree	8	5%
3	Slightly Disagree	18	12%
4	Neutral	39	25%
5	Slightly Agree	41	26%
6	Moderately agree	33	21%
7	Strongly agree	14	9%

Source: own study.

4.2.3 Entrepreneurial orientation

Technology leadership, innovation, and R&D investments of firms

A strong emphasis on R&D, technological leadership, and innovation is supported by 70% of respondents. While 13% are neutral, 17% disagree (Table 25). Overall, R&D and innovation initiatives are strongly supported by majority of export ventures.

Table 25: Technology leadership, innovation, and R&D investments of firms

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	4	3%
2	Moderately Disagree	11	7%
3	Slightly Disagree	11	7%
4	Neutral	20	13%
5	Slightly Agree	33	21%
6	Moderately agree	50	32%
7	Strongly agree	26	17%

Source: own study.

Five-year overview of product and service expansion

A survey finds that 65% of managers agreed that their company had introduced many new products or services in the last five years. In total, 15% of respondents express neutrality, while 21% express some level of disagreement (Table 26). In general, opinions are positive regarding the company's proactive approach to investing in updated product and service lines.

Table 26: Five-year overview of product and service expansion

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	1	1%
2	Moderately Disagree	10	6%
3	Slightly Disagree	21	14%
4	Neutral	23	15%
5	Slightly Agree	40	26%
6	Moderately agree	42	27%
7	Strongly agree	18	12%

Source: own study.

Overview of proposed changes/modification in Products or Services Lines

Nearly half of managers (49%) report that the company frequently are developed or modified its products or services. According to 23%, however, changes are less common to them. Another 19% were neutral. It is notable that 51% of respondents to this research do not acknowledge product and service modifications (Table 27).

Table 27: Overview of proposed changes/modification in products or services lines

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	6	4%
2	Moderately Disagree	16	10%
3	Slightly Disagree	14	9%
4	Neutral	30	19%
5	Slightly Agree	43	28%
6	Moderately agree	32	21%

Source: own study.

Having initiated actions that competitors respond

It is estimated that half of managers believe their company having initiation in their strategy. However, 21% disagree, indicating that their firm takes fewer initiatives than their competitors. 20% of respondents remain neutral on the issue (Table 28).

Table 28: Having initiated actions that competitors respond

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	6	4%
2	Moderately Disagree	8	5%
3	Slightly Disagree	18	12%
4	Neutral	31	20%
5	Slightly Agree	45	29%
6	Moderately agree	32	21%
7	Strongly agree	15	10%

Source: own study.

Being first-mover towards introduction of new products/services

More than half of respondents (67%) agree that their firms often take a first-mover approach to introducing novel products, services, and technologies. A smaller proportion, 13%, disagrees, suggesting they perceive their firms to be late mover by initiate actions toward their competitor move in a competitive dynamic. Among respondents, 19% remain neutral. It means that firms in this study are more likely to be first movers rather than late movers (Table 29)

Table 29: Being first mover towards introduction of new products/services

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	2	1%
2	Moderately Disagree	8	5%
3	Slightly Disagree	11	7%
4	Neutral	29	19%
5	Slightly Agree	30	19%
6	Moderately agree	47	30%
7	Strongly agree	28	18%

Source: own study.

Firms competitive posture: “undo-the-competitors” or “live and-let-live”

There are 40% of respondents who state their firm adopts a very competitive approach. But 38% disagree, suggesting their firms avoid aggressive competitiveness or follow "live-and-let-live". As Table 30 shows, 23% remain neutral. As a whole, a balance exists between managers who see their firms as highly competitive and those who do not.

Table 30: Firms competitive posture: “undo-the-competitors” or “live and-let-live”

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	14	9%
2	Moderately Disagree	23	15%
3	Slightly Disagree	21	14%
4	Neutral	35	23%
5	Slightly Agree	26	17%
6	Moderately agree	24	15%
7	Strongly agree	12	8%

Source: own study.

Managers' risk appetite: risk oriented or risk reverse

There is a wide range of perceptions of risk preferences among top managers, as demonstrated by the survey responses in Table 31. In contrast to 31% of respondents who believe that decision-makers favour low-risk projects, 37% perceive a tendency towards high-risk, high-reward projects. 33% are neutral, indicating uncertainty or a balanced view. Neutrality and cautious risk-taking were the predominant perceptions.

Table 31: Managers' risk appetite: risk oriented or risk reverse

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	6	4%
2	Moderately Disagree	22	14%
3	Slightly Disagree	20	13%
4	Neutral	51	33%
5	Slightly Agree	31	20%
6	Moderately agree	18	12%
7	Strongly agree	7	5%

Source: own study.

Managers' risk orientation: incremental/cautious vs. bold actions

According to the survey results shown in Table 32, 27% of respondents agree that a cautious, incremental approach is their top managerial decision-making style. 47% of respondents believe their managers are taking bold, wide-ranging actions to achieve the firm's objectives. 26% remain neutral. It can be deduced, nearly half of decision-makers believe taking significant risks to achieve competitive advantage requires them to step outside their comfort zone.

Table 32: Managers' risk orientation: incremental/cautious vs. bold actions

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	3	2%
2	Moderately Disagree	19	12%
3	Slightly Disagree	20	13%
4	Neutral	41	26%
5	Slightly Agree	40	26%
6	Moderately agree	23	15%
7	Strongly agree	9	6%

Source: own study.

Uncertainty-based decision-making: "wait-and-see" or bold aggressiveness

As shown in Table 33, the firm's approach to decision-making under uncertainty is diversified. Among respondents, 34% feel their firm takes a cautious "wait-and-see" approach to minimize risk, while 45% believe their firm takes an aggressive, bold approach to maximize opportunities. According to the 21% of neutral responses, the firm's decision-making approach has been perceived as balanced, or there is uncertainty about it.

Table 33: Uncertainty-based decision-making: "wait-and-see" or bold aggressiveness

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	7	5%
2	Moderately Disagree	27	17%
3	Slightly Disagree	19	12%
4	Neutral	32	21%
5	Slightly Agree	42	27%
6	Moderately agree	22	14%
7	Strongly agree	6	4%

Source: own study.

4.2.4 Export market orientation

Export market orientation analyses customers' needs

The majority of managers (92%) feel positively about the process of analysing customer needs. Only 5% of managers disagree, indicating that most managers think the company excels at understanding and addressing customer needs (Table 34). Based on this feedback,

the company's capabilities in this critical area are generally viewed positively and suggest that its analysis of customer needs is effective.

Table 34: Analyses customers' needs

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	0	0%
2	Moderately Disagree	3	2%
3	Slightly Disagree	5	3%
4	Neutral	5	3%
5	Slightly Agree	25	13%
6	Moderately agree	49	28%
7	Strongly agree	91	51%

Source: own study.

Manager perceptions of evaluating efforts to meet customer needs

Managers' opinions on the company's evaluation of its efforts to meet customer needs are generally positive, with 76% agreeing to some extent. 24% of managers are neutral or disagree, suggesting that although most are pleased with the evaluations, there may be some concerns or areas for improvement (Table 35).

Table 35: Manager perceptions of evaluating efforts to meet customer needs

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	5	3%
2	Moderately Disagree	10	6%
3	Slightly Disagree	7	5%
4	Neutral	15	10%
5	Slightly Agree	37	24%
6	Moderately agree	41	26%
7	Strongly agree	40	26%

Source: own study.

Manager perceptions of meeting customer needs

It is clear from the responses of managers that they feel the company has met the needs of the customers (Table 36). Most 93% agree, with 43% moderately agreeing and 32% strongly

agreeing. There are only 3% of respondents who disagree, and 5% are neutral. Management strongly believes that customer needs are being met at the company.

Table 36: Manager perceptions of meeting customer needs

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	1	1%
2	Moderately Disagree	1	1%
3	Slightly Disagree	1	1%
4	Neutral	7	5%
5	Slightly Agree	28	18%
6	Moderately agree	67	43%
7	Strongly agree	50	32%

Source: own study.

Manager perceptions of post-evaluation improvements in meeting customer needs

Managers are generally positive about the company's ability to meet customer needs after evaluation. Overall, 85% of respondents agree to varying degrees, while 6% disagree, and 8% are neutral (Table 37). According to this analysis, most managers agree that evaluations are effective in implementing improvements at the company.

Table 37: Manager perceptions of post-evaluation improvements in meeting Customer Needs

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	5	3%
2	Moderately Disagree	2	1%
3	Slightly Disagree	3	2%
4	Neutral	13	8%
5	Slightly Agree	29	19%
6	Moderately agree	59	38%
7	Strongly agree	44	28%

Source: own study.

Analysing competitors' strengths and weaknesses

While 73% of managers agree to some extent, 12% remain neutral, and 14% express some level of disagreement. This indicates that most firms in this study analyse their competitors'

weaknesses and strengths to understand their building blocks of competitive advantages (Table 38).

Table 38: Analysing competitors' strengths and weaknesses

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	1	1%
2	Moderately Disagree	5	3%
3	Slightly Disagree	16	10%
4	Neutral	19	12%
5	Slightly Agree	42	27%
6	Moderately agree	42	27%
7	Strongly agree	30	19%

Source: own study.

Implementing competitive strategy via competitive products/services

Among participants, 68% are somewhat in agreement, 27% are moderately in agreement, and 19% are strongly in agreement. The remaining 16% are neutral, and the remaining 16% are dissatisfied (Table 39). Based on these results, it can be concluded that most companies are implementing their competitive strategies through competitive products and services.

Table 39: Implementing competitive strategy via competitive products/services

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	4	3%
2	Moderately Disagree	15	10%
3	Slightly Disagree	5	3%
4	Neutral	25	16%
5	Slightly Agree	34	22%
6	Moderately agree	42	27%
7	Strongly agree	30	19%

Source: own study.

Encouragement for competitor-based strategy initiatives

Although 58% of managers are in agreement to some extent, only a portion of 27% are in disagreement. The remaining 15% are neutral as well (Table 40). Based on this information,

we can conclude that a significant number of managers in our sample supported initiatives based on competitor performance.

Table 40: Encouragement for competitor-based strategy initiatives

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	8	5%
2	Moderately Disagree	11	7%
3	Slightly Disagree	23	15%
4	Neutral	24	15%
5	Slightly Agree	43	28%
6	Moderately agree	26	17%
7	Strongly agree	20	13%

Source: own study.

Recognizing competitors in the industry

According to the survey, 72% of respondents agree that their companies meticulously recognize their competitors, 12% are neutral, and 17% disagree (Table 41). Even though most managers think the company implements an effective approach to identifying competitors, a significant minority disagree.

Table 41: Recognizing competitors in the industry

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	3	2%
2	Moderately Disagree	8	5%
3	Slightly Disagree	15	10%
4	Neutral	18	12%
5	Slightly Agree	31	20%
6	Moderately agree	46	30%
7	Strongly agree	34	22%

Source: own study.

Communication media across different departments

A strong 77% agree to some extent that there is effective communication media within their company to link different departments. However, 10% of managers are neutral, and 12% disagree (Table 42).

Table 42: Communication media across different departments

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	6	4%
2	Moderately Disagree	3	2%
3	Slightly Disagree	10	6%
4	Neutral	16	10%
5	Slightly Agree	31	20%
6	Moderately agree	42	27%
7	Strongly agree	47	30%

Source: own study.

Existence & implementation of standard operational procedures for customer service

Management generally responds positively to standard operational procedures (SOPs) for customer service within the organization. A total of 69% agree to some extent, though 20% are neutral or express some level of disagreement (Table 43), suggesting that, even though most managers recognize the existence of standard operating procedures for customer service, a significant minority feel there might be inconsistencies or room for improvement.

Table 43: Existence & implementation of standard operational procedures for customer service

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	7	5%
2	Moderately Disagree	12	8%
3	Slightly Disagree	15	10%
4	Neutral	15	10%
5	Slightly Agree	32	21%
6	Moderately agree	39	25%
7	Strongly agree	35	23%

Source: own study.

Updating customers' information during engagement

There is a strong majority of 77% who agree to some extent, with a combined 28% agreeing moderately and strongly. 8% hold a neutral position, and 14% disagree, suggesting that most managers believe the company keeps customer information up to date (Table 44).

Table 44: Updating customers' information during engagement

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	2	1%
2	Moderately Disagree	11	7%
3	Slightly Disagree	9	6%
4	Neutral	13	8%
5	Slightly Agree	32	21%
6	Moderately agree	44	28%
7	Strongly agree	44	28%

Source: own study.

Improvement of employee competencies for customer service

Table 45 shows the distribution of answers regarding the improvement of employee competencies for customer service. According to the survey, 74% respondents believe that their company improves employee competency, slightly to strongly. Only 18% of respondents disagreed to some extent with the survey results. A further 8% were neutral. According to the results, employees strongly believe that the company is improving their skills.

