The multidimensional implications of entrepreneurial orientation on export performance: empirical evidence from manufacturing SMEs in Tanzania

Manufacturing SMEs in

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Abstract

Purpose – This study aims to examine the influence of the entrepreneurial orientation (EO) dimensions (innovativeness, risk-taking, proactiveness, competitive aggressiveness and autonomy) on the export performance (EXP) of small and medium enterprises (SMEs).

Design/methodology/approach – In this study a cross-sectional survey design was used and data were collected from 250 managers of manufacturing-exporting SMEs in Tanzania. The developed conceptual model was empirically tested using confirmatory factor analysis and hierarchical regression.

Findings – The results reveal that innovativeness, risk-taking, competitive aggressiveness and autonomy have a significant positive influence on EXP. However, proactiveness hurts EXP. Additionally, findings indicate that the dimensions of EO do not have an equal impact on SMEs' EXP.

Research limitations/implications – This study only covered SMEs; future studies would be advised to include large firms because they may behave differently with respect EO due to their resource advantages. Furthermore, this study was conducted in a single country, Tanzania, and thus the findings should be interpreted cautiously, since each country has specific institutional frameworks that foster entrepreneurship and entrepreneurial culture in a different way.

Originality/value — The context of this study contributes significantly to the research's originality. The study contributes to the body of knowledge on the EO-EXP link in developing countries, where research on EO-export is scant, and it further contributes to the debate on the EO-EXP link by demonstrating that the dimensions of EO do not have an equal impact on SMEs' EXP, and accordingly a disaggregated approach would be more meaningful. Furthermore, the study contributes with regards the role of competitive aggressiveness and autonomy in improving SMEs' EXP, which has received little attention in previous studies.

Keywords Export performance, Entrepreneurial orientation, SMEs, Tanzania

Paper type Research paper

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EIMS

1. Introduction

Exporting is essential for the growth and competitiveness of SMEs (Quaye *et al.*, 2017) and it is the simplest and least expensive method of internationalizing SMEs (Gupta and Chauhan, 2021). However, because of the complexity and uncertainty of the business climate in export markets, SMEs have registered a disappointing performance in the export market (Acikdilli *et al.*, 2020; Ortigueira-Sánchez *et al.*, 2022; Paul, 2020). One of the major reasons is the structural differences in the availability of resources and capabilities in comparison to large firms (Castillo *et al.*, 2022). Unlike large firms, SMEs face resource and capability constraints that limit their ability to flourish in export markets (Akenroye *et al.*, 2020; Ringo *et al.*, 2023). Accordingly, despite the fact that SMEs account for the majority of all enterprises worldwide, their contribution to total exports has not been impressive (OECD, 2019; Imran *et al.*, 2019).

According to the dynamic capabilities (DC) theory, capabilities can be a source of sustainable competitive advantage and superior performance, especially when they are valuable, rare, inimitable and are capable of being exploited by the firm (Teece et al., 1997). Owing to the dynamism and complexity of export markets, SMEs must have a distinctive capability to deal with market features if they want to flourish (Rwehumbiza and Marinoy, 2020). Nonetheless, exporting is an act of entrepreneurship (Ibeh and Young, 2001) and entrepreneurial orientation (EO) is regarded as the primary focus of entrepreneurship (Faroque et al., 2021). EO refers to the strategic methods, processes, and decision-making styles adopted by a firm to act entrepreneurially (Lumpkin and Dess, 1996). Furthermore, Lumpkin and Dess (1996) indicated that EO is founded on a combination of characteristics that include innovativeness, risk-taking, proactiveness, competitive aggressiveness and autonomy. Likewise, Karacaoglu et al. (2012), contended that EO enables firms to adapt to changing business environments and have a sustainable competitive advantage over rivals in the marketplace. Consequently, EO has been linked with exporting behavior and firm success in export markets (Hossain et al., 2022a, b). EO enables firms to realize and sustain competitive advantage in volatile markets (Hernandez-Perlines, 2018; Rwehumbiza and Marinov, 2020), such as export markets. We therefore argue that EO is the required distinctive capability for SMEs to achieve successful EXP.

Likewise, several empirical studies investigated the effect of EO on SMEs' EXP (Ajayi, 2016; Boso et al., 2016, 2018; Chin et al., 2016; Hossain et al., 2022b; Hossain and Azmi, 2021; Imran et al., 2019; Kalinic and Brouthers, 2022; Monteiro et al., 2019; Neneh and Van Zyl, 2017; Robb et al., 2020; Rua et al., 2018). These studies, however, produced inconsistent results, leading to the conclusion that EO-EXP relationship is inconclusive (Hossain et al., 2022a; Hossain and Azmi, 2021; Imran et al., 2019). Although the majority of studies found a significant positive effect (Ajayi, 2016; Boso et al., 2013, 2016; Hossain et al., 2022a, b; Imran et al., 2019; Jin and Cho, 2018; Kalinic and Brouthers, 2022; Karami and Tang, 2019; Monteiro et al., 2019; Neneh and Van Zyl, 2017), some studies reported insignificant effect (Baldegger et al., 2021; Chin et al., 2016; Hossain and Azmi, 2021; Robb et al., 2020; Rua et al., 2018). Based on the findings of previous studies, several authors claimed that the EO-performance relationship is complex and varies based on each country's context, operationalization and measurements of the EO construct (Favolle et al., 2010; Hossain et al., 2022a; Rauch et al., 2009). Based on this presumption, Pehrsson (2016) and Dai et al. (2014) claimed that it is more pertinent to use the disaggregated measure of EO than the aggregated measure to investigate the effect of each dimension on international performance.

