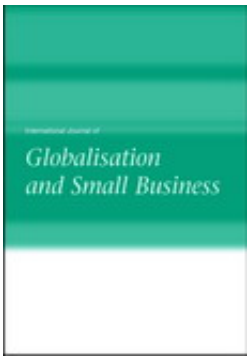

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The effects of dynamic capabilities on international SMEs' performance

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Abstract: Developing countries such as Iran face many challenges which can impact international small and medium-sized enterprises (SMEs) to a larger extent due to their limited resources and bargaining power. International SMEs are confronted by a number of challenges such as how to develop the dynamic capabilities needed to help them attain a high level of performance. By studying international SMEs, we investigate this matter by situating competitive advantage to mediate dynamic capabilities and firm performance. The partial least square technique was used to analyse the data which was collected through a self-administered survey. The survey was obtained from 166 SMEs in Iran. The findings suggest that dynamic capability does not have a significant impact on international SME performance. Moreover, competitive advantage does not mediate the relationship. This study offers recommendations to international SMEs on how to leverage comprehensive knowledge on dynamic capabilities and competitive advantage to enhance their performance in developing markets.

Keywords: dynamic capabilities; competitive advantage; firm performance; SMEs in Iran; international SMEs; differentiation advantage; cost advantage; developing markets; SME performance; small and medium-sized enterprises; SMEs.

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1 Introduction

The Iranian market can be attractive for businesses since it has a population of 85 million, making it the 19th biggest market in the world (United Nations, 2021). In addition to the human resources, it also has a vast array of natural resources, for example, it has one of the highest oil and gas reserves in the world as well as minerals, and it has a sophisticated manufacturing industry in many fields such as automobiles and pharmaceuticals (Alizadeh and Hakimian, 2014; Anvari, 2021). Thus, Iran is an attractive market for many international SMEs interested in taking advantage of the growth opportunities.

Nonetheless, firms, especially foreign businesses, need to be equipped with competencies to face the unique challenges of operating in this market.

Many foreign SMEs have entered this market to take advantage of the growth opportunities that the economy presents. However, their enthusiasm has also faced scepticism due to the uncertainty cloud that surrounds the economy (Ahadi and Kasraie, 2020). The recent political climate and the sanctions imposed on the economy has also contributed greatly to the scepticism about the economy, which adds an extra layer of uncertainty in international SMEs' approach to the market; as a result, they take steps cautiously. Particularly, the trade restrictions on a number of industries in Iran have complicated the trade relations with abroad (Iranmanesh et al., 2021). According to Iranmanesh et al. (2021), these restrictions have resulted in an increase in the cost of imports, which in turn affects international firms doing business in the Iranian market.

Amongst the most important challenges that face international SMEs in such an uncertain environment is to attain a high-performance outcome while considering their capabilities and the market conditions. Since resources need to be used effectively, and capabilities need to be adapted to fit the environment, then an environment which constantly changes can complicate these processes. The observations of Teece et al. (1997) and Araujo et al. (2003), builds on the ideas of Barney (1991a, 1991b) and Porter (1980) as they demonstrate the nature of the relationships between resources, competitive advantage, dynamic capabilities, and performance. Naldi et al. (2015) note that although the capability to sense, seize and reconfigure could result in a greater performance outcome in small innovative companies, the actual attainment of these gains needs to meet a specified 'threshold level' of these capabilities. For instance, international SMEs have to invest some of their resources on sensing and seizing new opportunities or reconfiguring them before they can reap the rewards. Without meeting this threshold, the positive effect on performance will not be materialised (Naldi et al., 2015). This highlights the importance of integrating resources with dynamic capabilities in order to achieve superior performance.