Table 45: Improvement of employee competencies for customer service

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	7	5%
2	Moderately Disagree	10	6%
3	Slightly Disagree	11	7%
4	Neutral	12	8%
5	Slightly Agree	33	21%
6	Moderately agree	49	32%
7	Strongly agree	33	21%

Source: own study.

4.2.5 Sustainable product attributes

Possession of an environmental product certificate

60% of managers confirmed in different degree that their firms possess environmental related certificate for production. A total of 15% of managers are neutral. Despite the majority believing that the company has an environmental product certificate, a significant portion doubts its existence (25%) (Table 46).

Table 46: Possession of an environmental product certificate

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	17	11%
2	Moderately Disagree	10	6%
3	Slightly Disagree	13	8%
4	Neutral	23	15%
5	Slightly Agree	26	17%
6	Moderately agree	31	20%
7	Strongly agree	35	23%

Source: own study.

Sustainable material usage in packaging and processes

46% of respondents agree in some degree that their firms use sustainable materials in their packaging and production process, but a substantial portion is neutral (18%) or disagrees (30%) (Table 47). Accordingly, despite some recognition of environmentally friendly processes or packaging, many managers are either uncertain or believe they are not properly implemented.

Table 47: Sustainable material usage in packaging and processes

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	10	5%
2	Moderately Disagree	8	8%
3	Slightly Disagree	12	17%
4	Neutral	27	18%
5	Slightly Agree	28	21%
6	Moderately agree	32	25%
7	Strongly agree	38	0%

Source: own study.

Obtaining ISO certification for environmental management

There is some agreement among 55% of managers that their firms invest in obtaining the ISO certificate for environmental protection, but some disagreement is evident among 27% of managers, and 18% remain neutral (Table 48). It appears that although approximately half of the managers are aware of the company's ISO environmental management certification, a substantial portion either doubts or does not know what the status of the certification is.

Table 48: Obtaining ISO certification for environmental management

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	21	14%
2	Moderately Disagree	9	6%
3	Slightly Disagree	11	7%
4	Neutral	28	18%
5	Slightly Agree	17	11%
6	Moderately agree	27	17%
7	Strongly agree	42	27%

Source: own study.

Reducing Emission with process optimization

With 71% expressing some agreement, most respondents believe process optimization reduces emissions. In contrast, 15% of respondents are neutral, indicating uncertainty (Table 49). There are only 15% of respondents who disagree, suggesting that process optimization is generally effective.

Table 49: Reducing Emission with process optimization

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	10	6%
2	Moderately Disagree	12	8%
3	Slightly Disagree	1	1%
4	Neutral	23	15%
5	Slightly Agree	31	20%
6	Moderately agree	43	28%
7	Strongly agree	35	23%

Source: own study.

Attitudes towards CSR-based quality products

56% of respondents expressed varying degrees of agreement with CSR-based quality products. 14% are slightly in agreement, 24% are moderately in agreement, and 18% are strongly in agreement. 21% remain neutral, reflecting uncertainty or indifference. There is relatively little disagreement, with 23% of respondents disagreeing to varying degrees (Table 50).

Table 50: Attitudes towards CSR-based quality products

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	13	8%
2	Moderately Disagree	15	10%
3	Slightly Disagree	7	5%
4	Neutral	33	21%
5	Slightly Agree	22	14%
6	Moderately agree	37	24%
7	Strongly agree	28	18%

Source: own study.

Confidence in product reliability and durability

Most respondents view reliability and durability of products very positively, with 82% agreeing. A total of 8% slightly agree, 25% moderately agree, and 57% strongly agree. The remaining 6% are neutral, while 4% disagree to varying degrees (Table 51). There is a strong sense of confidence in the reliability and durability of their products.

Table 51: Confidence in product reliability and durability

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	3	2%
2	Moderately Disagree	1	1%
3	Slightly Disagree	1	1%
4	Neutral	10	6%
5	Slightly Agree	13	8%
6	Moderately agree	39	25%
7	Strongly agree	88	57%

Source: own study.

Opinions on product labelling and information

According to 84% of respondents, product labelling and information are implemented as part of company policy. Only 7% express disagreement, while 10% are neutral (Table 52). Overall, managers approve of the clarity and adequacy of product labelling and information within their organization.

Table 52: Opinions on product labelling and information

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	4	3%
2	Moderately Disagree	2	1%
3	Slightly Disagree	4	3%
4	Neutral	15	10%
5	Slightly Agree	22	14%
6	Moderately agree	39	25%
7	Strongly agree	69	45%

Source: own study.

Perceived value of offering fair trade products

The offer of fair-trade products is disfavoured by 45% of respondents, 27% strongly disagreeing, and 18% moderately or slightly disagreeing. There are 22% who remain neutral and 23% who express some level of agreement, including 9% who agree slightly, 10% who agree moderately, and 14% who agree strongly (Table 53). Overall, there is a mixed response to fair trade offerings, with noticeable scepticism.

Table 53: Perceived value of offering fair trade products

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	42	27%
2	Moderately Disagree	14	9%
3	Slightly Disagree	14	9%
4	Neutral	34	22%
5	Slightly Agree	14	9%
6	Moderately agree	15	10%
7	Strongly agree	22	14%

Source: own study.

Perceived value on customers' health & safety

There is a strong majority of 84% who agree on different levels. There are only 9% of respondents who are neutral, while 6% express some level of disagreement. In this context, it is evident that firms place health and safety at the top of their priority list (Table 54)

Table 54: Perceived value on customers' health & safety

Scale	Agreement Scale	Frequency Table	Percentage
1	Strongly Disagree	3	2%
2	Moderately Disagree	2	1%
3	Slightly Disagree	5	3%
4	Neutral	14	9%
5	Slightly Agree	11	7%
6	Moderately agree	27	17%
7	Strongly agree	93	60%

Source: own study.

4.3 Validation of measurement model – Stage 1

A high factor loading (typically 0.7 or higher) suggests that the indicators measure the underlying construct effectively, thus supporting convergent validity (Sarstedt et al., 2019). Factor loadings for all indicators exceed 0.7, except for SSPA, which reaches 0.645 (Table 55). Loadings between 0.4-0.7 can be acceptable, as long as AVE and CR are within acceptable limits, as per Hair et al. (2017) (Table 56).

Table 55: Outer loading of each indicator in the measurement model items

Variables	Cus ori	Int-cor	Com ori	Innov	Pro	Risk	ESPA	FP	SSPA	Sat	SP
EMO1	0.771										
EMO2	0.854										
EMO4	0.826										
EMO10		0.812									
EMO11		0.828									
EMO12		0.860									
EMO5			0.813								
EMO6			0.815								
EMO7			0.886								
EO1				0.742							
EO2				0.760							
EO3				0.806							
EO4					0.697						
EO5					0.815						
EO6					0.743						
EO7						0.821					
EO8						0.835					
EO9						0.818					
ESPA 1							0.854				
ESPA 2							0.813				
ESPA 3							0.747				
ESPA 4							0.835				
ESPA 5							0.862				
EP1								0.833			
EP2								0.924			
EP3								0.830			
SSPA 1									0.734		
SSPA 2									0.799		
SSPA 3									0.646		
SSPA 4									0.754		
EP7										0.912	
EP8										0.907	
EP9										0.921	
EP4											0.909
EP5											0.882
EP6											0.892

Note: Cus ori: Customer Orientation, Int-cor: Inter-coordination, Com ori: Competitor orientation, Innov: Innovativeness.

Source: own study.

Table 56: Result of convergent validity - Stage 1

Variable	Cronbach's alpha	Composite reliability (rho_c)	Average variance extracted (AVE)
EMO 1	0.751	0.858	0.669
EMO 3	0.781	0.872	0.695
EMO2	0.788	0.877	0.703
EO 1	0.656	0.813	0.593
EO 2	0.626	0.797	0.567
EO 3	0.765	0.865	0.68
ESPA	0.88	0.913	0.677
FP	0.827	0.897	0.745
SSPA	0.714	0.824	0.541
SAT	0.901	0.938	0.834
SP	0.875	0.923	0.8

Source: own study.

According to Fornell and Larcker (1981), discriminant validity can be achieved when AVE square roots exceed correlations with other constructs. As shows in Table 57, this criterion has been met. Figure 35 shows the research model in stage 1.

Table 57: Results of discriminant validity - Fornell-Larcker Criterion

Variable	Cus Ori	Int-Cor	Com Ori	Innov	Pro	Risk	ESPA	FP	SSPA	Sat	SP
Cus Ori	0.818										
Int-Cor	0.648	0.834									
Com Ori	0.574	0.490	0.839								
Innov	0.074	0.169	0.036	0.770							
Pro	0.359	0.267	0.315	0.330	0.753						
Risk	0.270	0.284	0.259	0.457	0.501	0.825					
ESPA	0.351	0.566	0.418	0.204	0.135	0.226	0.823				
FP	0.144	0.255	0.155	0.074	0.210	0.138	0.209	0.863			
SSPA	0.450	0.472	0.398	0.117	0.257	0.258	0.607	0.210	0.736		
Sat	0.117	0.231	0.229	0.144	0.214	0.186	0.271	0.692	0.176	0.913	
SP	0.105	0.238	0.145	0.200	0.319	0.216	0.158	0.665	0.142	0.675	0.894

Note: Cus ori: Customer Orientation, Int-cor: Inter-coordination, Com ori: Competitor orientation, Innov: Innovativeness.

Source: own study.

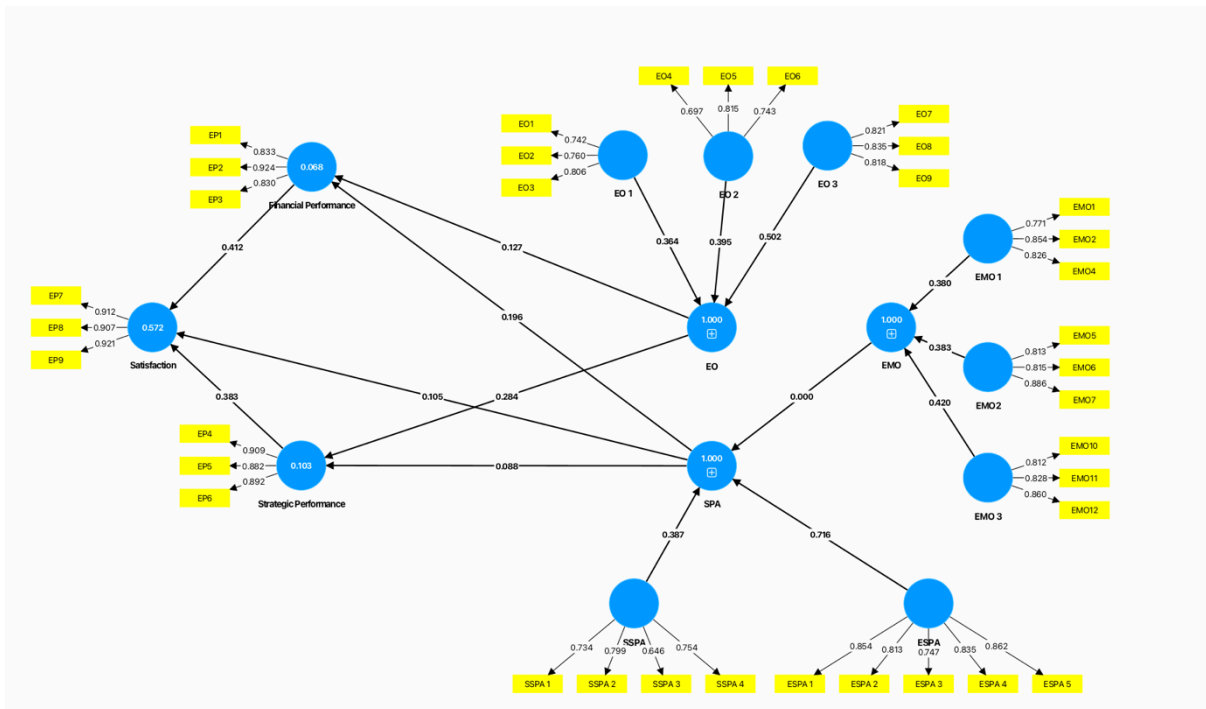


Figure 35: Stage 1 - research model

Source: own study.

4.4 Validation of measurement model – Stage 2

HOCs formative measurement model is shown in Figure 30. Based on the convergent validity, all path coefficients are equal to 0.7 threshold or higher, confirming the validity of the model at the second stage (Hair et al., 2017) (Table 58).

Table 58: Result of convergent validity - Stage 2

Variable	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
EMO	0.800	0.812	0.882	0.713
EO	0.700	0.760	0.824	0.612
Financial Performance	0.827	0.833	0.897	0.745
SPA	0.700	0.702	0.861	0.756
Satisfaction	0.901	0.905	0.938	0.834
Strategic Performance	0.875	0.878	0.923	0.800

Source: own study.

