



Strategic agility, openness and performance: a mixed method comparative analysis of firms operating in developed and emerging markets

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Abstract

This research delineates the relationship between strategic agility and performance, and proposes openness as a requisite means to fostering agility and enhancing performance. Methodologically, the research follows the pragmatist paradigm through a mixed-method research design, incorporating three separate studies. These comprise a CEO-based survey on foreign firms operating in emerging markets, a CEO-based survey on firms operating in developed countries, and CEO interviews, all of which are complimented by auxiliary instruments of secondary data and an expert panel. The research finds that strategic agility is vital for firms' performance in both developed and developing markets. Moreover, we found that while search depth amplifies the above relationship in both contexts, search breadth does it only in the context of foreign firms operating in emerging markets. The value of these findings stems from their elucidation of the role of strategic agility in emerging markets and its comparison to that of firms operating in developed countries; their insights into strategic agility's relationship with openness; their schematic culmination into a systematically and contextually depicted framework; and their prescriptive managerial implications.

Keywords Emerging markets · External knowledge sourcing · Strategic agility · Open innovation · Openness · Performance

JEL Classification O31 · O36 · L10

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1 Introduction

Amidst a fast-changing and shape-shifting globalised business environment, executives and scholars alike increasingly find time-honoured and venerable strategies to be incapable or unfit to meet the demands of contemporary firms' realities. Inevitably, perhaps irrevocably, they turn to new strategic notions, befitting the complex and hyper-competitive conditions of today, in pursuit of new requisite means to—contrariwise—interminable ends such as performance, growth and competitiveness.

This research follows one such strategic strand, specifically, strategic agility (Xing et al. 2020), which, as a stream of research, has heightened interest among both scholars and practitioners, owing to its increasing pertinence to the aforementioned qualities of the present business context (Jafari-Sadeghi et al. 2022). For the purposes of this research, strategic agility is defined, in mainstream fashion, as the ability of the organization to regularly adapt to uncertain and changing environments (Doz and Kosonen 2008). The concept consists of three meta-capabilities, namely strategic sensitivity, resource fluidity and leadership unity.

In this vein, scholars have suggested that firms must seek new ways of managing business and develop knowledge transfer skills, learning methods and an adaptive corporate culture in order to be agile and face changes and disruptions in the business environment (Liu and Almor 2016). Strategic agility, thus, constitutes a critical and core organisational competence, which is manifested in the development of new business models and strategies rather than innovating existing products and services (Weber and Tarba 2014; Wilson and Doz 2011).

A core challenge of strategic agility regards the executive competency of pursuing the selected strategy with the apt and requisite resources, be they human resources, physical resources, intellectual property, advanced manufacturing, information technologies or knowledge (Combs et al. 2011; Nadkarni and Herrmann 2010). This challenge and its importance are enhanced for multinational companies, which need to adapt to multifaceted contexts (Ahammad et al. 2016; Ilhan-Nas et al. 2018). Adding to the above, emerging markets present a particularly challenging and idiosyncratic context, as the firm therein needs to match its strategy and resources with the complexities of dynamic and challenging institutional contexts (Fourné et al. 2014; Tatoglu et al. 2020).

And while strategic agility has received well-deserved active and passive attention across the spectra of theory, practice, industry and geography, it is still an emergent stream of studies, with many theoretical gaps and a corresponding number of practicable answers still demanded by scholars and executives alike. Even the very concept of strategy agility itself is still considered ambiguous and context-related, while studies on antecedents, moderators and outcomes of strategic agility are still scarce (Clauss et al. 2019; Junni et al. 2015; Kale et al. 2019). This represents a first big gap in the literature. Our theoretical research has further shown similar and greater scarcity of studies on the relationship between strategic agility and different typologies of performance, such as economic, innovative and internationalization performance. For example, in specific types of markets, such

as emerging ones, arguably, strategic agility is even more, or at least differently, important due to the varied and different political, economic and socio-cultural elements (Pereira et al. 2020; Sarala and Vaara 2010). And yet, there is a visible lack of empirical studies on how strategic agility of foreign firms may foster competitiveness in emerging markets, which present steady growth prospects for firms aiming to grow internationally. And equally lacking is also extant knowledge of the conditions under which companies are able to capitalize on strategic agility to achieve better performance. To sum up, given the novelty of this topic, there is a need for empirical research on the strategic agility–performance relationship.