Although research indicates that there is a positive relationship between dynamic capabilities and performance, some studies imply that the link may not be direct (Ellonen et al., 2009). The processes associated with dynamic capabilities need substantial investments, which might be an issue particularly for small businesses which typically have limited resources (Zahra et al., 2006). Therefore, dynamic capabilities will result in enhanced performance only in cases where the pros are greater than the cons. It appears that the impact of dynamic capabilities is even more significant in unpredictable markets (Pehrsson et al., 2015; Fang and Zou, 2009). Frasquet et al. (2013) believe that the ability to predict opportunities or threats, and to capture and exploit opportunities, can be especially difficult in unpredictable business environments. Moreover, a firm that is operating in a number of markets is usually not as susceptible to changes in one of the markets as firms that only operate in a single market (Frasquet et al., 2013; Pehrsson et al., 2015), which as a consequence guarantees the stability needed for a firm to build dynamic capabilities required for a fluctuating competitive landscape (Prange and Verdier, 2011). However, these results are not conclusive and the relationship between dynamic capabilities and firm's performance in developing markets which are characterised by unpredictability remain under-researched, particularly as it pertains to international SMEs. Hence, the question arises on whether dynamic capabilities influence

international SME performance in developing markets. We address this question in this paper.

Against this backdrop, this study makes contribution to the knowledge in a number of ways. First, it focuses on SMEs since they are a significant part of most economies around the world. They contribute significantly to the funding of public services as well as shaping the local business environment by investing into the economy (Goudreault and Hébert, 2013). Therefore, SMEs are the foundations of economic prosperity, social change, innovation, and the first step for many future multinational conglomerates (Doern, 2009; Smallbone and Welter, 2001, 2008). Since SMEs in general only have limited resources for investing in developing dynamic capabilities, it is crucial that they receive returns on these resources in order to survive. Therefore, they ought to be equipped with the knowledge of possible competitive advantage which can alter the appropriation of the capabilities they have built. Second, the limited market power of international SMEs makes them more exposed to the market's competitive forces. They have limited ability to sense and seize new opportunities or to reconfigure their resources in order to react to competitors. As a result, it is vital to examine the impact of competitive advantage on their capacity to use dynamic capabilities to achieve their performance goals. Third, international SMEs are an important gateway between the isolated Iranian market and the rest of the world. Their performance directly impacts the consumers and the products and services they can obtain. Lastly, in the context of developing countries, international SMEs are a significant part of economic development, and they contribute to the social wellbeing of a nation. International SMEs' operations in Iran are of public interest since the general public views foreign goods to be preferable, hence, their supply level would affect their price for the public.

Next, we will present the theoretical background and the hypotheses. This is followed by the methods, data analyses and the presentation of the findings. Next, there will be the discussion of the results. The final section concludes.

2 Theoretical background

We investigate the impacts of dynamic capabilities on a firm performance. The paper also evaluates the mediating impact of competitive advantage. Moreover, this paper rests on the theoretical bases of resource-based view (RBV). This section explores the literature on these topics starting with RBV.

2.1 Resource-based view

RBV has been for many decades a leading model in the literature as it relates to the antecedents of competitive advantage. As stated by Wernerfelt (1984) and Barney (1986, 1991a), RBV highlights that a business can strive in foreign markets and achieve its long-term objectives if it has ample resources and is able to effectively exploit them. It suggests that competitive advantage is created from valuable resources that are scarce and which cannot be substituted or easily duplicated (Barney, 1986, 1991b). Hence, the significance of resources can be described by RBV in terms of firm performance and competitive advantage in different markets. Moreover, these resources are not necessarily spread through different firms equally, as different firms have their own individual resources which are known as firm-specific resources (Carpano et al., 2003). As a matter

of fact, Galbreath and Galvin (2008) argue that the firm-specific resources are the main components of RBV. One of the assumptions of the resource-based view is that a firm's performance in the marketplace is not merely contingent on the environmental dynamics of the market, but also on the firm's impact on the business environment, which means that each firm-specific resource is the main driver of competitive advantage in the marketplace (Forlani et al., 2008; Distel, 2021). Financial resources, experiences, and technology can all constitute as firm-specific resources (Tuan and Yoshi, 2010; Ismail et al., 2012).

Based on RBV, the growth of a firm is the consequence of a strategy that encompasses both the maximum use of current resources, as well as developing and exploring new resources (Wernerfelt, 1984). Nevertheless, different resources do not have the same utility. According to Barney (1991b), competitive advantage can only be achieved through resources that are valuable, rare, inimitable and non-substitutable (VRIN). These resources do not necessarily have to be tangible, in fact intangible resources such as knowledge, management skills, and firm processes can also be a part of VRIN resources (Barney et al., 2001).