VIF - Formative Higher-Order Constructs (HOCs) multicollinearity test

VIFs for all the variables are below 5, with the highest one being 3,085, indicating no multicollinear problems (Table 59).

Table 59: Result of multicollinearity test (VIF)

Variables	VIF
EP1	1.963
EP2	2.791
EP3	1.829
EP4	2.574
EP5	2.154
EP6	2.458
EP7	2.624
EP8	2.834
EP9	3.085
Com Ori	1.546
Cus Ori	2.026
ESPA	1.363
Inno	1.360
Int-cor	1.790
Pro	1.286
Risk	1.530
SSPA	1.363

Note: Cus ori: Customer Orientation, Int-cor: Inter-coordination, Com ori: Competitor orientation, Innov: Innovativeness.

Source: own study.

Heterotrait-Monotrait Ratio (HTMT): reflective Lower-Order Constructs (LOCs)

Validity test

To assess discriminant validity, the research compares the correlations between different constructs (heterotrait) with the correlations within the same construct (monotrait) using the Heterotrait-Monotrait Ratio (HTMT). Good discriminant validity is generally indicated by an HTMT value below 0.85 (Hair et al., 2017). HTMT for all variables are below 0.85, with the highest one being 0,78, indicating constructs are sufficiently distinct from each other (Table 58).

Table 60: Discriminant validity for LOCs – HTMT ratio

Variables	EMO	EO	FP	SPA	Sat	SP
EMO						
EO	0.456					
FP	0.269	0.238				
SPA	0.776	0.405	0.289			
Sat	0.269	0.291	0.799	0.282		
SP	0.230	0.396	0.783	0.227	0.757	

Source: own study.

In the next step and before testing the hypothesis, outer loadings of LOCs and HOCs are tested and results presented in Table 61. All loadings of LOCs and HOCs are above 0.7 that confirm the reliability of measurement items. Figures 36 and 37 show the PLS algorithm and bootstrapping analysis of the research model in stage 2.

Table 61: Outer loading of HOCs & LOCs

Variables	Outer loadings
EP1 <- Financial Performance	0.834
EP2 <- Financial Performance	0.923
EP3 <- Financial Performance	0.829
EP4 <- Strategic Performance	0.910
EP5 <- Strategic Performance	0.881
EP6 <- Strategic Performance	0.892
EP7 <- Satisfaction	0.913
EP8 <- Satisfaction	0.906
EP9 <- Satisfaction	0.920
LV scores - Comp Ori <- EMO	0.797
LV scores - Cust Ori <- EMO	0.867
LV scores - ESPA <- SPA	0.899
LV scores - Innovativeness <- EO	0.859
LV scores - Int cor <- EMO	0.868
LV scores - Proactiveness <- EO	0.671
LV scores - Risk Taking <- EO	0.805
LV scores - SSPA <- SPA	0.840

Note: Cus ori: Customer Orientation, Int-cor: Inter-coordination, Com ori: Competitor orientation, Innov: Innovativeness.

Source: own study.

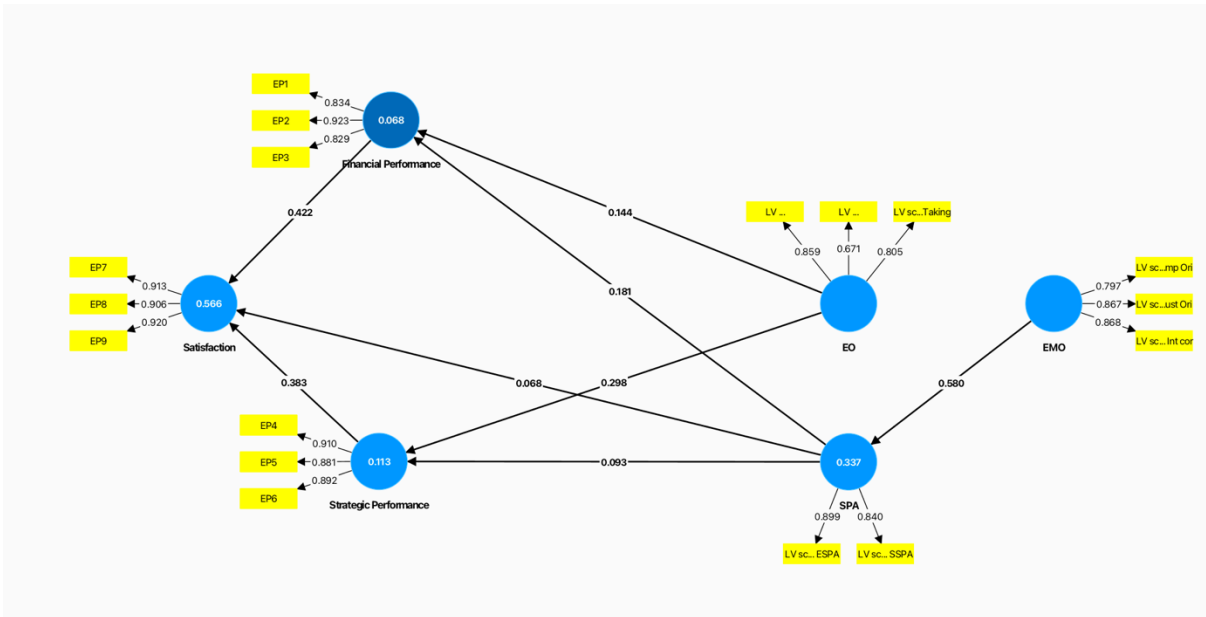


Figure 36: Stage 2 – PLS algorithm analysis

Source: Source: own study.

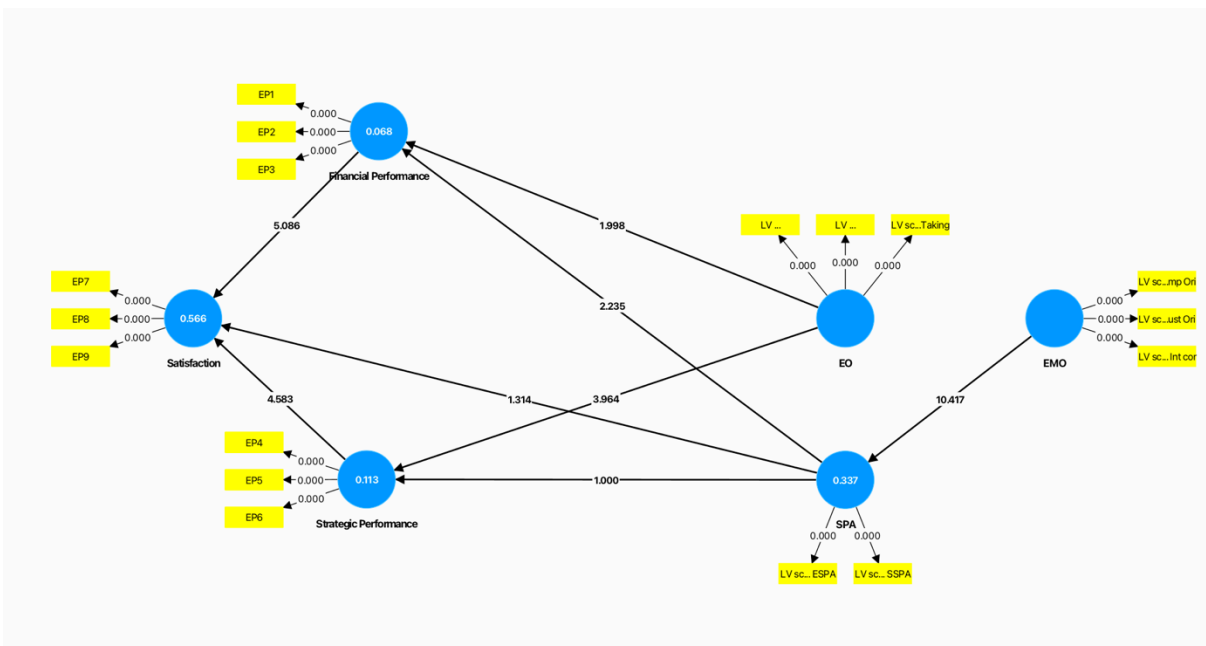


Figure 37: Stage 2 – bootstrapping

Source: own study.

4.5 Assessing model fit

As follow Henseler et al. (2009), the coefficient of determination (R^2) is used to check the inner model. Based on the research, R^2 value should be interpreted as follows; 0.75 and above: Significant explanatory power, 0.50 to 0.74: Moderate explanatory power, 0.25 to 0.49: Weak explanatory power, below 0.25: Very weak explanatory power. In this research, due to the complexity and number of indicators, adjusted R^2 will be used. The main dependent variable in this model was the managers' satisfaction with export operation that scored 0.559 that can be considered as a moderate value. This means that almost 56% of variance on SAT can be explained by FP, SP, SPA, EO and EMO. The second dependent variable in this model is SPA that score 0.333, that indicates 33% of variance on SPA could be justified by EMO, still could be consider as a moderate power. SP and FP recorded 0.103 and 0.057 R^2 respectively, that would be considered as dependent variables with weak explanatory powers (Table 62).

Table 62: Result of inner model validity

Variables	R-square (R^2)	R-square (R^2) adjusted
FP	0.068	0.057
SPA	0.337	0.333
Sat	0.566	0.559
SP	0.113	0.103

Source: own study.

4.6 Testing hypotheses

The SmartPLS 4 software is used to test both the inner and outer model using the PLS Algorithm and bootstrapping function. In this procedure, 5000 subsamples are taken from the original sample, follows by bootstrapping standard errors, which provide approximate T-values for significance testing (Hair et al., 2017). In Table 63, path coefficients (Mean, STSEV, T-Values and P Value) for H1-H8 are presented.

Table 63: Path coefficients and statistical significance for the structural model

Hypothesis	Relationships	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
H1	FP -> SAT	0.422	0.424	0.083	5.086	0.000***
H2	SP -> SAT	0.383	0.382	0.084	4.583	0.000***
H3	SPA -> FP	0.181	0.181	0.081	2.235	0.025*
H4	SPA -> SP	0.093	0.092	0.093	1.000	0.317
H5	SPA-> SAT	0.068	0.068	0.052	1.314	0.189
H6	EO-> FP	0.144	0.158	0.072	1.998	0.046*
H7	EO -> SP	0.298	0.312	0.075	3.964	0.000***
H8	EMO -> SPA	0.580	0.585	0.056	10.417	0.000***

Notes: ***significant at 0.001, **significant at 0.01, *significant at 0.05

Source: own study.

H1: SMEs' financial performance impact on satisfaction with export operation in the German manufacturing industry.

The first hypothesis is proposed to check the impact of financial performance on general satisfaction of managers with the export operation. This hypothesis is designed based on the EDT conceptual framework (Patterson et al., 1997) and the idea is if managers' perception positively disconfirm by the financial performance of the company. In this case, satisfaction is linked to export operation and financial performance is reflected by export ventures' profitability, sales volume and export growth rate borrowed from EXPERF conceptual framework (Zou et al., 1998). A standardized beta coefficient for financial performance (FP) and SAT is 0.422, as shows in Table 63. This is because the aim of any business is to increase shareholder value, and financial return is one of the important decision-making factors. The score indicates that financial performance has a positive relationship with satisfaction with export. Further, the path analysis shows that financial performance has a statistically significant positive relationship with satisfaction with export since the t-statistic 5.086 is greater than 1.96, and $P = 0.000 < 0.001$. Accordingly, we accept H1 that SMEs' financial performance impacts satisfaction with export operations in the German manufacturing industry.

H2: SMEs' strategic performance impact on satisfaction with export operation in the German manufacturing industry.

The second hypothesis is about investigating the effect of firm's strategic performance on satisfaction. In the same vein, the conceptualisation of satisfaction is taken from (Patterson et al., 1997) and strategic performance is reflected by export ventures 'improvement of global competitiveness, strengthening an exporter's strategic position in international market and improvement of global market share based on the EXPERF framework (Zou et al., 1998). A standardised beta coefficient for strategic performance and satisfaction with export operation is 0.383, is shown in Table 63. The score indicates that SP has a positive relationship to SAT. Further, the path analysis shows that SP has a statistically significant positive relationship to SAT since the t-statistic 4.583 is greater than 1.96, and $P = 0.000 < 0.001$. Accordingly, we accept H2 that the SMEs' strategic performance impact on satisfaction with export operation in the German manufacturing industry.

H3: Sustainable product attributes impact on financial performance in the German manufacturing industry.