Nevertheless, the majority of the previous studies characterized EO as a unidimensional construct with a strong emphasis on three primary dimensions, namely: innovativeness, risk-taking and proactiveness. In this regard, researchers emphasized that firms are entrepreneurs if they actively pursue innovativeness, risk-taking and proactiveness (Ajayi, 2016; Karami *et al.*, 2020; Miller, 1983). Despite the lack of empirical studies that investigated EO-EXP link using a disaggregated measure of EO (Ajayi, 2016; Dana *et al.*, 2016; Hossain and Azmi, 2021),

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these studies still employed the three dimensions of EO. However, EO is a strategic managerial capability that provides new opportunities in international markets and empowers firms to sustain a competitive edge through innovativeness, proactiveness, risk-taking, competitive aggression and autonomy (Imran *et al.*, 2019; Lumpkin and Dess, 1996). Likewise, Lumpkin and Dess (1996) suggested that each dimension of EO may have a different effect on the performance. As such, this study contributes to the existing body of knowledge by investigating the effect of each dimension of EO on EXP, unlike the majority of prior studies.

In addition, Anderson and Ronteau (2017), Robb et al. (2020) and Hossain et al. (2022a) asserted that the majority of studies that investigated the EO-performance link were carried out in developed nations, whereas there is a dearth of empirically-based evidence in developing nations, such as Tanzania. In particular, significant disparities exist between the institutional structures that promote entrepreneurial culture between developed and developing countries (Ratten, 2014). Unlike developed countries, many developing countries have less effective institutions that are characterized by political uncertainty, corruption, inadequate infrastructure and poor governance (Lee et al., 2015). As a result, SMEs in developing economies fail to achieve their entrepreneurial goals due to the lack of institutional frameworks. For instance, in Tanzania there is a lack of entrepreneurial culture and an inadequate institutional support for the promotion of entrepreneurial culture has been identified as being one of the most critical problems facing SMEs (Kiyabo and Isaga, 2019). Likewise, in developed nations, institutions have an important role in influencing firms' entrepreneurial performance, although this is less likely in most developing nations (Lingelbach et al., 2005). As such, findings from developed countries might not apply to the majority of SMEs in developing countries and accordingly several studies called for further research in developing countries to investigate the EO-performance link (Anderson and Ronteau, 2017; Hossain et al., 2022a; Knight et al., 2020; Pehrsson, 2019; Robb et al., 2020).

To fill the gap, this study develops and tests a conceptual model based on data collected from 250 manufacturing SMEs in Tanzania. The authors' selection of Tanzania was motivated by the need for more studies to be focused on developing countries, particularly those of the African continent, where the academic field is devoid of research related to the EO-EXP link (Robb *et al.*, 2020). In addressing the gap, this study makes significant contributions to the literature and body of knowledge. To begin with, the study provides an in-depth examination of the impact of each EO dimension on the EXP of SMEs and it thus adds to the body of knowledge about the effect of each EO dimension on EXP. Discovering a comprehensive view of the relationship will assist policymakers and practitioners to improve the effectiveness of EO in nurturing EXP. In addition, the study reveals the significance of two dimensions in enhancing EXP, namely: competitive aggressiveness and autonomy, which have received little attention from previous studies. Furthermore, this study contributes to the body of knowledge on the EO-EXP link in developing countries, where a lack of empirical evidence on the relationship has been reported.

2. Literature review and hypotheses development

2.1 The dynamic capabilities (DC) theory

The DC theory describes how firms can achieve a competitive advantage via exploiting their capabilities in an ever-changing business environment (Fernandes *et al.*, 2017). In a highly volatile market such as the export market, not every capability can be unique and capable of satisfying the unique factors of being valuable, rare, inimitable and nonsubstitutable (Teece *et al.*, 1997). A dynamic capability is essential in such a market to achieve a competitive advantage and improved performance (Acheampong, 2017). Dynamic capability refers to the "ability of firms to integrate, construct, and reconfigure both internal and external competences in order to respond to quickly changing circumstances" (Teece *et al.*, 1997).

Furthermore, Teece (2016) highlighted that DC fall into the following three elements: sensing, seizing and reconfiguring. Sensing assists firms in gathering and evaluating market information to understand their competitors and the needs of customers (Wagner et al., 2017). Seizing stimulates the development of new products or services to assist in capitalizing on perceived opportunities (Teece, 2007). In turn, reconfiguring involves maintaining competitiveness by enhancing, merging and reshaping the internal and external resources of the firm (Wagner et al., 2017). Based on the fact that EO enables firms to exploit new ideas, evaluate customer needs, encourage innovativeness, show a tendency to seize potential opportunities ahead of competitors, take risks in pursuing projects with uncertain outcomes, and focus on maintaining competitiveness, involving the three elements of sensing, seizing and reconfiguring. Therefore, we contend that EO is a dynamic capability.