By observing the literature on RBV, it can be concluded that a component which is as important as firm-specific resources are the way in which those resources are managed. If the resources are managed in an effective manner, they may lead to competitive advantage and favourable performance (Elizabeth, 2021). The intrinsic value of a resource is in carrying out activities in a way which could result in better performance. Therefore, if a firm possesses dynamic capabilities, they will be able to manage their resources more effectively. According to Song et al. (2008), firms have different performance levels due to differences in how they utilise resources. Resource-based view suggests that if the resources and capabilities of a firm lead to competitive advantage in an industry or a market, then a high-performance level can also be expected (Barney, 1995). Possessing unique and better resources may not be by itself sufficient to outperform rivals, rather a firm should also possess the capabilities on how to use its resources effectively to achieve competitive advantage.

2.2 Firm performance

There is a long track of research affirming that the performance of an organisation is an indication of their survival since it impacts the decision of investors, lenders, and other stakeholders (Andow and David, 2016; Adawiyah and Pramuka, 2017; Owolabi et al., 2021). Businesses have to prove that they are able to turn a profit in a competitive market while they demonstrate their capacity to sustain their business in the long run. According to Wu and Voss (2015), evaluating the efficiency and effectiveness of the decisions made by a firm is performance measurement. Newbert (2008) asserts that the real benefit that a firm accrues from their various activities in the economy is measured by the firm's performance.

The literature on corporate performance discusses the different measures that have been developed by researchers to quantify performance. As a result, these measures have been categorised mainly into two segments, objective, and subjective measures. Objective measures focus on profits while subjective measures focus on other metrics such as a firm's growth, efficiency, productivity, leadership, and market share relative to competitors. Incorporating subjective measures of performance to assess a firm's

performance was born out of the desire for firms to be competitive in a new environment, where merely objective measures were not sufficient anymore (Chenhall and Langfield-Smith, 2007; Guimarães et al., 2017).

There are several advantages that subjective performance measures have over objective measures. A good performance based on subjective measures is associated with a good objective performance in the long run (Richard et al., 2009). According to Acquaah (2012), one of the preferred measures of the performance of a firm is the subjective comparison between the firm and its competitors in the market. Firm's performance should also encompass the non-financial and operational aspect of a firm (i.e., subjective measures), and not only the financial aspect (Murphy et al., 1996; Venkatraman and Ramanujam, 1986). Such an outlook on the firm's performance allows for a more comprehensive measurement (Venkatraman and Ramanujam, 1986; Rikhardsson et al., 2020). The secrecy and the lack of accessibility surrounding objective (i.e., financial) measures also deter many researchers from pursuing them in favour of subjective measures (Matsuno et al., 2002).

2.3 Dynamic capabilities

For SMEs to stay in business in the long run, they need to have the ability to modify their practices when necessary; detect the shifts in the business environment; and reconfigure resources when needed, meaning they should have dynamic capabilities. Teece et al. (1997, p.516) defined the concept as a firm's "ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments". Since then, Teece's definition was amended, developed and expanded, leading to various other conceptualisations (Eisenhardt and Martin, 2000; Schreyögg and Kliesch-Eberl, 2007; Helfat, 2007). Although the emphasis on a firm's capacity to adjust their resources and processes is shared by the majority of these conceptualisations (Foss and Stieglitz, 2010), the range of perspectives has led to some debate regarding their veracity, which according to Easterby-Smith et al. (2009, p.2), "this may be due, in part, to the fact that the definition provided by Teece et al. (1997) was broad enough to provide opportunities for others to refine, reinterpret and expand the concept". Many scholars have taken this task on, and as a result, one can observe that dynamic capabilities do engage on different levels. For instance, Schilke (2014) categorised dynamic capabilities as first order and second order capabilities. Collis (1994), on the other hand, classified capabilities in four different levels. Other researchers like Zahra et al. (2006), categorised capability levels as substantive, Teece (2014) as ordinary, Winter (2003) and Wu et al. (2010) and Zollo and Winter (2002), as zero level and operational, Teece (2014) and Zahra et al. (2006) as dynamic capabilities, and Winter (2003) as first order capabilities.