The third hypothesis is designed to assess the impact of firms' environmental and social product attributes on firms' financial performance. The concept of SPA is taken from Ullah et al. (2021) and financial performance concept is taken from EXPERF framework (Zou et al., 1998). Therefore, the research is interested to know if an exporter's strategic direction toward developing sustainable product or services would lead to any forms of financial return. A standardised path coefficient for SPA and FP is 0.181, is shown in Table 63. The score indicates that SPA has a positive relationship to FP. Further, the path analysis shows that SPA has a statistically significant positive relationship to FP since the t-statistic 2.235 is greater than 1.96, and $P = 0.025 < 0.05$. Accordingly, we accept H3 that SPA impacts on FP in the German manufacturing industry.

H4: Sustainable product attributes impact on strategic performance in the German manufacturing industry.

Hypothesis 4 is designed to check if the strategy of exporters in producing environmentally friendly product would lead to having a strategic position in the global market, means if

exporters benefit from having enhancement in global market share or stronger international market position. Similarly to the previous hypothesis, SPA concept is developed based on the Ullah et al. (2021) and SP is conceptualised according to the EXPERF (Zou et al., 1998). A standardised path coefficient for SPA and SP is 0.093, is shown in Table 63. The score indicates that SPA has a positive relationship to SP. Further, the path analysis shows that SPA has a statistically significant positive relationship to SP since the t-statistic 1.000 is lower than 1.96, and $P = 0.317 > 0.05$. Accordingly, we rejected H4 that SPA impacts on SP in the German manufacturing industry.

H5: Sustainable product attributes impact on general satisfaction with export operation in the German manufacturing industry.

Hypothesis 5 is developed to investigate if the exporters' strategic move toward making environmentally friendly product or service would lead to general satisfaction of managers with export operation. Similarly to the previous hypothesis, SPA concept is developed based on the Ullah et al. (2021) and SAT is conceptualised according to the EXPERF (Zou et al., 1998) and EDT theoretical understanding (Patterson et al., 1997). A standardised path coefficient for SPA and SAT is 0.068, is shown in Table 63. The score indicates that SPA has a positive relationship to SAT. Further, the path analysis shows that SPA has a statistically significant positive relationship to SAT since the t-statistic 1.314 is lower than 1.96, and $P = 0.189 > 0.05$. Accordingly, we reject H5 that SPA impacts on SAT in the German manufacturing industry.

H6: Entrepreneurial orientation impacts on financial performance in the German manufacturing industry.

Sixth hypothesis is developed to check the impact of entrepreneurial orientation on exporters' financial performance. Exporters' EO is conceptualised according to Wach (2015) as a formative variable that includes exporters' innovativeness, proactiveness and risk-taking behaviour in international market. On the other hand, FP is conceptualised according to EXPERF (Zou et al., 1998). A standardised path coefficient for entrepreneurial orientation (EO) and financial performance (FP) is 0.144, is shown in Table 63. The score indicates that EO has a positive relationship to FP. Further, the path analysis shows that EO has a

statistically significant positive relationship to FP since the t-statistic 1.998 is greater than 1.96, and $P= 0.046 < 0.05$. Accordingly, we accept H6 that EO impacts on FP in the German manufacturing industry.

H7: Entrepreneurial orientation impacts on strategic performance in the German manufacturing industry.

Hypothesis 7 is designed to assess the influence of entrepreneurial orientation on exporters' strategic performance. Exporters' EO is conceptualised according to Wach (2015) as a formative variable that includes exporters' innovativeness, proactiveness and risk-taking behaviour in international market. on the other hand, FP is conceptualised according to EXPERF (Zou et al., 1998). In other words, if exporters' entrepreneurial behaviour would lead to strengthening exporters market position by having a larger international market share. A standardised path coefficient for Entrepreneurial orientation (EO) and strategic performance (SP) is 0.298, is shown in Table 63. The score indicates that EO has a positive relationship to SP Further, the path analysis shows that EO has a statistically significant positive relationship to SP since the t-statistic 3.964 is greater than 1.96, and $P= 0.000 < 0.001$. Accordingly, we accept H7 that EO impacts on SP in the German manufacturing industry.

H8: Export market orientation impacts on the SMEs' sustainable product attributes in German manufacturing industry.

The last hypothesis is developed to estimate the effect of exporters market orientation on firms' sustainable product attributes. SPA concept that is conceptualised as a formative variable (includes social and environmental aspects in their product/service development) is designed according to Ullah et al (2021). EMO is seen as a corporate culture MIKTOR approach developed by Narver and Slater (1990). In this hypothesis the research tries to explore if a firm's behaviour towards customer orientation, competitor orientation and inter-functional coordination has a positive impact of development of sustainable products or service. A standardised path coefficient for EMO and SPA is 0.580, is shown in Table 63. The score indicates that EMO has a positive relationship to SPA. Further, the path analysis shows that EMO has a statistically significant positive relationship to SPA since the t-

statistic 10.417 is greater than 1.96, and $P= 0.000 < 0.001$. Accordingly, we accept H8 that EMO impacts on the SMEs' SPA in German manufacturing industry

4.7 Indirect relationships in the structural model

In Table 64 of this report, we demonstrate that the mediation analysis or indirect relationships in the model. According to the findings, while SP does not mediate the impact of SPA on SAT as the t-statistic 1.853 is lower than 1.96, and $P= 0.342 > 0.05$, but SPA influence SAT via FP since the t-statistic 1.986 is greater than 1.96, and $P= 0.047 < 0.05$. The mediation analysis presents no evidence of SPA mediating the relationship between SAT and EMO since t-statistic 1.296 is lower than 1.96 and $P=0.195 > 0.05$, nor that SPA mediates the relationship between SP and EMO since t-statistic 1.010 is lower than 1.96 and $P=0.312 > 0.05$. However, EMO influences FP via SPA since the t-statistic 2.276 is greater than 1.96, and $P= 0.023 < 0.05$. In addition, EO does not indirectly influence SAT via FP since the t-statistic 1.853 is lower than 1.96, and $P= 0.064 > 0.05$, however SP mediates the relation between EO and SAT as t-statistic 3.090 is greater than 1.96, and $P= 0.002 < 0.01$. lastly, EMO indirectly via SPA and FP, influences SAT as t-statistic 2.005 is greater than 1.96, and $P= 0.045 < 0.05$, while there is no mediation effect of SPA and SP on SAT from EMO as the t-statistic 0.962 is lower than 1.96, and $P= 0.336 > 0.05$.

Table 64: Indirect relations of structural model

Indirect relation	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
EMO -> SPA -> SAT	0.039	0.040	0.030	1.296	0.195
EMO -> SPA -> SP	0.054	0.052	0.053	1.010	0.312
SPA -> SP -> SAT	0.036	0.036	0.037	0.950	0.342
EO -> FP -> SAT	0.061	0.067	0.033	1.853	0.064
SPA -> FP -> SAT	0.076	0.077	0.038	1.986	0.047*
EMO -> SPA -> FP -> SAT	0.044	0.045	0.022	2.005	0.045*
EMO -> SPA -> SP -> SAT	0.021	0.020	0.021	0.962	0.336
EMO -> SPA -> FP	0.105	0.105	0.046	2.276	0.023*
EO -> SP -> SAT	0.114	0.118	0.037	3.090	0.002**

Notes: ***significant at 0.001, **significant at 0.01, *significant at 0.05

Source: own study.

5. Discussion of the empirical results

5.1 SMEs' financial performance impact on satisfaction with export operation in the German manufacturing industry

Hypothesis one is accepted. SMEs' financial performance in this research measured via assessing firms' profitability, export volume and growth rate. The positive dis-confirmation based on the EDT concept shows that the financial performance of company is higher or at least equal to the expectation of decision maker. This leads to the satisfaction and most probably continuation of export operation. This findings resonates with the findings of other studies that mentioned that achieving strategic financial goal for executives due to the pressures of firm's top management is crucial (Ahamed & Skallerud, 2015; Siddiqui et al., 2023). It is important to consider the liability of smallness and limited resources SMEs had, thus having financial return would be important to enable them with their export activities. In addition, according to the integrative model, German SMEs are experiencing very important episode of "Russia-Ukraine" war. Due to their reliance on energy, German SMEs faced additional pressure during this episode. The Russian energy providers are the main energy suppliers to Germany, and German manufacturing SMEs consume the most energy (Breitkreutz et al., 2023).

A study by Alhitmi and Ndambuki (2023) find that the war in Russia and Ukraine has severely affected supply chain processes of German SMEs, so they need financial support in order to face such challenging time. This indirectly highlights the importance of financial performance for SMEs to continue their operation. Of course, the world economy is still in recovery from Covid-19, while it hit with this war.

One also needs to consider the indirect impact of profitability from export activities, which mean higher economies of scale and reaching to higher efficiency which provide certain advantages for SMEs in the domestic market. Having a closer look at the respondents' answer indicates that more than half of the exporters are happy with the profitability (67%) and sales volume generated from export operation (61%), however the story for the growth rate is a bit different. Although growth rate is positive but 45% of managers do not perceive any growth. This could be another negative impact of the current economical-political

episode world are experiencing. Still, 44% of managers, report that their export operation turns to results they were expected. Wang and Olsen (2002) argue that level of satisfaction of two managers with similar export sales or profitability could be different. This might be linked to their intention or export goals. In this research 63% of managers are satisfied with their export performance and found their firms' successful in this respect, which is the positive disconfirmation of their expectations (Ahamed & Skallerud, 2015; Patterson et al., 1997).

5.2 SMEs' strategic performance impact on satisfaction with export operation in the German manufacturing industry

Hypothesis 2 is accepted. SMEs' strategic performance is assessed by enhanced global competitiveness, strategic position and global market share. According to the EDT concept, the strategic performance of SMEs is higher or at least equal to the expectations of decision makers. As with the financial performance, this dimension is also a reason for satisfaction and most likely for the export activities to continue. Confirmation of such hypothesis means that SMEs in this research are managed to reach their strategic goal in exporting (Ural, 2009). Further penetration in international markets and future growth would be guaranteed by higher strategic performance. Based on Zou et al. (1998), this could also be an indicator to support a company's marketing strategy. In the research, exporting is viewed as part of the firm's marketing program, and financial success and a strong strategic position are considered indicators of success.

The descriptive result regarding the strategic performance shows that almost 76% of managers believed that their firms strengthen their position in the global market and 68% report that their export ventures improve their global competitiveness and gaining more market share (63%). Although majority of the managers have a positive perspective toward the strategic direction of their export ventures, yet 44% of managers are not so happy with the export operation results and their expectation was yet to be met.

However, driving forces behind the satisfaction of managers linked directly to improving the global competitiveness and their international position in the market. This resonates the concept of sustainable competitive advantage that firms need to achieve financial return for number of years that would be impossible without having further growth in the global

market. This results are inconsistent with the findings of Ahamed and Skallerud (2015) that found no significant relationship among exporters' strategic performance and exporters' satisfaction in the ready-made garments industry in Bangladesh. This research argues that for Bangladeshi exporters actual sales are more important than improvement of organisational capability or their future market position. However, for managers in Germany, both financial return and long-term strategic benefits of engaging in the export operations determined the success. This could differentiate the mindset of managers in a developed and emerging markets. This can be explained by the fact that managers in emerging or developing economies are under pressure to be successful in short term that might lead to scarification of long-term benefits. Another reason behind the negative perception of satisfaction could be managers' anticipation on the world political changes. During the data collection there was speculation on having Trump running for presidency in United States again. Having said that his administration always argued and threatening Germany to impose of tariffs on their exporting goods. In the time of writing this chapter, Trump became the next president of the US and imposed initiated trade war with Canada, Mexico and China. Although US has not yet imposed any tariffs to Germany directly but some of German companies negatively impacted from tariffs on China as they have their manufacturing plans or suppliers in China. This research result is confirmed the proposed idea of Madsen (1998) that managerial satisfaction towards export activities is multidimensional.

5.3 Sustainable product attributes impact on financial performance in the German manufacturing industry.

Hypothesis 3 is accepted. SPA in this research measured by considering both environmental and social attributes in exporters' product or service. For measuring the environmental aspect, the research investigated implication of having environmental certificate, ISO environmental certificate, using sustainable products, reduction of emission, considering environmental aspect in developing products (Ullah et al., 2021; Villena & Souto-Pérez, 2016). Regarding the social aspects, the study explored the effect of criteria such as reliability and durability, labelling & information, fair trade concept, and considering customer's healthy and safe (Awan et al., 2018).

Findings of the study in this respect shows that implementing products and services with sustainable attributes significantly improved the financial performance of exporters. German exporters with their sustainable offering reached to higher profitability, export volume and their export growth rate enhanced. The findings of our study are in agreement with other scholars (Christmann & Taylor, 2001; Padilla-Lozano & Collazzo, 2022; Ullah et al., 2021). Similarly in their research those firms that are implemented environmental management practice, have experienced significant improvement of their financial performance.