As a dynamic capability, EO stresses the ability of SMEs to achieve and maintain a competitive advantage in a dynamic business environment such as the export market (Rwehumbiza and Marinov, 2020). This is because SMEs which possess management with a strong entrepreneurial mindset are capable of developing and implementing excellent business strategies and of making the necessary improvements to capitalize on market opportunities. Likewise, for SMEs, EO is regarded as a unique capability that significantly contributes to competitive advantage and to improved performance (Monteiro *et al.*, 2017). This study therefore adopts DC theory to establish the focus and the relationship by linking EO dimensions as the dynamic capability with SME EXP. EO as a dynamic capability in terms of innovativeness, risk-taking, proactiveness, competitive aggressiveness and autonomy, brings competitive advantage to SMEs and in turn to EXP.

2.2 Innovativeness and export performance

Innovativeness refers to the tendency of a firm to engage in and support new ideas, novelty, experimentation and creative processes that may result in new products, services and technological processes (Lumpkin and Dess, 1996). Innovativeness can also be explained by a firm's effort to create a new product or modify existing products (Hossain et al., 2022a). Innovative firms develop improved or new products and processes that provide a competitive advantage in foreign markets (Brouthers et al., 2015). Likewise, the process of innovation is regarded to be a vital aspect in business success, with firms that encourage innovative activity performing better in exporting than others (Calantone et al., 2006). Innovative firms build new strategic resources by combining internal and external resources, allowing them to gain a competitive edge in the international marketplace (Fernandez-Mesa and Alegre, 2015). In addition, highly innovative SMEs are likely to find positive outcomes in the foreign markets in terms of new technology, products, services or processes (Edeh et al., 2020), whereas SMEs that lack the potential to act innovatively are more likely to suffer (Cho and Pucik, 2005). Furthermore, innovativeness promotes stronger export competitiveness that can ultimately lead to sustainable EXP (Robb et al., 2020; Stottinger and Holzmuller, 2001). It is thus hypothesized that:

H1. Innovativeness positively influences the EXP of SMEs.

2.3 Risk-taking and export performance

Risk-taking refers to the readiness to commit a significant amount of resources when implementing initiatives and solutions associated with a high level of uncertainty on expected outcomes (Lumpkin and Dess, 1996). Risk-taking SMEs assess the risks and returns associated with potential business opportunities, unlike risk-averse SMEs that tend to avoid risky projects (Fernandez-Mesa and Alegre, 2015). This calculated and proactive approach to exploring business opportunities enables risk-taking SMEs to find and enter new foreign markets

(Karami et al., 2020). Consequently, a firm gains a first-mover advantage in some new foreign Manufacturing markets, which helps them create brand equity and acquires a larger market share (Faroque et al., 2021; Fernandez-Mesa and Alegre, 2015). In other words, risk-taking SMEs are able to take advantage of market opportunities that other, more risk-adverse firms may overlook (Robb et al., 2020). As a result, those SMEs that dare to take calculated risks out-perform riskaverse firms in the international markets (Okpara, 2009). It is thus hypothesized that:

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H2. Risk-taking positively influences the EXP of SMEs.

2.4 Proactiveness and export performance

Proactiveness refers to a firm's ability to predict market demand and opportunities through market analysis and develop new products or processes ahead of its rivals in order to gain first-mover advantages in the marketplace (Lumpkin and Dess. 1996). Proactive SMEs have positive outlook on market potential opportunities (Lee and Peterson, 2000). Proactivity allows SMEs to capitalize on their responsiveness and willingness to act swiftly in response to changing business conditions, enabling them to revise current plans and strategies and predict future market trends (Lumpkin and Dess, 1996). In addition, proactive SMEs focus on turning their ideas into reality and on gaining a competitive advantage by being the first to capitalize on new market opportunities (Lee and Peterson, 2000). Likewise, particularly for SMEs, proactivity is essential for recognizing and responding to changing customer needs, which guarantees success in international markets (Lee and Peterson, 2000), Furthermore, Jafari-Sadeghi and Dana (2022) revealed that firms must be proactive to ensure competitiveness and improved EXP. Therefore, the ability of SMEs to be proactive may add a level of competency, leading to a stronger EXP (Cannavale and Nadali, 2019). It is thus hypothesized that:

H3. Proactiveness positively influences the EXP of SMEs.

2.5 Competitive aggressiveness and export performance

Competitive aggressiveness refers to tactics or strategies used by an organization to compete with and outsmart competitors in the marketplace (Lumpkin and Dess. 1996). Competitive aggressiveness is recognized as being a crucial component of EO, especially for SMEs, as SMEs are more likely to fail due to strong competition than larger firms (Giachetti, 2016; Lumpkin and Dess, 2001). The ability of SMEs to secure and improve their position in the export market may be enhanced by their strong and aggressive stance (Lumpkin and Dess, 2001). Consequently, SMEs must adopt an aggressive approach and engage in rigorous competition if they want to survive and succeed in the export market (Robb et al., 2020). This is because more aggressive firms, or those that directly face their competitors in export markets with a greater number of activities and a broader range of strategic movements, are more likely to achieve better EXP (Giachetti, 2016). It is thus hypothesized that:

H4. Competitive aggressiveness positively influences the EXP of SMEs.