In 2007, Teece noted that dynamic capabilities could be categorised as sensing capability; seizing capability; and reconfiguration capability. The capabilities to sense and seize are key to a firm's ability to be versatile (Gibson and Birkinshaw, 2004; Naldi et al., 2015), in addition to sustaining the capacity to generate value (Rothaermel and Alexandre, 2009; Rashidirad and Salimian, 2020). Zahra and George (2002) note that reconfiguration capability is vital as well since it is necessary to transform existing practices when needed. Therefore, dynamic capability is a significant ability that enables firms to adjust to new environments, and which occurs as a consequence of the relationship between resources and capabilities to achieve competitive advantage (Teece et al., 1997). From this viewpoint, performance is impacted by the choices made in terms

of the way in which firms interacts with competitors in the same industry (Araujo et al., 2003).

There's ample empirical evidence to suggest that SMEs with higher dynamic capabilities may be in a better position to navigate market uncertainty and achieve their performance goals (Fang and Zou, 2009; Raasch et al., 2020). International SMEs deal with the complexities in their environment with different levels of success. The differences in the performance of international SMEs could partly be justified by the differences in their dynamic capabilities. Teece (2007) alludes to a direct link between the capabilities to sense, seize and reconfigure, with firm performance. Yet, particularly in SMEs, capabilities are limited by the available resources and abilities of a firm. Zahra et al. (2006, p.925) state that, "the building and use of dynamic capabilities are costly and can lead to losses or gains". Hence, the link between dynamic capabilities and performance in international SMEs might not be as clear as previously thought. The possession of competitive advantage or lack thereof, for example, may have an effect on the relationship between these aspects of dynamic capabilities and international SMEs performance. Thus, this research hypothesises that:

H1 Dynamic capabilities influences the international SME's performance.

2.4 Competitive advantage

Competitive advantage is an important concept in business and economics. This was evidenced by the content analysis which found that except for 1997 and 2004, every year since 1994 more than 50% of the published articles in the *Strategic Management Journal* mentioned the term competitive advantage (Ong et al., 2012). Competitive advantage can be defined as a firm's ability to offer more value for their consumers than what is offered by their competitors.

Barney (1991b) believes that a firm's internal capabilities can be distinguished from the internal capabilities of their rivals, which could result in competitive advantage. This allows for employing certain strategies which could help a firm compete by creating cost differentiation or product differentiation (Walsh and Sanderson, 2008; Porter, 1985; Grant et al., 2015). A mixture of cost differentiation and product differentiation in pursuit of acquiring competitive advantage and increased performance compared to rivals has been empirically substantiated by numerous studies (Carlisle and Faulkner, 2005; Walsh and Sanderson, 2008; Walsh and Dodds, 2017).

A competitive strategy based on dynamic capability is viewed to be the force behind a successful offensive and defensive approach (Hayes and Upton, 1998; Correia et al., 2020). A number of researchers claim that an effective management of resources and operational superiority do more than just strengthening and consolidating a firm's current competitive advantage, as it also and perhaps more significantly, aids organisations in gaining new competitive advantages, since it is grounded in capabilities which are rooted in the firm's resources and processes. Therefore, it is fundamentally challenging for a firm's market rivals to duplicate them, thereby, assisting the firm in achieving their desired performance goals (e.g., Hayes and Upton, 1998; Peters, 2012; Markovich et al., 2021).

RBV emphasises how significant firm's capabilities and resources are in gaining sustainable competitive advantage and a higher performance level (Bharadwaj et al., 1993; Barney, 1991b). Based on the RBV model, the appropriate deployment of the

organisation's capabilities can result in positional competitive advantages which could be manifested as either product differentiation, decreased costs, or both (Wernerfelt, 1984). In fact, Sharma and Erramilli (2004) believe that the level at which an SME can allocate their resources to the foreign market and make use of them effectively determines their competitive advantage. Thus, the firm's capability in managing resources is essential at this stage.