Exporters could distinguish themselves with such eco-friendly product in eyes of customers and encourage them toward green purchasing (Padilla-Lozano & Collazzo, 2022). Our sample includes 60% of companies that have acquired environmental certificates. Nearly half of them obtained ISO certificates. Customers' decision-making would be influenced by such certifications (Leonidou et al., 2017). Approximately 46% of managers are confirmed their company uses recycled or sustainable materials, which resonates with eco-efficiency and helps to reduce costs (Hu et al., 2011). Additionally, 71% of exporters regenerate their systems to optimize their processes, resulting in reduced emissions. This strategy not only helps them distinguish themselves from their competitors, it is also a novel method of managing resources rationally and reach to efficiency (Padilla-Lozano & Collazzo, 2022).

Apart from the environmental aspects, social aspects also play an important role in performance of exporters in this study. The descriptive analysis shows that managers are confirmed the implementation of all social attributes in their firm's strategy except offering fair trade product or services. Among our research samples, only 33% of firms consider fair-trade options and 67% either are disagree or have neutral opinion. One of the main reasons behind such response could be complexity of understanding of fair-trade or respondent are not quite sure about procurement process in their firms.

From a definition of FINE (a network of four Fair Trade Organisation), *“Fair Trade is a trading partnership, based on dialogue, transparency and respect, that seeks greater equity in international trade. It contributes to sustainable development by offering better trading conditions to, and securing the rights of, disadvantaged producers and workers – especially in the South. Fair Trade organisations (backed by consumers) are actively engaged in supporting producers in awareness raising and in campaigning for changes in the rules and practices of conventional international trade”* (Bowen, 2001, p. 24) taken from Bezencon

and Blili (2009). It is therefore essential for firms to control their supply chain and to be transparent to implement fair trade practice as part of their strategic plans.

Other social dimension including offering high quality production (reliable & durable), product labelling and information and customers' safety and healthy have received the strong confirmation of managers (all above 80%). In short, social and environmental attributes have been consider as part of product export strategies by SMEs in Germany that led to better profitability, sales volume and increased their growth rate. From the other perspective, it can be deduced that customers show positive responses to company CSR strategies. These findings are confirmed by Ullah et al. (2021) results that report positive and significant relations among American exporters' SPA, ESPA and SSPA strategy. The findings of this research is inconsistency with Miron and Petrache (2012) that reported improvements in corporate social performance do not necessarily follow from improvements in financial performance, as well as no guarantee that improving corporate social performance will result in higher profits.

Another possible argument for a better financial performance could be the support SMEs would receive from German Government and EU direct or indirectly due to their active participation in environmental products (İpek et al., 2023). Institution offers variety of incentives such as low interest loan (green loan), funding options for environmental innovation projects via Horizon Europe or other state level program. Such support could indirectly reduce the R&D cost and improve firms' efficiency. Needless to say how much exporters' liquidity important in such a challenging episode (Veugelers et al., 2015).

A positive financial result could also be explained by the efforts made by German export SMEs to build trust with their clients by obtaining environmental certificates and distinguishing their offerings with high quality CSR-based products/services. Eco-friendly consumers gain a stronger understanding of "Made in Germany" high quality concept products through labels and supporting documents. CSR-based offerings are among German companies' pioneering offerings in the global market, according to scholars. A new block of competitive advantage is built for German SMEs by moving toward eco-friendly products and services, as is mentioned by Bartlett and Ghoshal (2002).

5.4 Sustainable product attributes impact on strategic performance in the German manufacturing industry.

Hypothesis H4 is rejected. This research also investigates the impact of sustainable product attributes on strategic performance of German SMEs. As mentioned in the earlier hypothesis, German SMEs' SPA includes their environmental and social practices as followed Ullah et al. (2021). On the other hand, SP also measured by EXPERF framework by subjective measurement of exporters' global competitiveness, their strategic position in international market and their global market shares (Zou et al., 1998). According to our findings SPA does not support German exporters SMEs to enhance their SP. Managers believed that SPA does not help their companies to reach to enhanced global market position or reached to certain global competitiveness. From the perspective of this doctoral research, there might be three main justifications for this negative relation.

First is the diversity of markets for German manufacturing SMEs. With considering the fact that almost 68.5% of German exports are to EU (BMWK, 2019), almost one third of products/services exported to other markets that might not care so much about the sustainable oriented products. Based on the European Green Deal, all exporters to the EU must follow certain sustainability guidelines and standards (Fetting, 2020). Some key aspects of this planning are climate-neutral by 2050, EU's Circular Economy Action Plan, REACH (Registration, Evaluation, Authorisation, and Restriction of Chemicals), RoHS (Restriction of Hazardous Substances), Eco-design Directive and labelling and Certifications. Thus, according to the set plans, German SMEs are now experiencing EU institutional guidelines that forced them to change their strategy. The researcher assumption is such guidelines might not be applicable for other markets.

For instance, with considering the diversity of international markets for German exporters, this research concludes that having sustainable products might not be the priority in less developed countries. Obviously, cost of offering sustainable product is higher and therefore such offering might not help exporters to build-up their global market share or global competitiveness in the short term. Sooner or later, sustainability practice will become a new norm, enables German SMEs to benefit from such competencies in the global market.

Similar findings report by Ng and Rezaee (2015) that investigate how economic sustainability performance and ESG sustainability interactively affect cost of equity capital in more than 3000 firms during 1990-2013, concluded that there is a negative relationship among non-financial ESG sustainability and cost of equity. Additionally, the same researchers reported that companies need additional resources to sustain social sustainability, but stakeholders did not benefit from it.

Hence, offering sustainable products/services are costly that might not be profitable in all markets (this research would not be interested to call it niche markets), therefore it is difficult to call it a global market or global customers yet. To be a global player, a firm needs to invest resources and have a closed understanding of their financial stakeholders in this long-term strategic direction. As it is concluded by Rajnoha and Lesníková (2016) that investigate the impact of firms resources on the sustainability activities of small, medium and large enterprises in Slovakia, the larger the enterprise is, the greater the focus on environmental issues and social opportunities. Ullah et al (2021) also reported that company size positively influenced on SPA, ESPA And SSPA in American manufacturing sectors. In this case, size could be and indicator for factors of production (capital & labour).

lastly, this research would agree with the conclusion of Rajnoha et al. (2016) that businesses face a challenge in sustainable development because it requires changing consumerist, short-term-oriented production and consumption patterns. Both systems require defining corporate strategies, which determine the indicators of achieving objectives. A customisable system for measuring and reflecting enterprise needs is essential to determining a business's sustainability status (past & future). Therefore, the current EXPERF measurement could be improved to measure the strategic performance of SMEs with considering their sustainability approaches. This might one of the reasons that some researchers used environmental performance as a dependent variable in their researches (Al-Ghwayeen & Abdallah, 2018; Joo et al., 2018).

5.5 Sustainable product attributes impact on general satisfaction with export operation in the German manufacturing industry.

Hypothesis 5 is rejected. The research is proposed to check the impact of sustainable product attributes on general satisfaction of managers with the export operation. The EDT conceptual

framework underpins the design of this hypothesis. As elaborate in the last two hypothesis SPA was measured via assessing exporters' environmental and social impact and satisfaction also measure via EXPERF framework that are managers' perception toward satisfaction with the export venture, success of export ventures and alignment of decision makers' expectation and final export outputs (Zou et al., 1998). The results show no significant impact of SPA on SAT. It means that 2nd scenario of EDT has happened (Patterson et al., 1997) that led to the negatively dis-confirmation. This research could assume two scenarios to justify the result of this hypothesis. Firstly, with considering the conclusion of the pervious hypothesises, this research has argued that satisfaction of managers from export activities depends not only on the FP (H1) but also the SP (H2). Therefore, managers not only expect certain financial return in short terms but also reaching to certain global market share and competitiveness, to be satisfied. Although the SPA leads to FP but there is no relation among the exporters' SPA and SP.

Secondly, having a closer look into their satisfaction's indicators, 63% of managers are perceived their export venture successful and are satisfied with their performance but almost half of them believe that the export venture meets their expectations. So, it is possible that they are expecting more with the dedicated resources to their sustainable product and service strategies. However, due to the current economical episode, exporters are unable to reach to the set planned goals or their expectations is not realistic (Wang & Olsen, 2002).

Another possible explanation would be complexity of measuring managerial satisfaction regarding the SPA. As Sadeghi et al (2021) argued, the notion of managerial satisfaction in export literature is still at the early age of development. Those scholars that measured the satisfaction, hardly linked it to any financial indicators (as for operationalisation) and used overall satisfaction of managers toward the export venture. Therefore, the findings of this research also confirm Sadeghi et al. (2021) suggestion that for measuring satisfaction of decision makers regarding specific strategy, researchers need to develop specific measurement.

Nevertheless, such approach add complexity to measuring the export performance and researchers might also need to consider qualitative approach to explore certain operationalisation variables. One can does not ignore the fact that managerial personal preference and attitudes might also influence the decision-making process. As Knežević et al (2017)'s study conclude managers who prioritise financial gain over ethical strategic long-

term orientation behave differently. In our research objective was not to assess export managers' attitudes but as the study mediation test shows, they had orientation to be satisfied with financial gain via sustainable products. Similarly, the indirect effects of export market orientation on satisfaction, via sustainable product and service is only viable through financial gain.

5.6 Entrepreneurial orientation impacts on financial performance in the German manufacturing industry.

Hypothesis 6 is accepted. We investigate the relationship among German SMEs entrepreneurial orientation and financial performance of exporters. Three dimensional approach including innovativeness, risk taking and proactiveness is used to measure exporters' EO (Wach, 2015a). On the other hand, EXPERF framework is used to measure exporters' profitability, sales' volume and growth rate of the export venture (Zou et al., 1998). The results show that, as expected, EO positively affects exporters' FP. In this way, these results support assertions that EO is an internal predictors of firms' exporter FP, which is backed up in the literature (Boso et al., 2019; Lumpkin & Dess, 2001). Findings of this research confirm Bahadir et al. (2009) meta-analysis report, that EO (particularly innovation dimension) positively improved organic sales growth.

Among the respondents to research survey, 70 % of managers also confirm the fact that their export venture has a strong emphasis on R&D and innovation to benefit from technological leadership in their export market. Among the sample firms in this study, only 19% do not experience any increase in sales that is confirmed the relation among the innovation driven strategy and sales growth from the descriptive perspective. According to this studies German manufacturing SMEs point out their willingness to embrace the new ideas in process and product development to be innovative. 65% of exporting SMEs in this study are introduced many new products or service line within the past five years, that could be an indicator for their innovation capacity. As Joo et al. (2018) are concluded the more a company invents the more innovative could be. This also shows that managers allocate their resources in a smart manner to build such capabilities that is paid off from the financial perspective. Again, the result from descriptive analysis shows that 67% of managers believe that their export venture is profitable. Similar findings also report by Kazemi et al. (2021), however this

research can't say for sure how many of such innovative outputs are successfully adopted in market, although their profitability is the best judgmental index in SMEs.

60% of firms in this study have a proactive approach in implementing certain strategic initiative actions in their markets or almost 70% of managers confirm using first mover advantages by offering a novel products or service in the export markets. Such strategic initiatives help them to possibly have strategic leadership in the markets in comparison to their competitors. Other scholars similarly argue that entrepreneurial oriented firms that proactively exploit new opportunity in the international markets could tolerate financial risk much better (Keh et al., 2007; Miller, 1983; Pérez-Luño et al., 2016). Although proactively innovate products is costly but SMEs from EU and particularly Germany could benefits from incentives and loans offers by EU to enhance their efficiency and indirectly improve their financial performance (İpek et al., 2023). Yet, this research has no data to confirm if SMEs participated in this doctoral research used any of these financial supports.

Accordingly, our findings support Kreiser et al. (2013)'s argument that proactive firms are more profitable. Exporters in our research show that their proactiveness probably is helped them to be more aware of sustainability trends and innovate more sustainable products and therefore enjoy higher financial benefits. In fact this risk taking behaviour leads to higher financial outputs (Al-Mamary & Alshallaqi, 2022) by scanning the markets for potential opportunities (Kropp et al., 2008).

Yet, descriptive analysis of indicators regarding risk taking behaviour illustrated that German SMEs in the current episode seems to have more conservative approach. In this regard, only 37 % of managers in the export venture have risk-oriented approach, or almost half of them prefer cautious approach and opt to wait and see how market dynamic develop. This can be also justified with current economical down term and political tension in the region. It is important to consider the average inflation rate in EU zone got back to 8.5% (one digit) just in December 2022 after Covid-19, while Russia invaded Ukraine in February 2022 (Eurostat, 2023). Thus, findings of this research confirm Zahra et al. (2001) that internationalisation is a risky and costly approach and a firms' competitive position might be weakened if risk taking is taken to an extreme. The current instability in political and economic general environment may multiply risk of doing business. So, it's understandable that managers would adopt a more conservative approach in this regard. It might be also

rooted in the operational direction of firms or the organisational position of the respondent of this study. As Kuivalainen et al. (2007) concluded risk taking might not be part of export managers job, considering the fact that exporting would widely understood as one the least risk-oriented market entry strategy.