2.6 Autonomy and export performance

Autonomy refers to giving employees a free hand to explore and exploit identified market opportunities (Otache and Mahmood, 2015). Since innovative ideas stem from the employees (Kuratko et al., 2011), in order to achieve successful firm performance, they must be permitted to experiment with their creative ideas without being hampered by organizational bureaucracies. In addition, Lee and Peterson (2000) claimed that the freedom to take matters into their own hands enables managers to experiment with various innovative ideas, which in turn gives them a competitive edge. SMEs should operate in a way that promotes

entrepreneurs to act autonomously, while maintaining a level of personal control and seeking opportunities in the absence of social limitations, with the aim to achieve improved performance (Robb *et al.*, 2020). It is thus hypothesized that:

H5. Autonomy positively influences the EXP of SMEs.

3. Research methodology

3.1 Study areas and design

This study was carried out with data from Tanzania, in five cities, namely: Dar es Salaam, Arusha, Mbeya, Dodoma and Mwanza. The selection of the study area was based on the fact that the five cities have significant production potential for manufacturing output (Nyello and Kalufya, 2021; URT, 2016) and also they have a significant number of manufacturing SMEs (Kiyabo and Isaga, 2020). A cross-sectional survey design was used, as the data were collected only once from a target population. The design is deemed effective and efficient, since it enables the collection of a large amount of data for a short period (Kresmodel, 2018). The unit of analysis was manufacturing-exporting SMEs that have been regularly involved in exporting business for at least three years. Three years is a sufficient time frame to determine a business's direction and performance outcomes (Quaye et al., 2017). This study uses the Tanzanian definition of SME to obtain the unit of analysis. According to SME development policy (2003), SMEs are firms with less than 100 employees (URT, 2003). The study's target population consists of 958 manufacturing-exporting SMEs in the selected cities, with the list being acquired from the National Bureau of Statistics (NBS), supplemented by a registered list from the regional small industries development organizations (SIDO). The list comprises SMEs that export in the food, leather, textile and furniture industries. The four industries were chosen because they account for the majority of Tanzania's exporting SMEs in the manufacturing sector (Andreoni, 2017). The sample size of this study was determined using Yamane's (1967) formula, whereby a 95% confidence level and 5% margin of error were used. Accordingly, the ideal sample size (n) obtained was 282 manufacturing-exporting SMEs.

3.2 Data collection and analysis

In this study, data were collected from 250 managers of manufacturing-exporting SMEs through a face-to-face survey that took place from November 2021 to April 2022. After distributing 282 questionnaires, 270 were returned. However, after eliminating questionnaires due to response errors, missing values and outlier cases, only 250 questionnaires were deemed clean responses and were considered for analysis. This equates to an 88.7% effective response rate. A structured questionnaire was the main tool used to collect data, since it has the capacity to cover a large area in a short period of time, while removing any potential bias between the researcher and the respondent (Nyamsogoro, 2010). To guarantee that the questionnaire's content and design would be easily and plainly understood by the respondents, it was pretested by 20 managers of manufacturing-exporting SMEs, and the questionnaire was then revised based on their feedback. Confirmatory factor analysis (CFA) and the hierarchical regression model were used to analyze the data.

3.3 Measurement of variables

The measurement scales for EO dimensions and EXP were adapted from extant literature and they have been validated and used in previous studies. The EO scale used in this study was a modified version of the widely-accepted scale developed by Miller (1983), further altered to include items established by Lumpkin and Dess (1996). This scale consists of five

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elements of innovativeness, risk-taking, proactiveness, competitive aggressiveness and autonomy. Nineteen items were measured on a five-point Likert scale ranging from one (strongly disagree) to five (strongly agree), with respondents being requested to provide responses pertaining to the last three years of exporting operations. Four items were used to measure innovativeness; four items were used to measure risk-taking; four items were used to measure proactiveness; four items were used to measure competitive aggressiveness; and three items were used to measure autonomy. EXP was measured using the EXP scale developed by Zou et al. (1998). This scale is used in this study because it is a comprehensive scale that integrates both objective and subjective measures to ensure the validity of the results (Zou et al., 1998). This scale comprises nine items.

The study also included four control variables that had been found to affect EXP in previous studies: firm size, firm age, industry and exporting experience (Boso *et al.*, 2016; Dana *et al.*, 2016; Sozuer *et al.*, 2017). Firm size was measured as the total number of full time employees hired by SMEs (Robb *et al.*, 2020). Firm age was operationalized as the number of years during which a firm existed (Jin and Cho, 2018). Industry type was measured as a continuous variable comprising food processing = 1, furniture = 2, textile = 3 and leather = 4 (Faroque *et al.*, 2021). Exporting experience was measured by taking the total number of years that a firm has been exporting, comprising 3–5 years = 1, 6–10 years = 2, 11–20 years = 3 and more than 20 years = 4 (Faroque *et al.*, 2021).