The relation between dynamic capabilities, firm performance and competitive advantage is examined through RBV. By synthesising the current research on RBV, the theoretical framework draws on the experiences of foreign SMEs in Iran and measures their performance. Moreover, it assesses how this relationship is affected by dynamic capabilities and competitive advantage. Thus, this research hypothesises that:

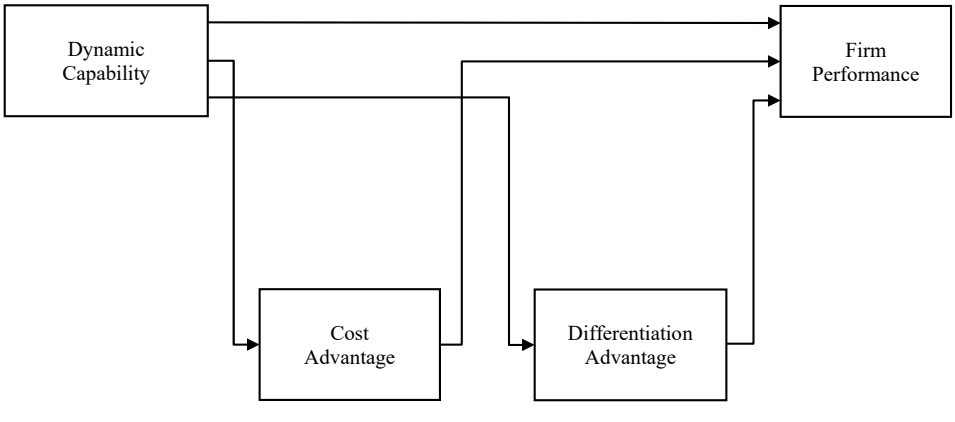
H2 Cost advantage has a mediating impact on dynamic capabilities and SME's performance.

H3 Differentiation advantage has a mediating impact on dynamic capabilities and SME's performance.

3 Methods

Current studies suggest that dynamic capabilities can lead to superior performance. In fact, the nature of their relationship raises the possibility for the existence of mediating factors that alter the relationship. This paper addresses this matter by empirically analysing the mediating effects of competitive advantage on the link between dynamic capabilities and firm performance. The review of the literature suggests that both differentiation advantage and cost advantage could affect the management of dynamic capabilities by a firm. A framework has been developed to lead this study following the review of the literature and the background of the study. Figure 1 presents the conceptual model.

Figure 1 Conceptual model



This study uses quantitative approach (i.e., survey) to analyse these relationships. An important aspect of development of the survey instrument was guaranteeing validity, which entails striking a balance between the construct and the measurement. The first

stage of guaranteeing content validity is to identify the preliminary measurement items for all the constructs. Every measure in the present study was evaluated by using scales formerly validated and subsequently adapted in order to align with the framework of this research. Table 1 presents the sources for the initial measurement items used in the survey.

The survey instrument consists of an introduction of the topic and explains the purpose for collecting the data. The respondents were also informed about the topic of the questionnaire. Likewise, the researchers guaranteed the privacy of the respondents. These steps helped in addressing the common method bias (CMB). In addition, the survey uses different scales for the dependent and the independent variables (i.e., five-point and seven-point Likert), also to avoid concerns of CMB (Podsakoff et al., 2003). Furthermore, the measurement items were improved and clarified following the experts' review of the survey. The survey was tested and refined following the expert feedback of two members of academia as well as two executives in Iran. The survey was also reviewed by two academics in Malaysia. Thus, the number of feedbacks acquired from the experts was higher than the minimum required to validate the measurements (Rubio et al., 2003). Based on the experts' feedback, a few small refinements to the questionnaire were made in order to ascertain contextual suitability. The refinements included breaking certain items in two in order or avoid double-barrelled questions, in addition to changing the wording of some items to increase their clarity. Furthermore, in order to improve the overall design of the survey, the experts were asked to voluntarily add any suggestions that they may have. The complete survey has been added to Appendix.

Table 1 Sources for the measurement items

Variables sources	
Firm performance	Ong et al. (2018)
Competitive advantage	Ong et al. (2018)
• Differentiation advantage	
• Cost advantage	
Dynamic capabilities	Wilden et al. (2013)
• Sensing capability	
• Seizing capability	
• Reconfiguration Capability	

The sampling frame is comprised of international SMEs with local branches in Iran. As the study is conducted in Iran, the Iranian definition of SME (i.e., firms with less than 100 employees) has been used. Since the sampled population of this study are mainly SMEs in the private sector, relative measures of performance are applied (e.g., Garcia-Morales et al., 2014). This method reduces managers' reluctance to answer the questions as well as lowering the possibility of data inaccuracy. Respondents were requested to rate their performance in relation to their competitors in the sector.