5.7 Entrepreneurial orientation impacts on strategic performance in the German manufacturing industry.

Hypothesis 7 is accepted. This study is examined the relationship between German SMEs' entrepreneurial orientation and their export sales volume by using a three-dimensional approach that included innovativeness, risk taking, and proactiveness (Wach, 2015). Meanwhile, the EXPERF framework is used to evaluate the profitability, sales volume and growth rate of export ventures (Zou et al., 1998). Results indicate that EO positively affects exporters' SP, as of the pervious assumption. Hence, these results support the literature's assertion that EO positively influences exporters' SP (Dai et al., 2014; Gupta et al., 2021). Rationally most of firms expand to international markets to reduce their dependency to their domestic markets. Particularly innovation driven firms, market development would support their cost structure and help them with their enormous R&D cost (Fernández-Mesa & Alegre, 2015).

The concept is similar to what Bartlett and Ghoshal (2002) describe as economies of scope, reaching to efficiency by sharing cost of certain activities and in this case R&D in multiple markets. In this research also majority of exporters (65%) are confirmed that they have innovated different product lines and services. Most probably such strategic approach has helped them to reach to efficiency and at the same time fulfil the different customers' needs. Operating in multiple markets that possibly have different cultures and values are required exporters to be innovative and modify their business model.

Almost half of firms have modified their products and services frequently according to the descriptive analysis of this research. One also can argue that such modifications is linking to exporters' learning capability. Thus, as Gupta et al. (2021) argued, SMEs that proactively expand their product portfolio and their novelty capacity can improve their strategic position in the market. All these efforts have led to the global competitiveness for the majority of the firms (68%) and strengthen their position in the international markets (76%). Consequently,

such international operation provides a firm, a competitive position to outperform their competitors in both domestic and international market (competitive aggressiveness) (Kuivalainen et al., 2007). This can be realized via reaching to efficiency by having a better scale and scope operation. In addition, SMEs, might be able to introduce the innovative solution developed in one export market to another.

EO behaviour helped SMEs in this study to tolerate better the ambiguities in cross-border operations and enhanced their strategic position in the market. The claim can be confirmed by SMEs' competitive stance in this research. Where almost 60% of managers in this research confirmed in various degrees that their firms have initiated certain actions that forced their competitor to react. As a result, SMEs would benefit from a dominant market position by targeting high profile industrial clients (Zahra & Covin, 1995).

The outcome of an EO approach will be establishing brand and creation of customer awareness in the international market that help German SMEs to keep their strategic position in the market for a long time. The support to this argument is the fact that 63% of SMEs in this research confirm that they have improved their market share in the global market during the past 5 years. That would be reflected in the concept of sustainable competitive advantage. As follow Ibeh (2003) this research also confirm that German exporters entrepreneurial behaviour "export entrepreneurship" facilitate market development for German manufacturing SMEs and consequently have led to higher SP according to this research findings.

5.8 Export market orientation impacts on the SMEs' SPA in German manufacturing industry

Hypothesis 8 is accepted. This research investigates the impact of export market orientation of SMEs in Germany on their sustainable product attribute strategy. To measure the EMO, the study considered the corporate culture MIKTOR framework introduced by Narver and Slater (1990). As discussed in the previous hypothesis SPA also is a formative variable and operationalise based on the Ullah et al. (2021) suggested measurement model.

German manufacturing SMEs that develop export market orientation as an organizational capability gain a better understanding of the market environment and leverage acquired business intelligence to make strategic decisions about offering sustainable products. Ismail

et al. (2017) also highlight the increased demand for sustainable product and service. Having look at statistical findings and relation among variables, this path coefficient attains the highest significant outer weight (t-statistic=10.417). This could be a strong justification that products with sustainable attributes are considered as major selling points for German exporters, and in response to customers' needs (Choi et al., 2018). Offering environmental and socially friendly products/service have become a part of German SMEs' brand identity. This can be justified also from cultural perspective where firms originated from future-oriented, and uncertainty avoidance culture (Hofstede, 1984), dedicate appropriated resources to develop market orientation capability in the export market, to have better understanding of changes and consumer/competitor dynamics. This research believes that SME's effort to be export market oriented is multiplied due to current external environment hyper dynamic (war in Ukraine and tensions in Middle East and in particular Trumps' administration).

Such instabilities have increased the uncertainties, risk and consequently could led to increasing the business transaction cost. Also, the diversity of export markets for German SMEs has exposed them to different formal and informal institutions. In a nutshell, export market orientation capability has been developed to shield firms' export business model in the vibrant markets to properly respond to consumers' ever-changing needs and markets' competitive dynamic (Narver & Slater, 1990). The descriptive research shows that 92% of firms in this research constantly analysing their customers' needs and consequently managers confirmed that such efforts led to a success rate of 93% of meeting customers' needs.

Similarly, top managers confirm that firms' efforts in analysing are not only limited to the consumers but also their competitors. More than 70% of managers, report that their firms knew their competitor and have analysed their competitor's weakness and strength. The approach has led to developing a competitive strategy by developing better sustainable product or services. Investing in knowing their competitors and analysing their competitive capabilities could be a sign of intense competition. Therefore, this study could also confirm Flanner's (2015) conclusion that firms invest in CSR strategies to differentiate themselves from their competitors as the competition increases.

Although it was not significant but firms in this research put more efforts on the customer orientation rather than competitor orientation (which was almost 20% less than their consumer orientation). On top of that the descriptive results shows that almost 60% of firms follow competitor-based strategy, which means that their competitors marketing strategy play a significant role in German SMEs' strategic choice, which in this case is developing products/services with sustainable attributes. Similar findings report by Lin et al. (2022), where peer effect of CSR push non-winner to catch-up with the competitors by improving their CSR practices. Therefore, this research concludes that developing sustainable products/services by German manufacturing SMEs is a strategic response to the consumers' demands and competitors' strategies. Apart from customer orientation and competitor orientation, the descriptive analysis shows that firms in this study put lots of efforts in inter-functional coordination. German SMEs implement SOPs for customer service (69%) to update customer information and enhance employee competency to better serve their customers (74%). Such strategic behaviour enables them to have stronger relationships with their customers and caters their need in timely manner.

Conclusions

This doctoral dissertation attempts to close the research gap of unclear understanding of internationalisation of German manufacturing SMEs, and the direct or indirect impact of sustainable product attributes, entrepreneurial orientation and export market orientation on their financial performance, strategic performance and level of managerial satisfaction in SMEs. We have the ambitious to expand the scope of existing research, by examining the interplay between EO, EMO, SPA and firms' EP. Just as important was the exploration of SPA and EO influence different export performance dimensions. The main objective of this study is to identify the key internal determinants within Entrepreneurship Orientations (EO), Sustainable Product Attributes (SPA), and Export marketing Orientation (EMO) that contribute to the successful export performance in a sample of manufacturing SMEs based in.

Hypotheses verification

The study proposes eight hypotheses to investigate the impact of EO, SPA and EMO on FP, SP, and SAT of German manufacturing SMEs. Based on our findings, manufacturing SMEs' FP and SP in Germany will be influenced by their EO. As is also revealed in our study, SAT significantly affects and is dependent on SMEs' FP and SP. Furthermore, SMEs' strategies toward SPA influence their FP positively, whereas such strategic approaches do not lead to SP or satisfaction of export managers. Therefore, two hypotheses were rejected in this study. Lastly, SMEs' EMO significantly influenced, SMEs' SPA strategy. Therefore, as Table 65 shows, 4 hypotheses (H1, H2, H7 and H8) approved at the significant level of 0.001. Two other hypotheses (H3 and H6) accepted at the significant level of 0.05 and two hypotheses (H4 & H5) rejected.

Table 65: Evaluation of research's hypothesis

Hypothesis	Statement	P value	Results
H1	SMEs' financial performance impact on satisfaction with export operation in the German manufacturing industry.	0.000***	Confirmed
H2	SMEs' strategic performance impact on satisfaction with export operation in the German manufacturing industry.	0.000***	Confirmed
H3	Sustainable product attributes impact on financial performance in the German manufacturing industry.	0.025*	Confirmed
H4	Sustainable product attributes impact on strategic performance in the German manufacturing industry.	0.317	Rejected
H5	Sustainable product attributes impact on general satisfaction with export operation in the German manufacturing industry	0.189	Rejected
H6	Entrepreneurial orientation impacts on financial performance in the German manufacturing industry.	0.046*	Confirmed
H7	Entrepreneurial orientation impacts on strategic performance in the German manufacturing industry.	0.000***	Confirmed
H8	Export market orientation impacts on the SMEs' SPA in German manufacturing industry.	0.000***	Confirmed

Notes: ***significant at 0.001, **significant at 0.01, *significant at 0.05

Source: own study.

Main findings and contribution

The findings of this study have significant practical implications in the case of SMEs in the EU and particularly in Germany that are experiencing a contraction in demand as a result of the current political tensions in the EU (War in Ukraine), the Middle East and new wave of nationalism triggered by the new administration in the US, but also in Europe. When a trough episode such as this occurs in the EU, exporting SMEs are more likely to be able to deal with reductions in domestic sales. This is compared to SMEs that do not export. They could also increase their general turnover as a result of their export operations, but most importantly, it would allow them to have more liquidity at the moment, which is a severe problem for SMEs in the entire EU region.

There is still room for understanding the relationship among the export performance dimensions. Most of research have considered export performance multiple dimensions as dependent variable without being carious on the internal relationships of its dimension. The findings of this study show satisfaction of managers about export activities happens if a firms achieve success in their financial performance while strengthening their strategic position in the international market. Although the samples are taken from Germany but with cautious, the results can be generalised to SMEs in the EU and other western economies. This shows

top managers' strategic mindset of not only thinking of profitability (probably in short term) but also increasing their global market share and their international competitiveness. Apparently, having more market share in the long run help them to have stronger financial performance. Vice versa, stronger financial position provides them their companies with more resources to invest in the new markets. Operating in these new markets might not be profitable in the short terms but in long run could contribute to a firm's sales and profitability ratio. In fact, mature markets become SMEs' profit centre and help them to cross-subsidise their internationalisation activities.

This research also investigates the impact of firms' sustainable product attributes on export performance. The main reason behind this investigation is to know how sustainability which is quite recognisable in strategic direction of German manufacturing SMEs could influence their export performance dimensions. Findings of this study probably could help researchers to have a better overview of this trend, in terms of adoption as well as its strategic impact. Reviewing exporters behaviour in our study from the sustainable product perspective can confirm this statement that most of the samples in this research implement some or all of the key drivers of the circular economy such as *recycling, reduction of material use, eco-efficiency, regenerative system and creating environmental quality* that are mentioned in the review of Alhawari et al. (2021, pp. 13–14).

Therefore, this research can conclude that German SMEs have strategic mindset in producing and offering products or services that are environmentally friendly. As same as environmental aspect, social aspects of offerings such as reliability & durability of products, products labelling, and customers' safety have been considered as part of exporters' products and services. The findings of this study shows that SMEs' sustainable product attributes influence positively SMEs' financial performance but do not have any impacts on their strategic performance and satisfaction of managers about their export operations. These results confirm indirectly the last argument that managers' satisfaction will be achieved if firms not only reaching to acceptable financial performance but also acquiring strategic international market position. In case of sustainability, it seems German SMEs are not convinced if their sustainable products/services are well received their set of strategic expectations in global market. To understand this result, one should consider the broad market scopes of German SMEs and these markets' status in terms of considering sustainability as a strategic value proposition. In this case, it is obvious that sustainable

products or service are in the early stage of growth in the global market. Most probably certain customers and governments in certain western markets initiated this move and are quite demanding to have environmentally and socially friendly products and willing to pay for the possible premium price while other markets not. This leaves German SMEs with a profitable niche market while they see still room for improvement in their strategic position in the global markets. Still, the researcher believes that it is a beginning for a new quality norm for sustainable products and services and global markets will be soon opened to receive sustainable products/services. This can be considered as a pull factor. It is also important to consider the push factor, which are institutional forces in the EU that enforces market players to act more sustainable. Therefore, SMEs in Germany and many other EU economies have to invest heavily in their product, process operation, and technological capabilities to develop more sustainable options while it has not led to achieving major global position, at least until the time of this doctoral research.