3.4 Common method bias and nonresponse bias

The possibility of a common method bias was raised given that the data were collected from a single individual in representation of an exporting SME, using the same response format for all constructs (i.e. Likert scales), and just for a single survey. As a result, Harman's single factor test was performed to determine whether the collected data demonstrated common method bias. The results of the test indicate that 28.66% of the variance was explained in the model by a single factor. Therefore, the test confirms that common method bias was not a serious issue of concern in this study, since the variance value was below 50% (Podsakoff et al., 2003). Additionally, face-to-face contact with managers or the drop-off and pick-up (DOPU) self-administered questionnaire approach was used in this study. The DOPU technique has the potential to enhance survey response and improve researchers' ability to assess eligibility compared to email-based data collection techniques (Steele et al., 2001). Likewise, this technique assists in reducing potential non-response bias (Allred and Ross-Davis, 2011). Furthermore, although the high response rate suggests that nonresponse is not an issue, a formal test for early and late responses was conducted to scientifically validate the impression (Armstrong and Overton, 1977). Accordingly, the early responses were defined as being the initial 75% of the first-returned questionnaires, and late responses were defined as being the final 25% of the late-returned questionnaires (Weiss and Heide, 1993). The comparison between early and late responses was conducted using a t-test that included all the variables. The results show that there were no significant differences between early and late responses (b > 0.05) and therefore nonresponse bias was not an issue in this study.

4. Study findings

4.1 Demographic characteristics

The demographic variables studied are industry, firm size, exporting experience and firm age. In this study, manufacturing-exporting SMEs were obtained from four industries, namely food-processing, furniture, leather and textiles, distributed as follows: food processors; 39.2%, furniture, 26.4%; textiles, 20.4% and from leather, 14%. The majority of exporting SMEs (approx. 70%) are micro and small firms (32% are micro, and 38% are small). Furthermore,

84.4% of SMEs have more than five years of exporting experience and 80.4% of SMEs included in this study have more than 5 years since existence, as indicated in Table 1.

4.2 The measurement model

Cronbach's alpha and composite reliability (CR) were used to assess the internal consistency of the theoretical constructs. The results are shown in Table 2. All Cronbach's alpha values are greater than 0.7, which demonstrates that the study's constructs are internally consistent and are reliable (Cronbach, 1951). The results in Table 2 show that all the constructs in the study have composite reliability (CR) values that are greater than the threshold value of 0.7, implying that the measurement scales are reliable (Hair et al., 2010). In addition, the items display an adequate level of reliability, since all items have a factor loading that is greater than the acceptable value of 0.5 (Hair et al., 2010). Likewise, the results in Table 2 reveal that the average variance extracted (AVE) values for all the constructs are greater than the suggested threshold of 0.5, which indicates that convergent validity was achieved (Hair et al., 2010). Furthermore, discriminant validity was assessed by examining the square root of AVE for each construct and comparing them with the inter-construct correlations. The square root of AVE for each of the study's construct was greater than the values of inter-construct correlations, as indicated in Table 3, and thus discriminant validity is confirmed (Fornell and Larcker, 1981). In addition, the model fit indices were examined to determine whether the model fits the collected data well. The results of the model fit indicate that the data in the model fit well with the values of chi-square to degrees of freedom (CMIN/DF) = 1.689 (with a chi-square value (CMIN) of 560.863 and degrees of freedom (DF) 332), which is a less than the acceptable value of 3.000 (Hooper et al., 2008; Sharif et al., 2018). The other fit indices of the

Variables	Frequency	Percent
Industry		
Food	98	39.2
Furniture	66	26.4
Textiles	51	20.4
Leather	35	14
Total	250	100
Exporting experience (Years)		
3–5	39	15.6
6-10	36	14.4
11-20	98	39.2
More than 20	77	30.8
Total	250	100
Firm Age(Years)		
3–5	49	19.6
6–10	98	39.2
11-20	77	30.8
More than 20	26	10.4
Total	250	100
Firm Size		
Micro	80	32
Small	94	37.6
Medium	76	30.4
Total	250	100
Source(s): Survey data (2022)		

Table 1. Characteristics of exporting SMEs

Construct and measures	Code	Loadings	α	CR	AVE	Manufacturing SMEs in
Risk-taking (RS)			0.890	0.896	0.686	Tanzania
Invests in higher risk projects	RS1	0.85				1 anzama
Tolerance for high risk projects	RS2	0.92				
Taking chances is part of business strategy	RS3	0.66				
Takes calculated risks with new ideas	RS4	0.86				
Innovativeness (INV)			0.856	0.856	0.598	
Creativity in methods of operations	INV1	0.78				
Seeks out new ways of doing things	INV2	0.82				
Encourages people to think in unique ways	INV3	0.78				
Constantly experimenting with new products	INV4	0.72				
Proactiveness (PR)			0.855	0.855	0.600	
Seeks to exploit anticipated market changes	PR1	0.77				
Opportunistically shape export environment	PR2	0.88				
Positioning to meet export market demands	PR3	0.74				
Excel at identifying opportunities	PR4	0.69				
Competitive aggressiveness (AG)	1111	0.00	0.874	0.875	0.637	
Adopts competitive posture to overtake competitors	AG1	0.81		***************************************		
Responds to actions of our competitors	AG2	0.86				
Out-maneuver the competition as best as I can	AG3	0.81				
Takes bold and hostile decision-making	AG4	0.71				
Autonomy (AT)	1101	0.11	0.855	0.857	0.668	
Self-directed in pursuit of market opportunities	AUT1	0.81	0,000	0.001	0.000	
Acts and thinks without interference	AUT2	0.89				
Behaves autonomously in all business operations	AUT3	0.75				
Export performance (EXP)	11010	0.10	0.934	0.932	0.604	
Export has been very profitable	EXP1	0.77	0.001	0.002	0.001	
Export has been very probable Export has generated a high sales volume	EXP2	0.73				
Export has achieved rapid growth	EXP3	0.86				
Export has achieved rapid growth Export has improved our global competitiveness	EXP4	0.84				
Export has strengthened our strategic position	EXP5	0.76				
Export has significantly increased our global market share	EXP6	0.70				
The export performance has been satisfactory	EXP7	0.79				
Our firm export has been successful	EXP8	0.73				
Our firm export has been successful Our firm export has fully met our expectation	EXP9	0.71				m 1: 0
Note(s): α, Cronbach's alpha; CR, Composite Reliability; AV			1			Table 2. Confirmatory factor