Several strategies were employed to encourage participation in the survey. These included providing a summary of the goals of the study in the cover page, guaranteeing privacy, and including the university letterhead to underscore the academic nature of the study. Moreover, referral networks were used as well since previous empirical research in

the Iranian market confirm that participation rate can be improved by leveraging networks (Kamalian et al., 2015).

The database which included 1,452 SMEs, was obtained from a prominent industry database supplier in Iran, which is utilised as the sample base for this study. In order to achieve a comprehensive response rate, the questionnaire was sent to the entire population. The survey and four reminders were sent between March and October 2020, which resulted in achieving 166 usable responses. The data was gathered by a self-administered questionnaire from senior managers in foreign SMEs. The views of SMEs and their experiences in international markets in terms of their performance were attained from their answers to closed-ended questions.

4 Results and findings

The descriptive analyses were done in order to assure the data corresponds to the requirements of linearity and normality. To assess validity and reliability, the study performed factor analysis, in addition to the correlations of the scales. Since the model includes numerous relationship paths, structural equation modelling (SEM) was carried out using PLS software. This study utilised the mediating model in testing the hypothesised effects of competitive advantage on dynamic capabilities of international SMEs and their performance. This followed the testing the direct effect of dynamic capabilities on SME performance.

This section presents the results of the research, starting with the demographic profiles, validity, and testing the model.

4.1 Demographic profiles

The demographic profiles of all the participants are reported in Table 2. About a quarter of the international SMEs have either ten employees or less. A third have between 11 and 49 employees, and the rest have more than 50 but less than 100 employees. Since the survey was sent only to international SMEs with less than 100 employees, none of the participants had more than that amount. In terms of the SMEs' origin, 57.8% originated in Asia Pacific, 35.5% in Western Europe, and 5.4% in Eastern Europe. Moreover, manufacturing accounted for the largest segment of respondents.

4.2 First order reflective measurement model evaluation

Table 3 shows the results of the first order reflective measurement model assessment. In order to determine convergent validity, the average variance extracted (AVE) is employed. An AVE of 0.50 or above is considered acceptable (Hair et al., 2017). However, an AVE of sub 0.5 can be acceptable if the composite reliability is higher than 0.6 (Fornell and Larcker, 1981; Hair et al., 2017). As seen in Table 3, the 0.6 cut-off has been exceeded. Furthermore, items with an outer loading between 0.40 to 0.70 should also be eliminated in case deleting them raises the AVE and the composite reliability (Henseler et al., 2009). Accordingly, this was done for this study.

Table 2 Demographic Profiles of the international SMEs

Profile	*Frequency (166)*	*Percentage (100%)*
	SME size (number of employees)	
10 or less	46	27.7
11-49	58	34.9
50-99	62	37.3
	Region of origin	
Asia Pacific	96	57.8
Eastern Europe	9	5.4
Western Europe	59	35.5
Other	2	1.2
	Core industry	
Service	48	28.9
Manufacturing	55	33.1
Retail	29	17.5
Agriculture	28	16.9
Other	6	3.6

Table 3 Measurement model

Construct	*Composite reliability*	*Average variance extracted (AVE)*
Dynamic capabilities	0.902	0.417
Reconfiguration capability	0.872	0.584
Sensing capability	0.870	0.551
Seizing capability	0.947	0.818
Cost advantage	0.716	0.376
Differentiation advantage	0.856	0.501
Firms performance	0.876	0.469

The Fornell-Larcker's (1981) criterion, cross-loading, and HTMT ratio were performed in order to measure discriminant validity, and the findings reveal a suitable degree of discriminant validity.

4.3 Second order formative measurement model evaluation

The higher order measurement model for this paper is dynamic capabilities. The formative measurement model is assessed for its indicators' weight, the significance of its weight, as well as multicollinearity (Hair et al., 2011).