Comparing a push factor in the EU and Germany with those that their competitors experiencing in China and the US, possibly put German exporters in a dis-advantage position at least in a short run. It might have led to dissatisfaction among managers as they might blame EU strict regulations for losing market share. Yet, it is important to consider financial resources and funds provided by the EU, might offset the related costs and efforts. One can see the recent speech of President Macron at the AI Action Summit in Paris on February 10, 2025, where he said *"It's very clear we have to resynchronize with the rest of the world"* (Macron, 2025).

Technological advancement and SMEs' entrepreneurial orientation could facilitate and boost up this process. In fact, the findings of this study confirms that the more a firm be risk oriented, innovative and benefit from proactive approach the better was it export performance. Based on this research, German SMEs in manufacturing industry can be categorised as innovation driven type, that proactive look for opportunities in international market and investing in new cutting-edge technology to build their international competitiveness. Their risk-oriented approach has led to developing many successful lines of products and services that well adopt in the market and reflect in their financial performance.

Developing or modifying their offering could be due to operating in different markets and catering different formal and informal institutions. This research believes German SMEs' EO not only enhance their risk tolerance but also help them to reach to economies of scope. The justification behind this argument is the significant and positive link among EO and SP. This means that SMEs' entrepreneurial approach facilitate their strategic global leadership and consequently they benefit from leveraging their brand reputation and innovation capacity to export different lines of their products/services to international markets. Needless to mention that EO could be a costly strategic approach, but it paid off not only from the financial but also from the strategic export performance perspective.

Therefore, this research concludes that majority of German manufacturing SMEs proactively innovated products/services during past five years that have been adopted very well in the market. Such strategic direction is tied up to their first-mover advantage that is led to their sustainable competitive advantage in the global market. Aside from that this study assume that such capability has been used to innovate sustainable product and services. Most of our sample firms in practice implement product innovation strategy noted by *Thomson Reuters Asset4* "it reflects a company's capacity to reduce the environmental costs and burdens for its customers, and thereby creating new market opportunities through new environmental technologies and processes or eco-designed, dematerialized products with extended durability." (taken from Ullah et al., 2021, p. 1846). Therefore, it can be concluded that SMEs' entrepreneurial orientation in developing sustainable and impactful products/services distinguished German manufacturer from their competitors.

One of the last question this research would like to address is the role of export market orientation in this combination. According to İpek and Bıçakcıoğlu-Peynirci (2020) investigation of the impact of EMO in terms of ethics and sustainability orientation is one of the trend that so far has been address only in few studies (16.3% of their research samples). Therefore, it was pivotal to understand if being market oriented in this direction could add any values for German exporters.

In addition, in a sustainability regulated market like Germany, moving toward developing sustainable product could be a reaction to formal institution or a strategic transformation rooted in firms' market intelligence. Findings of this study confirms that German manufacturing SMEs develop strong market orientation capability toward developing the

products/services with sustainable attributes. Export marketing orientations in German manufacturing SMEs is aligned with the Uppsala revision of 2017 (Vahlne & Johanson, 2017). As a result Bhatti et al., (2022) study on the impact of industry 4.0 on Uppsala, SMEs are able to learn and adopt local identities more quickly by using reasonable business targets, algorithms, and data management systems, as well as real-time market monitoring, thus reducing outsider liabilities efficiently. This study's findings are consistent with the findings of this study, that SMEs' export market orientation by real-time access to market trends helps them align their strategic orientation with customers committed to sustainability.

As part of their corporate culture, SMEs actively analysing not only the consumers' value stream but also competitors move. This strong customer and competitor orientation lead to generating business intelligence that would be shared with all department to create homogenous perspective among the different internal stakeholders. One need to considered organizing such capability is not as easy of their domestic market and needs lots of resource allocation and network development in the host countries. Therefore, SMEs entrepreneurial networking approach facilitates their market orientation by building meaningful relations. Findings of this research also shows, the mindset of firms' manager, where they allocate more resources to know their customers and follow the upcoming trends. From behavioural perspective, although managers follow a conservative mindset but probably their market orientation strategy paid off when they mostly benefit from their first mover advantage.

It is important to also investigate this approach from cultural perspective. With considering Germany as an uncertainty avoidance-oriented culture, one can deduce that German SMEs behaviour on emphasising of knowing customers and competitors to perform more confident in the market. This could be a more tangible approach when German firms operating in a market with less stable formal institution.

Addressing research questions

This study reports that the managers' satisfaction is influenced by the financial export performance, which is the receiving of short-term profits, and strategic performance, which is having market competitiveness on the global market, a meaningful market share, which is linked to the concept of sustainable competitive advantage.

SMEs in Germany benefits from significant and positive financial performance influences by sustainable product attributes. Nevertheless, it does not create any kind of satisfaction for managers and, of course, does not affect the strategic performance of German SMEs. Hence, one can conclude that SMEs' satisfaction is not only affected by short-term performance, but also by their long-term performance. The bottom line is that for a manager to be successful, he/she needs not only a short-term financial goal and profitability but also thinking about the long-term goal and market competitiveness.

Based on the findings of these studies, it can be concluded that the company's financial performance correlates to short-term profitability, and its strategic performance correlates with long-term competitiveness, both of which are positively and strongly influenced by an entrepreneurial orientation. In other words, firms that look for opportunities in export markets and engage in risky behaviour to innovate a product are able to not only reap financial profitability and financial returns from these markets, but they also acquire strong market shares and, of course, are able to gain a competitive advantage on the international market as first movers.

In our study, we conclude that companies' export market orientations are strongly influenced by sustainable product attributes. Our results shows that firms' export market orientations mean that analysing customers, analysing competitors, and inter-coordination within the exporter's internal environments can positively and significantly influence the company's product attribute strategies in terms of sustainability. As such, those companies which can implement the systems for analysing customers, analysing their competitors' latest strategies, and of course sharing the information among departments so there is synergy could create products with sustainable product attributes, which means environmentally and socially responsible products.

Implications and recommendations

Entrepreneurial orientation, sustainable product/services, and export market orientations have been shown to benefit companies in a variety of ways (Abdul-Talib et al., 2023; Andries & Stephan, 2019; K. Wach, 2024). A proactive and innovative approach to international markets could improve exporters' financial and strategic performance, resulting in indirect satisfaction for managers. As our research results show, German SMEs' strategies in creating

and producing sustainable products or services paid off with positive financial returns and increased their competitive position in global markets. Managers' expectations, however, are not met since SPA have not yet led to satisfaction. It's likely they are expected a higher return on their investment.

Additionally, our research results support the assertion that firms with a market orientation developed sustainable products and services that helps them to achieve competitive advantage. Thus, exporters moved toward sustainable products by actively listening to their customers and analysing their competitors' strategies. A market-oriented firm needs to have active coordination among different departments to transform business intelligence into practical sustainable solutions, according to the study. SMEs in Germany should integrate EMO as part of their corporate philosophy and culture. According to our research, EO and EMO complement each other. It is pivotal for exporters to prioritise processing their customers' need to have first mover advantage in the market.

The German exporters should also invest in entrepreneurship behaviour to proactively spot international opportunities and to turn their product line into a sensor for proactively developing new products according to customer demands. It comes as no surprise that managers' satisfaction with German SMEs will be influenced by their financial and strategic performance. Nevertheless, export plans should be attainable and realistic match with the dynamic of global market.

Research limitations

Due to the unwillingness to respond to the email and social media message, we had to collect data in person at the international fair exhibitions. Despite the advantage of purposive sampling, data collection was time-consuming and costly. During an event, I was able to collect 15-25 respondents per day at best, in some very few cases with help of the participant we manage to get more. For this reason, I had to attend multiple events across Germany to collect data. That contributed to the fact that we were unable to obtain a homogeneous sample from one industry. As a result, it can be argued that with regard to the industry-specific characteristics, one would need to expand the reported results with caution to other industries as well. As an example, one of the questions the research is asked was the question

of fair-trade products, and we believe this question would be more applicable to certain industries such as the food and beverage industries, and less relevant to the service industries.

As already mentioned, the researcher tried to collect data during international trade events in Germany during the course of the study. It is true that the setting facilitates a better communication process, but the negative aspects of such an approach should also be considered. As an example, sometimes participants get distracted by visitors and cease to answer the survey until they attend to the potential customers and stop answering the survey. This highlights the fact that environmental impact might distract them from having a full attention according to Malhorta et al. (2017).

The same problem resulted in it being difficult to distinguish between the firms with different sizes in the present study. Therefore, data was taken from small and medium enterprises (SMEs), considering the definitions provided by official institutions (less than 500 employees and a turnover up to 50 million Euro). It is obvious that in a sample of this size, one would expect to see a wide range of business sizes.

As part of the RBV model, we must consider the critical importance of resources for the development of sustainable products from an entrepreneurial and export marketing perspective. Taking into consideration the size of the firm, we could infer that smaller firms may be more conservative rather than larger ones. Therefore, our findings may have bias in this regard and must be extended to different sizes of enterprises with a sense of caution.

The main research limitation is the lack of generalization based on that sample and the conclusions are limited to the investigated sample. We cannot absolutize the results over the whole population of German manufacturing SMEs as the sample was not random and representative.

In this research due to the numbers of questions, researcher decided to limit the general questions, however having some more general questions, like firms' size, age, manager experience and educational background, and direct experience with their current company could have help us to further understand the findings regarding to the satisfaction with export operation as it could be linked to the managers' experience and level of education.

Suggested directions for future studies

The researcher believes that global market is experience certain episodes influenced be the War in Ukraine, escalated tension in the Middle East and the change in the US administration. These macro-environmental forces have un-deniable impact of market and energy price. Therefore, we could hypothesise that managers' decisions, and their expectation might be influenced of such events. Thus, another research in a different episode could justify the validity of our research.

The future study could only try to collect data only from one industry, this could create a homogenous samples and better interpretation of findings regarding to the specific industry characterises. On top of that, most probably enlarge sample size could also be very helpful. The future research could also try to expand the sample size to check the reliability of research findings.

In this research the SPA variable is conceptualised as a formative variable that includes social and environmental aspect of product or service development. This research would suggest checking the individual impact of such variables to understand if any of them might influence firms' performance differently. Thus, I would suggest that the future research to check the impact of SSPA and ESPA to be tested as independent variables on SP, FP and Sat.

Regarding the EO perspective, this research tried to investigate the innovation as one of EO-dimension according to the Wach (2015), however future research could even deep dive to check to what extent the new inventions (environmental inventions) being accepted/adopted in the market and as Brown (2021) argued if it led to sustainable, repeatable and substantial net growth.

Regardless of definition offered for SMEs, I would recommend further research to be more specific with data collection to disregard the impact of availability of resources based on the RBV model. Probably, this model could be test in firms in different level such as start-up, BGs, INV or hidden champions. In addition, future research also could distinguish innovation-driven SMEs from traditional SMEs. Therefore, studies could make better

understanding if EO and SPA would be more relevant to innovation driven enterprise or SMEs with traditional mindset.

From methodological perspective, probably a mix method approach could be also advisable where future studies could implement a complementary qualitative expert interview to deep dive in some aspects of research. As I collected data personally during the fairs, I have chance to talk to some of the managers and they were happy to provide more elaboration about their decision or answer.

One of them that I can't forget was the statement from a tech company that manager answer my question about the important of sustainability for their business. He said as an IT service provider I can't do much about sustainability, but I am putting all my efforts to be sustainable firms that could make impact, this help me to recruit competent employees -new generation cares about sustainability practice - and without having employees I can't win new project, literally we could justify his argument from RBV model and updated Upsala model. Future study could also add more general questions such as firms' size, age, manager experience and educational background, and direct experience with their current company to judge better the internal environment of the samples.

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Appendix 1: Survey questionnaire in German

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Leistung von KMUs und ihr Nachhaltigkeitsansatz

Leistung von KMUs und ihr Nachhaltigkeitsansatz

Als Experte im Bereich Export wurden Sie ausgewählt, um Ihre Meinung zu den Auswirkungen von Nachhaltigkeits-Praktiken und unternehmerischen Ansätzen auf die Leistung von KMUs in Deutschland abzugeben. Als Dankeschön für Ihre Zeit wird für jede abgeschlossene Umfrage eine Spende von €1 an eine gemeinnützige Organisation Ihrer Wahl getätigt. Sie können am Ende der Umfrage aus einer Liste von Wohltätigkeitsorganisationen auswählen (UNICEF, Save the Children Germany, CKD, Caritas und Deutsches Rotes Kreuz). Ihr Feedback ist sehr wertvoll, und es wäre sehr nett, wenn Sie sich etwa 10 Minuten Zeit nehmen könnten, um diese Umfrage zu beantworten.

* Indicates required question

1. 1. Haben Sie Erfahrung mit der Arbeit in der Exportabteilung eines deutschen mittelständischen Unternehmens? *

Mark only one oval.

- Ja
 Nein
 Indirekt

2. 2. Welche Position haben Sie im Unternehmen? *

Mark only one oval.