Construct	INV	RS	PR	AG	AT	EXP
INV	0.773					
RS	0.188	0.828				
PR	-0.096	0.447	0.774			
AG	0.447	0.294	-0.072	0.798		
AT	0.304	0.081	-0.047	0.241	0.817	
EXP	0.540	0.289	-0.096	0.457	0.410	0.777

Source(s): Survey data (2022)

Note(s): The square roots of AVE are indicated in diagonals (italics), with construct intercorrelations in lower half of the table. All construct inter-correlations are less than the corresponding square root of AVEs Source(s): Survey data (2022)

Table 3. Discriminant validity results

analysis results

measurement model are: comparative fit index (CFI) = 0.948, incremental fit index (IFI) = 0.949, standardized root mean square residual (SRMR) = 0.042 and root mean square error of approximation (RMSEA) = 0.053. All the fit indices fall within the acceptable range,

thus implying that the model accurately fits the data (Hooper et al., 2008; Hu and Bentler, 1999; Sharif et al., 2018).

4.3 Results of hypotheses tests

To analyze the hypotheses of this study, a hierarchical linear regression analysis was used, since it is considered to be an appropriate technique for analyzing contextual and configurational models (Cohen et al., 2003). To start, the results in Table 5 show the effects of the control variables on EXP. Two of the four control variables show a significant effect in the model. The model's R^2 value was 0.059, implying that 5.9% of the variance in EXP was explained by the control variables. Firm age was significant ($\beta = 0.210$, p < 0.001), and years of exporting experience was also significant ($\beta = 0.175$, p < 0.01). However, firm size $(\beta = -0.003, \text{ n.s.})$ and industry $(\beta = 0.014, \text{ n.s.})$ were not significant. To test the hypotheses of this study, Model 2 was used, where the effect of INV, RS, PR, AG and AT on EXP was examined. Model 2 was significant (b < 0.001, F = 22.185). The R^2 for Model 2 increases to 0.394, which implies that 39.4% of the variation in EXP is explained by the five dimensions of EO. Five hypotheses were formulated in this study. In H1 it was hypothesized that INV positively influences the EXP of SMEs and the results shown in Table 5 indicate that INV does indeed have a significant positive effect on EXP ($\beta = 0.28$ and p < 0.001), and therefore H1 is supported. In H2, the study hypothesized that RS positively influences the EXP of SMEs, and as the results indicate that RS has a significant positive influence on EXP $(\beta = 0.19, p < 0.001)$, H2 is thus supported.

In H3, the study hypothesized that PR positively influences the EXP of SMEs, however the results indicate that PR does not have a positive effect on EXP ($\beta=-0.12, p<0.05$), and therefore H3 is not supported. In H4, it was hypothesized that AG positively influences the EXP of SMEs, which is statistically supported, as the results indicate that AG has a significant positive influence on EXP ($\beta=0.18, p<0.01$). In H5, the study hypothesized that AT positively influences the EXP of SMEs, with the results indicating that AT has a significant positive influence on EXP ($\beta=0.24, p<0.001$), and thus H5 is statistically supported. Furthermore, the study performed an effect size analysis to examine the magnitude of the impact of each EO dimension on EXP to determine the practical significance of each EO dimension in enhancing the EXP of SMEs. Based on this analysis, the study employed Aiken and West's (1991) formula and cut-off points, from which *R*-squared and *F*-squared values were computed, as indicated in Table 4. The results in Table 4 revealed that INV has a medium-sized effect, and that RS, AG, and AT have a small effect on EXP, and that PR has no effect at all on EXP. However, the combined effect of all five EO dimensions was large.