Table 4 presents the statistical findings based on the assessment of the formative measurement model of dynamic capabilities. We can observe that all three indicators in dynamic capabilities have positive impact on dynamic capabilities with all the indicators' weights statistically significant at 99% confidence level. The variance inflation factors (VIF) is utilised to find the correlations between variables. The VIFs are adequate as they

are all below the cut-off. Hence, the formative measurement model for dynamic capabilities is deemed to have fulfilled the assessment criteria.

Table 4 Measurement models evaluation for dynamic capabilities

Construct	*Item*	*Std beta*	*Std error*	*T-value*	*VIF*
Dynamic capabilities	SC	0.432	0.051	8.400	1.794
	SEIZ	0.431	0.039	10.977	2.397
	RC	0.354	0.046	7.621	1.479

4.4 Model testing

Bootstrapping is used in this study to assess the hypotheses. The findings are demonstrated in Table 5, including the p-value and the coefficients (β). Based on the findings, the effect of dynamic capabilities on firm performance is not significant.

Table 5 Results of bootstrapping for the direct effects

Path	*β*	*SE*	*T value*	*P values*	*F*	*R squared*	*R squared adjusted*
DC → FP	0.195	0.124	1.568	0.117	0.011	0.067	0.050
CosA → FP	0.130	0.216	0.602	0.548	0.002		
DA → FP	0.062	0.121	0.516	0.606	0.023		

4.5 Test of mediation

Table 6 reports the impact of competitive advantage on the dynamic capabilities-performance relationship for international SMEs through bootstrapping. The results reveal that the effects of dynamic capabilities on SME performance mediated by competitive advantage is not significant.

Table 6 Results of bootstrapping for the indirect effects

	β	*SE*	*T value*	*P values*	*CI 95%*	
					LL	*UL*
DC → CostA → FP	0.029	0.048	0.593	0.553	-0.113	0.091
DC → DA → FP	0.014	0.035	0.392	0.695	-0.038	0.110

5 Discussion

The results do not back the hypothesised relationship linking dynamic capabilities to international SME performance. Dynamic capability refers to the firm's "ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments" [Teece et al., (1997), p.516]. Consequently, dynamic capabilities are likely to influence firm performance, including international SMEs. While there has been research confirming the positive impacts of dynamic capabilities on firm performance in general (Prange and Verdier, 2011; Morgan, 2012), its impact on the

performance of international SMEs in developing markets has not been equally investigated. This research provides some insight into the implication of this construct on firm performance, particularly in developing economies. Surprisingly, the results revealed that dynamic capabilities do not have a significant impact on international SME performance, however, its significance was higher when it was not mediated by competitive advantage. This is consistent with Liu and Liang's (2015) proposition regarding the role of dynamic capabilities vis-à-vis performance.

The result implies that dynamic capabilities have less effect on business performance of international SMEs in developing markets than previously thought. Indeed, the diverging performance outcomes between large versus small firms, as well as local versus international companies in terms of their dynamic capabilities is an interesting phenomenon which merits further research. One of the possible reasons why dynamic capabilities was found to not have a significant effect on performance might be because international SMEs in Iran do not practice the capabilities to sense, seize opportunities and reconfigure resources in a way which will impact performance in a meaningful way. Some studies found that dynamic capabilities can provide small firms with more resilience at times of crises (Elf et al., 2022). However, this may not necessarily apply to developing countries. The culture and business context may also play a role. The fact that most of the middle east has a top-down, high context business culture, may impact how dynamic capabilities are being practiced, and most importantly implemented, leading to differential consequence on performance. The impact of this top-down approach may also be more pronounced in smaller firms.

6 Conclusions

This paper explored the previously overlooked impacts of dynamic capabilities on foreign SME's and their performance in developing economies. Moreover, the role of a conceptually related notion of competitive advantage in achieving performance goals was considered. Following the literature, dynamic capability was categorised as sensing, seizing and reconfiguration capabilities, and were hypothesised to affect international SME performance. This was done by obtaining data from a questionnaire of foreign SMEs in Iran. The findings revealed that dynamic capabilities did not influence SMEs' performance. This implies that the difference in performance as it relates to the role of dynamic capabilities and competitive advantage in developing economies versus developed countries are more complicated than previously thought.