- CEO, Geschäftsführer oder auf Top-Management-Ebene
 • Vertriebsleiter, Marketing Manager, Export Manager
 • Führungskraft im Marketing- oder Exportbereich
 Other: _____

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3. 3. Was sind die Hauptprodukte Ihres Unternehmens? *

Mark only one oval.

- Lebensmittel & Getränke
- Bauprodukte
- Elektrizität, Gas, Dampf und Klimaanlage
- Sonstige technische Erzeugnisse
- Bergbau und Steinbruch
- Gesundheit & Pharmazeutika
- Other: _____

Auf einer Skala von 1 bis 7, wie sehr stimmen Sie der folgenden Aussage zu:*

1 Stimme überhaupt nicht zu | Stimme eher nicht zu | Stimme teilweise nicht zu | Neutral | Stimme zum Teil zu | Stimme eher zu | Stimme voll zu 7

4. 4. Unser Unternehmen analysiert immer die Bedürfnisse der Kunden *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme voll zu

5. 5. Unser Unternehmen sammelt regelmäßig Daten zu Kundenbedürfnissen und dem Aufwand, der mit deren Erfüllung verbunden ist *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme voll zu

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6. 6. Unser Unternehmen hat bisher die Bedürfnisse der Kunden erfüllt *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme voll zu

7. 7. Unser Unternehmen reagiert auf o.g. Analysen durch regelmäßige Prozess- oder Produktverbesserungen *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme voll zu

8. 8. Unser Unternehmen identifiziert die Stärken und Schwächen von Wettbewerbern *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme voll zu

9. 9. Unser Unternehmen hat eine am Wettbewerb ausgerichtete Strategie und setzt sie durch entsprechende Vorgaben für Produkt- und Serviceentwicklung um *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme voll zu

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10. 10. Unser Unternehmen sammelt proaktiv Wettbewerbsinformationen und passt seine Strategie auch auf Basis von diesen Informationen regelmäßig an *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme voll zu

11. 11. Unser Unternehmen kennt alle und identifiziert auch neue Wettbewerber in der Branche *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme voll zu

12. 12. Unser Unternehmen verfügt über Kommunikationsmedien für die Zusammenarbeit zwischen Arbeitsgruppen *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme voll zu

13. 13. Unser Unternehmen hat standardisierte Verfahren für den Kundenservice *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme voll zu

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14. 14. Unser Unternehmen aktualisiert regelmäßig Informationen zu Kunden während der Kundeninteraktion *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme voll zu

15. 15. Unser Unternehmen verbessert regelmäßig die Kompetenz der Mitarbeiter im Kundenservice *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme voll zu

Im Allgemeinen legt das Top-Management meines Unternehmens großen Wert auf:

Stimme gar nicht zu | Stimme eher nicht zu | Stimme teilweise nicht zu | Neutral | Stimme zum Teil zu | Stimme eher zu | Stimme vollkommen zu

16. 16. Erwerb von Umweltzertifikaten für die Produkte *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme voll zu

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17. 17. Verwendung von wiederverwendbaren, recycelbaren und biologisch abbaubaren oder organischen Materialien in Verpackung/Prozess *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme voll zu

18. 18. ISO-Zertifikat für Umweltmanagement *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme voll zu

19. 19. Emissionsreduzierung durch Prozessoptimierung *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme voll zu

20. 20. Nachhaltigkeitsbasierte (CSR)-basierte Qualitätsprodukte und -services *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme voll zu

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21. 21. Zuverlässigkeit und Haltbarkeit von Produkten *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme voll zu

22. 22. Kennzeichnung & Produktinformationen *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme voll zu

23. 23. Anbieten von Fair-Trade-Produkten *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme voll zu

24. 24. Schutz von Gesundheit und Sicherheit der Kunden *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme voll zu

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25. 25. Auf einer Skala von 1 bis 7, wobei 1 für 'Starke Schwerpunktsetzung auf die Vermarktung bewährter Produkte und Dienstleistungen' steht und 7 für 'Starke Schwerpunktsetzung auf F&E, technologische Führung und Innovationen', geben Sie bitte an, wozu das Top-Management tendiert: *

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

26. 26. Auf einer Skala von 1 bis 7, wobei 1 für 'Keine neuen Produktlinien oder Dienstleistungen' steht und 7 für 'Sehr viele neue Produktlinien oder Dienstleistungen', geben Sie bitte an, wie viele neue Produktlinien oder Dienstleistungen Sie glauben, dass Ihr Unternehmen in den letzten 5 Jahren (oder seit Gründung) vermarktet hat: *

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

27. 27. Auf einer Skala von 1 bis 7, wobei 1 für 'Änderungen in den Produktlinien oder Dienstleistungen waren größtenteils von geringer Natur' steht und 7 für 'Änderungen in den Produktlinien oder Dienstleistungen waren üblich', geben Sie bitte an: *

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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28. 28. Auf einer Skala von 1 bis 7, wobei 1 für 'Mein Unternehmen reagiert typischerweise auf Aktionen, die von Mitbewerbern initiiert werden' steht und 7 für 'Mein Unternehmen initiiert typischerweise Aktionen, auf die Mitbewerber dann reagieren', geben Sie bitte an: *

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

29. 29. Im Umgang mit seinen Wettbewerbern ist mein Unternehmen ... *

1...sehr selten das erste Unternehmen, das neue Produkte/Dienstleistungen, Verwaltungstechniken, Betriebstechnologien usw. einführt.

7...sehr oft das erste Unternehmen, das neue Produkte/Dienstleistungen, Verwaltungstechniken, Betriebstechnologien usw. einführt.

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

30. 30. Im Umgang mit seinen Wettbewerbern nimmt mein Unternehmen ... *

1...typischerweise eine Haltung ein, um Wettbewerbs Konflikte zu vermeiden und eine "Leben-und-leben-lassen" -Haltung einzunehmen.

7...typischerweise eine sehr wettbewerbsorientierte, "den-Wettbewerbern-enthronen" -Haltung ein.

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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31. 30. Im Allgemeinen haben die Top-Manager meines Unternehmens... *

1...eine starke Neigung zu Projekten mit geringem Risiko (mit normalen und sicheren Renditen).

7...eine starke Neigung zu Projekten mit hohem Risiko (mit Chancen auf sehr hohe Renditen).

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

32. 31. Im Allgemeinen glauben die Top-Manager meines Unternehmens, dass... *

1...aufgrund der Natur des Marktes es am besten ist, sie allmählich durch vorsichtiges, inkrementelles Verhalten zu erkunden.

7...aufgrund der Natur des Marktes kühne, weitreichende Handlungen notwendig sind, um das Ziel des Unternehmens zu erreichen.

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

33. 32. Bei Entscheidungssituationen mit Unsicherheit nimmt mein Unternehmen... *

1...typischerweise eine vorsichtige "Abwarten-und-sehen" -Haltung ein, um die Wahrscheinlichkeit kostenintensiver Entscheidungen zu minimieren.

7...typischerweise eine kühne, aggressive Haltung ein, um die Wahrscheinlichkeit der Ausnutzung potenzieller Chancen zu maximieren.

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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**Auf einer Skala von 1 bis 7, wie sehr stimmen Sie der folgenden Aussage zu:
Unser Exportgeschäft/Unternehmen...**

Stimme gar nicht zu | Stimme eher nicht zu | Stimme teilweise nicht zu | Neutral |
Stimme zum Teil zu | Stimme eher zu | Stimme vollkommen zu

34. 33. ...war sehr profitabel. *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme vollkommen zu

35. 34. ...hat ein hohes Verkaufsvolumen generiert. *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme vollkommen zu

36. 35. ...hat schnelles Wachstum erreicht. *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme vollkommen zu

37. 36. ...hat unsere globale Wettbewerbsfähigkeit verbessert. *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme vollkommen zu

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38. 37. ...hat unsere strategische Position gestärkt. *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme vollkommen zu

39. 38. ...hat unseren globalen Marktanteil erhöht. *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme vollkommen zu

40. 39. ...Das Exportgeschäft hat unsere Erwartungen erfüllt. *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme vollkommen zu

41. 40. ...Der Erfolg des Exportgeschäfts entsprach (mindestens) unseren vorab formulierten Plänen/Zielen. *

Mark only one oval.

1 2 3 4 5 6 7

Stirr Stimme vollkommen zu

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42. 41. ...Das Exportgeschäft hat unsere Erwartungen vollständig erfüllt. *

Mark only one oval.

1 2 3 4 5 6 7

Stir Stimme vollkommen zu

43. Die Erträge dieser Forschung fließen in Spenden. Welche Wohltätigkeitsorganisationen möchten Sie unterstützen?

Mark only one oval.

- UNICEF
- Save the Children Germany
- Caritas
- Deutsches Rotes Kreuz

44. Falls Sie an den Forschungsergebnissen interessiert sind, hinterlassen Sie bitte Ihre Email-Adresse!

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Appendix 2: Survey questionnaire in English

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SME's Performance & their sustainability approach

SME's Performance & their sustainability approach

As an expert in area of International Business you have been chosen to provide your opinion about the impact of sustainability practice & entrepreneurship approach on SME's performance in Germany. As a token of gratitude for your time, for each completed survey a charitable donation of €1 will be made. You will be able to select from a list of charities (*UNICEF, Save the Children Germany, CKD, Caritas and Deutsches Rotes Kreuz*) at the end of the survey. Your feedback is very valuable and it would be greatly appreciated if you could spare approximately 10 minutes to complete this survey.

* Indicates required question

1. 1. Do you have any experience working in the trade department of a German manufacturing SME? *

Mark only one oval.

- Yes
 No
 Indirect

2. 2. What is your position in the company ? *

Mark only one oval.

- CEO, Management Director or Top Management level
 Sales Manager, Marketing Manager, Export manager
 Executive in Marketing or export department

3. 3. What are your company's main products? *

Mark only one oval.

- Food & Beverage
 Construction products
 Electricity, Gas, Steam and Air Conditioning Supply
 Manufacturing products
 Mining and Quarrying
 Health & Pharmaceutical
 Other: _____

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SME's Performance & their sustainability approach

4. From scale of 1 to 7 how much you agree with the following statement *

Mark only one oval per row.

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately agree	Strongly agree
Our company always analyzes customers' needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our company evaluates the effort of meeting customers' needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our company has met the customers' needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our company improves the effort of meeting customers' needs after evaluation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our company identifies the strengths and weaknesses of competitors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our company implements a competitive strategy by issuing product policies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our company encourages initiatives to formulate competition strategy based on knowledge of competitors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our company identifies competitors in the industry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our company has had communication media to communicate across work units	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our company has had standard operational procedures for customer service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our company updates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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SME's Performance & their sustainability approach

information on customers during customers' engagement

Our company improves the competency of employees to serve the customers

5. In general the top managers of my firms favour/a strong emphasis on: *

Mark only one oval per row.

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately agree	Strongly agree
Possessing the environmental product certificate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using reusable, recycle and biodegradable or organic material in packaging/process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ISO certificate for environmental management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reducing Emission with process optimization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CSR-based quality products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reliability & durability of products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Labelling & Info products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Offering fair trade products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customer Health & safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. On a scale of 1 to 7, where 1 indicates 'Strongly Favour a Strong Emphasis on the Marketing of Tried-and-True Products and Services' and 7 indicates 'Strongly Favour a Strong Emphasis on R&D, Technological Leadership, and Innovations,' please indicate the extent to which you believe the top managers of our firm lean towards: *

Mark only one oval.

1 2 3 4 5 6 7

1 - S 7 - S Strongly Favour a Strong Emphasis on the Marketing of Tried-and-True Products and Services Strongly Favour a Strong Emphasis on R&D, Technological Leadership, and Innovations'

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SME's Performance & their sustainability approach

13. 13. In general the top managers of my firm believe that *

Mark only one oval.

1 2 3 4 5 6 7

...ov ...ov ~~is not the capture of the reality of the market, but it is a demand for a necessary to achieve the firm's objective.~~

14. 14. When confronted with decision-making situations involving uncertainty, my firm ... *

Mark only one oval.

1 2 3 4 5 6 7

...ty ...ty ~~is not the capture of the reality of the market, but it is a demand for a necessary to achieve the firm's objective.~~

15. 15. From scale of 1 to 7, how much you agree with the following statement: This export venture *

Mark only one oval per row.

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately agree	Strongly agree
has been very profitable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
has generated a high volume of sales.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
has achieved rapid growth.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
has improved our global competitiveness.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
has strengthened our strategic position.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
has increased our global market share.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The performance of this export venture has been satisfactory.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This export venture has been successful.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This export venture has fully met our expectation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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SME's Performance & their sustainability approach

16. Which Charity organisations would you like to support?

Mark only one oval.

- UNICEF
 Save the Children Germany
 Caritas
 Deutsches Rotes Kreuz

17. In case you are interested in the research results please leave your email address!

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