The research's *overarching aim* is to fill the above-described gap by delineating the relationship between strategic agility of foreign firms operating in emerging markets and performance. It further proposes openness as a requisite means to fostering agility and enhancing performance. In this regard, open innovation has emerged as a key approach for innovative firms that aim to adapt and renew themselves quickly and steadily (Bogers et al. 2018). In fact, open innovation – which regards the acquisition and transfer of knowledge and technologies – has become a widespread management practice (Chesbrough et al. 2006; Kraus et al. 2020), with a considerable body of literature advocating that opening to external knowledge sources, both widely and deeply, helps to boost performance (e.g. Santoro et al. 2018).

First, from a resource based view (RBV) and knowledge based view (KBV) perspective, outside-in innovation activities allow firms to acquire unique and valuable forms of knowledge and other key resources from external counterparts to contribute to adapting to the business environment (Ferrerias-Méndez et al. 2015). Second, access to broad resources from external partners' facilities increases the understanding of new information and potential changes, enhancing the firm's ability to detect technological opportunities and bestowing the agility to adapt to unpredictable changes (Robson et al. 2019). This, in turn, facilitates adaptation to the specific conditions of emerging markets, and the implementation of new strategic approaches. Thus, with this paper we propose that openness fosters strategic agility of foreign firms operating in emerging markets. Against this backdrop, the paper answers the following research questions:

- (a) *Does strategic agility contribute to improving performance, and what is the relationship between strategic agility, open innovation and performance therein?*
- (b) *Does this relationship take different forms in developed versus emerging markets?*

Methodologically, the research rests on a tripod of research foundations. The first leg theoretically identifies the gap and develops hypotheses; the second leg applies the principal tools through a mixed quantitative–qualitative method research design; and the third leg incorporates the supportive and auxiliary instruments, namely secondary data and an expert panel. The novelty of this topic, together with the apparent lack of studies on the relationship between strategic agility and performance, as well as on strategic agility as a theoretical

concept, underlines the need to employ both deductive and inductive approaches. For these reasons, we decided to enrich this research with both qualitative and quantitative methods.

The *value and contribution* to knowledge and practice of the work stems from four distinct elucidations. (a) It sheds light on the scale and nature of both the absolute and comparative importance of strategic agility in developed and/versus emerging markets, whereas extant studies have focused on developed markets so far. (b) It provides insights on the relationship between strategic agility and openness, in the former context, suggesting that being open to external sources of knowledge and other resources increases the impact of agility on performance. Accordingly, we add to the body of literature that is currently lacking studies on the relationship between strategic agility and openness. (c) It presents a framework for understanding the different types of strategic orientations, based on the variables of strategic agility and openness and depicted systemically and contextually towards a comprehensive understanding of the notions involved and their interrelationships. (d) It identifies the explicit descriptive managerial implications and offers prescriptive and practicable recommendations towards industry adoption and implementation.

Structurally, and in orthodox fashion, and following a theoretical research, the paper first develops a set of hypotheses concerning the relationships between strategic agility, openness and performance. It subsequently tests these through a quantitative study using data gathered from Italian firms operating and/or selling in emerging markets. The findings, thereafter, are compared, through a second study, with a pool of firms operating in developed countries. Next, the paper provides the results of interviews conducted with top managers of three Italian firms to deepen and refine the research findings and to further explore the underlying means through which openness may support strategic agility and competitiveness. Finally, and in an integrative manner, a framework is developed which refines and expands the notions and (the subsequently tested) suppositions of the topic, and positions these, along with their critical contextual factors and forces, within a comprehensive conceptualisation that interrelates these systemically.

2 Theoretical foundation and hypotheses

2.1 The strategic agility imperative

Strategic agility is a field of research of relatively recent origins, but it is one that has attracted significant attention (Morton et al. 2018; Weber and Tarba 2014). This interest is evidently stimulated by firms' growing need for adaptation (Klammer et al. 2017), which itself is consequent to increasing globalization, competition and opportunities offered by new technologies.

According to Doz and Kosonen (2008, 2010), agility refers broadly to the ability of the organization to adapt constantly to uncertain environments. The authors' elaboration of the notion further identified three requisite meta-capabilities for strategic agility, namely strategic sensitivity, resource fluidity, and leadership unity. Strategic sensitivity refers to the ability to become aware of market trends and converging

forces in order to quickly take advantage of new opportunities (Doz and Kosonen 2010). Resource fluidity is the capability to rapidly redeploy resources and reconfigure business systems (Doz and Kosonen 2010). Resource fluidity is the ability to respond quickly to market changes and to stay ahead of the competition. Finally, strategic agility requires leadership unity and collective commitment, so that the firm can profit from rising opportunities without being slowed down by internal disagreements and conflict (Doz and Kosonen 2010).