6.1 Implications of the study

Theoretically, this paper extends the understanding on the necessity of RBV conceptualisation through exploring the role of dynamic capabilities in achieving a high level of performance for international SMEs in developing markets. Literature has recognised resources as the primary driver of obtaining value, which would subsequently lead to competitive advantage and high firm performance (Barney, 1991b; Newbert, 2008). Nonetheless, the exact link underlying this relationship remains unclear, particularly when it comes to dynamic capability's role. This paper offers some

explanation by conceptualising the links between dynamic capabilities, firm performance, and RBV, thus contributing to the theoretical knowledge.

This study advances resource-based view to explain the predictability of dynamic capabilities (i.e., sensing capability, seizing capability, and reconfiguration capability) on international SME performance. Barney and Clark (2007) observed that explaining the individual differences is a crucial step towards a clear understanding of the relationship between resources and performance. Additionally, dynamic capabilities could lead to competitive advantage. While resources can help gain competitive advantage by creating value for the firm (Barney, 1991b), and competitive advantage can lead to a high level of performance (Newbert, 2008), yet the relationship is not as clear cut. Thus, the empirically validated SEM model did not support this link.

In addition to the suggestions to policy makers to create a conducive business environment which would attract international SMEs, this study seeks to offer recommendations to the management of international SMEs which can help enhance their performance. International SMEs ought to encourage collaboration between their various operations so that they can better meet their consumers' needs. Taking these steps will lead to positive outcomes such as the consumers assigning a higher value to the goods and services offered by the company. This would consequently help them attain their performance goals.

6.2 Limitations and future research

Although this study made every attempt to meticulously adhere to the methodological steps, the possibility of respondent bias is nevertheless present. While we employed a number of empirical and statistical techniques to control for these types of biases, self-reported data can nevertheless be prone to bias (Howard, 1994; Podsakoff and Organ, 1986). Yet, surveys continue to be the most suitable method of gathering evidence on certain phenomena (Spector, 1994, 2006). According to Rupp and Spencer (2006), by including a mediator, as it was done in this study, the influence of bias can be minimised, hence, strengthening the suitability of self-reported surveys.

Moreover, the research only explored the international SMEs in the Iranian market, and the result ought to be regarded as such. The difference in sizes of the firms and whether the firm is local or international might impact their performance in the market. As such, the generalizability of the findings will depend on gathering data from other types of businesses (e.g., larger firms) as well as other developing countries too.

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Appendix

Survey instrument for constructs in the research model

Sensing capability

In our organisation …

1 people participate in professional association activities

2 we use established processes to identify target market segments

3 we use established processes to identify changing customer needs

4 we use established processes to identify customer innovation

5 we observe best practices in our sector

6 we gather economic information on our operations and operational environment.

Seizing capability

Our organisation …

1 invests in finding solutions for our customers
2 adopts the best practices in our sector
3 responds to defects pointed out by employees
4 changes our practices when customer feedback gives us a reason to change.

Reconfiguration capability

In our organisation …

1 we constantly implement new kinds of management methods
2 we frequently change our marketing strategy
3 we frequently change our marketing method
4 we substantially renew business processes
5 we constantly renew the ways of achieving our targets.

Differentiation advantage

Our organisation …

1 provides better customer service than our competitors
2 is better in commercialising new products than our competitors
3 is more successful at retaining customers than our competitors
4 can display our technology know-how in our products
5 enjoys the image as a premium producer
6 can attract customers to pay higher prices for our products because of its better quality
7 is able to serve a new market segment.

Cost advantage

Our organisation …

1 produces the products faster than our competitors
2 has lower production wastage than our competitors
3 utilises better technology to operate more efficiently than our competitors
4 uses latest management philosophy to operate more effectively
5 has certification and recognition for an effective production system
6 has a tight production control to achieve consistent product quality.

Firm's performance

Evaluate your firm's performance against your closest competitors in the following areas…

1 sales growth
2 capturing market share
3 profitability
4 financial wellbeing
5 financial stability
6 efficiency
7 customer loyalty
8 liquidity.