Variables	R-squared value for total effect (A)	R-squared value when the variable is excluded (B)	F-squared value (A-B)/(1-B)	Effect size
INV	0.394	0.293	0.167	Medium
RS	0.394	0.364	0.049	Small
PR	0.394	0.383	0.018	None
AG	0.394	0.365	0.047	Small
AT	0.394	0.339	0.091	Small
Combined effect	0.394	0	0.6502	Large

Note(s): The cut-off points on effect size is based on F-squared value; 0 = none; 0.02 = small; 0.15 = medium 0.35 = large

Source(s): Survey data (2022)

		Model 1	Model 2	Manufacturing SMEs in
Control variables	Firm size	-0.003	-0.042	Tanzania
	Ε.	(-0.042)	(-0.599)	1 (4115(411))
	Firm age	0.210*** (3.374)	0.175** (2.728)	
	Exporting experience	0.175**	0.128*	
	Exporting experience	(2.728)	(1.992)	
	Industry	0.014	0.041	
	•	(0.232)	(0.646)	
Main effect	Innovativeness (INV)		0.280***	
	D: 1 - 1: (D0)		(4.492)	
	Risk-taking (RS)		0.193***	
	Proactiveness (PR)		(3.391) -0.115*	
	Troactiveness (FR)		(-1.751)	
	Competitive aggressiveness (AG)		0.182**	
	F		(3.182)	
	Autonomy (AT)		0.242***	
- 2			(4.632)	
R^2		0.059	0.394	
Adjusted R^2 ΔR^2		0.051	0.377 0.335***	
F-value		7.745***	22.494***	
ΔF		1.140	26.371***	Table 5.
	p < 0.01; *** $p < 0.001$. Standardized regression	on coefficients are used	20.0.1	Hierarchical regression
Source(s): Survey da		on coefficients are used		analysis results

4.4 Discussion

Based on the empirical findings of this study, four hypotheses were supported and one was not supported by the data collected. In H1, this study examines the effect of INV on EXP, where the findings support the hypothesis that INV significantly influences EXP. The results in Table 5 indicate that when INV is increased by one unit, EXP increases by 0.28 units. These findings are similar to those of previous studies (Boso *et al.*, 2018; Habib *et al.*, 2020; Hossain and Azmi, 2021; Rua and Franca, 2016) and they support Stottinger and Holzmuller's (2001) notion that innovative SMEs are more likely to thrive in export markets than noninnovative ones. In addition, the findings of this study support Guarascio *et al.*'s (2017) claim that innovativeness gives firms a competitive advantage by introducing new products and processes, which in turn contributes to a firm's international success. Furthermore, the findings of this study confirm the DC theory that innovativeness as a dynamic capability enhances EXP. Due to the lack of empirical evidence in developing economies; this study investigates the effect of INV on the EXP of SMEs in Tanzania, which is a developing economy, in order to contribute to the existing body of knowledge.

In H2, is hypothesized that RS positively influences EXP and the results of this study support this hypothesis. The findings are similar to those of previous studies (Ajayi, 2016; Cannavale and Nadali, 2019; Imran *et al.*, 2018; Robb *et al.*, 2020) which found a positive influence of RS on EXP. Furthermore, the findings of this study support Alvarez and Lowell's (2001) claim that the commitment of resources to risky projects, particularly for firms that believe in encouraging risk-taking behavior, advances performance. Likewise, the findings of this study confirm Jafari-Sadeghi's (2021) assertion that the internationalization success of a firm is dependent upon the entrepreneurial tendency of the firm's owner-managers' willingness to take risks. In addition, the findings of this study confirm the DC theory that RS

as a dynamic capability enhances EXP. However, due the lack of empirical evidence in developing economies, this study opted to investigate the effect of RS on the EXP of SMEs in Tanzania, a developing economy, in order to contribute to the existing body of knowledge.

In H3, it was hypothesized that PR positively influences EXP. Surprisingly, the influence of PR on EXP of SMEs was found to be significant negative. According to the results in Table 5, increasing proactiveness by one unit reduces EXP by 0.12 units. The findings of this study are consistent with those of Francis and Collins-Dodd (2000), who found a negative effect of PR on the EXP of Canadian SMEs. Okangi (2019) has also discovered a negative effect of PR on the performance of Tanzanian construction firms. Likewise, the study by Skarmeas et al. (2016) reported a negative effect of PR on the export market exploration of Portuguese exporting firms. In addition, this study's findings corroborate the premise that the majority of SMEs are reactive rather than proactive in exploiting foreign market opportunities (Robb et al., 2020). This premise may be true, because the majority of SMEs that conduct international transactions benefit from existing foreign market opportunities by being reactive, since this gives them time to assess market constraints (Ringo et al., 2022). Additionally, the findings indicate that the export market does not enable future demand or easiness in forecasting market opportunities. Likewise, a strong emphasis on forward-thinking management methods negatively affects EXP, implying that the export market is an inefficient market. The findings of this study contribute to the body of knowledge on the influence of PR on EXP in the context of SMEs in Tanzania, which is a developing country.

In H4, it was hypothesized that AG positively influences EXP. The findings of this study confirm that AG does indeed positively and significantly affect EXP. Accordingly, SMEs need to adopt an aggressive stance and a fierce competitive spirit to survive and succeed in export markets (Robb *et al.*, 2020). Despite the fact that previous studies paid little attention to the effect of AG on EXP, this study reveals that AG has a significant positive effect on SMEs' EXP. Likewise, the findings of this study confirm the DC theory that AG as a dynamic capability improves EXP. In H5, it was hypothesized that AT positively influences SMEs' EXP, with the findings of this study affirming that AT does positively influence EXP. The results in Table 5 indicate that when AT is increased by one unit, EXP increases by 0.24 units. Based on the findings of this study, managers of exporting SMEs should be given sufficient liberty and independence to take matters into their own hands regarding export operations. The findings of this study therefore emphasize that the AT dimension of EO is crucial in enhancing SMEs' EXP, despite being paid little attention in previous studies.

5. Conclusion, implications and future directions

5.1 Conclusion

Anchored by the DC theory, the central purpose of this study was to examine the influence of EO dimensions on SMEs' EXP. Specifically, the objective was to present an in-depth examination of the multidimensional effects of the entire dimensions of EO, namely INV, RS, PR, AG and AT on SMEs' EXP. A conceptual model was developed which was empirically tested in the context of Tanzanian manufacturing SMEs. The motivation for conducting this study was influenced by the dearth of empirically-based evidence on the effect of EO on EXP in developing economies, as well as the lack of in-depth research on the effect of each EO dimension on EXP. The findings of this study confirm that INV, RS, AG and AT are all significant predictors of SMEs' EXP. However, PR registered a negative effect on EXP, and therefore the results of this study demonstrate that the impacts of EO dimensions on the EXP of SMEs vary. In turn, this indicates how the use of aggregated EO may provide inaccurate results in some research contexts.

5.2 Theoretical implications

The findings of this study contribute to the entrepreneurship and export literature in several ways. To start with, the findings broaden the application of the DC theory in the context of exporting, in particular for SMEs in developing economies. The study reveals the effects of the dimensions of EO, namely INV, RS, PR, AG and AT as DC in enhancing SMEs' EXP. Overall, the findings of this study support the DC theory that DC provide a competitive advantage which leads to successful performance. In addition, this study contributes to the effect of INV, RS, PR, AG and AT on the EXP of manufacturing SMEs in Tanzania, which is a developing country. Given the scarcity of empirical evidence on the EO-EXP link in developing countries, this study adds to the existing literature by providing empirical insights into SMEs in the context of a developing country, rather than of a developed country. Furthermore, by responding to calls from several authors' challenges to investigate the effect of EO on EXP in a disaggregated manner with the objective to obtain an insight into the effect of each dimension (Hossain et al., 2022a, b; Knight et al., 2020; Pehrsson, 2019), this study presents a comprehensive investigation of the relationship between each of the dimensions of EO and SMEs' EXP. Likewise, this study affirms the significant positive effect of AT and AG on EXP, and thereby adds to the existing literature on the relevance of two dimensions that have received little attention in previous studies. In conclusion, the negative effect of PR on EXP and the analysis of the effect of size both contribute to the extant literature that the dimensions of EO do not have an equal impact on SMEs' EXP. The findings therefore add important information to the existing body of knowledge on the effects of the individual dimensions of EO on the EXP of SMEs.

5.3 Managerial implications

This study has managerial implications to report. The findings affirm that INV, RS, AG and AT are all significant determinants of SMEs' EXP. Therefore, owner-managers should foster more innovative strategies and should properly implement them in order to establish the framework for achieving successful EXP. This could be accomplished by establishing innovation goals and objectives and by cultivating an innovation culture within SMEs. In addition, owner-managers of exporting SMEs should develop a positive attitude toward risks and should be inclined to take risky decisions for their business and export operations. In addition, owner-managers should develop structures, behaviors and processes that enhance their risk-taking attitude in order to increases their firms' export success. However, managers are advised to only take calculated risks (Okangi, 2019) in their efforts to achieve successful EXP for their firms and, in addition, they are advised to develop competitive tactics and strategies and to execute them effectively to outsmart foreign market competitors. This will enable them to improve their position in the foreign market and thus gain a competitive advantage, and, in turn, will improve their EXP. Furthermore, owner-managers of exporting SMEs should empower their export managers to capitalize on identified export market opportunities without being hampered by organizational bureaucracy. With such freedom, export managers will be able to experiment with their various innovative ideas, which in turn will give firms a competitive advantage and successful EXP. Finally, the negative effect of PR on EXP implies that a strong emphasis on forward-thinking management methods might negatively affect EXP, indicating low market efficiency in export markets.

5.4 Limitations and future research directions

The findings of this study should be assessed in light of certain limitations which might offer opportunities for future studies. To begin with, this study was conducted with exporting SMEs in a single country context, namely Tanzania, which raises concerns about the extent to which the findings can be generalized. The relationship might produce different results in

the case of large firms and for SMEs in other developing countries. Therefore, future studies should replicate the study for both SMEs and large firms in other developing economies, with the objective to test the external validity of the findings of this study. In addition, the influence of PR on EXP was unexpectedly negative, and hence future studies would be advised to supplement the findings of this study with a qualitative paradigm in order to explore the reasons for such a negative effect. In addition, as it has been argued that variations in measuring the EO construct rank among the factors contributing to variation in EO-performance findings, we recommend that future studies use other available published export EO scales to verify whether they could result in different conclusions, in order to scientifically prove the claim and extend the extant knowledge. Furthermore, a cross-sectional design was employed in this study, and it is suggested that future studies could use longitudinal designs to examine how the variables used in this study change over time, which could lead to different conclusions in the furthering of the body of knowledge. Conclusively, future studies should explore contingent factors such as firm factors, and they should also assess the mediating and moderating effects of such factors on the EO-EXP relationship.

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