In essence, agility demands both fast decision-making processes and timely organizational adaptations/transformation, which can take place in the firm's different activities and business processes, such as information technology (Morton et al. 2018), organization (Brueller et al. 2014), human resource management (Lewis et al. 2014; Komodromos et al. 2019), strategy (Brannen and Doz 2012), and innovation (Wilson and Doz 2011). Furthermore, according to the resource-based view (RBV), agility is also about discovering and deploying the right resources, tangible and intangible, to implement the new strategy in a timely manner (Weber and Tarba 2014). In this regard, studies on open innovation have highlighted the importance of acquiring unique resources, such as knowledge, from external partners (Bogers et al. 2020). Hence, knowledge is considered an increasingly important asset to compete in dynamic markets (Cillo et al. 2019).

And though extant literature overwhelmingly characterises and highlights strategic agility as a core asset of competitive firms, we still know little about the antecedents, moderators and outcomes of strategic agility so far (Kale et al. 2019; Junni et al. 2015).

2.2 Context of analysis: emerging markets

The term “emerging markets” refers to specific fast-growing economies with high rates of stable development (Howe-Walsh et al. 2019; Rodgers et al. 2019), in which the population is moving from basic needs to a more consumption-oriented behaviour (Ciftci et al. 2019; Kapidani and Luci 2019). Overall these markets provide new opportunities and new challenges to face (Marquis and Raynard 2015; Loehde et al. 2020). In such a dynamic environment, firms are expected to balance their role in economic development with social responsibility toward the country in which they are operating (Akhtar et al. 2018). Firms also have to challenge the gap between local inefficiency and global governance structures, and to adapt to cultural differences, standards and practices (Meyer and Peng 2016). Furthermore, global firms have to face political instability, which is traditionally associated with emerging countries, as well as industrial infrastructure inefficiency and the lack of intellectual property right protection. The absence of specialized intermediaries, proper regulatory systems and contract-enforcing mechanisms is also a threat. Firms also face political risks, inflation risks, bank instability, legal risks, exchange rate risks and risks from operations (Khanna et al. 2005).

The aforementioned characteristics of emerging markets, plus others such as low income, high volatility and fierce competition, additionally and potentially demand a degree of agility at the highest strategic level. At this level, in fact, they can even

transcend, as needed, simple strategic adaptation to apply complete strategic redevelopment and/or reorientation that will boost sales and grow as the market itself grows. Therefore, the context of analysis suggests the absolute importance and necessity for foreign firms to be agile in order to explore and exploit opportunities and face competition in emerging markets.

In addition, these opportunities and challenges underline the importance of acquiring country-specific resources and knowledge, and thus, suggest that open innovation is a viable strategy for increasing agility and performance. In fact, operating in an institutional and competitive context, different from the firm's original one, could reveal a lack of tangible and intangible resources, such as knowledge, that are necessary in implementing strategy and creating value.

Finally, while there are many studies on the benefits of open innovation in the context of developed markets (e.g. Bogers et al. 2020), to the best of our knowledge, this phenomenon has not been investigated enough in the context of developing markets. This makes the comparative investigation between the two markets even more worthwhile.

2.3 Hypotheses

Our literature review has confidently concluded that the strategic agility–performance relationship has received very little attention by scholars, at least proportionally to its importance. More indirectly, some studies have suggested that an agile organization is better able to adapt its culture to market changes, to learn about market changes swiftly, and to shape its products according to customers' preferences (Kumkale 2016). Moreover, these changes can potentially be transformed into opportunities by reorganizing the firm's strategy and systems responsively to environmental changes (Shin et al. 2015). To sum up, purposefully designed and realised strategic agility bestows business with the competencies to respond promptly to changes, to be flexible, and to implement other actions to control and limit market risk and uncertainty (Sherehiy et al. 2007).

Hence, being agile requires constant scanning of the internal and external environments, collecting and using information swiftly, responding to market changes rapidly, and allocating resources promptly and appropriately (Ferraris et al. 2018). In the same vein, strategic reflexivity is hereby introduced as a potential necessity, with visible effects at the organisational, team and individual levels (Chen et al. 2018). Specifically, strategic reflexivity has been suggested as a remedy to incessant environmental changes and the varying competitive conditions that are intolerant of conventional strategic planning.

Agility can foster the quality of a firm's competitive activity inventory and applicable responses to environmental changes, thus, enhancing performance (Tallon and Pinsonneault 2011). Additionally, it has been shown that strategic agility impacts positively on business model innovation propensity (Clauss et al. 2019; Hock et al. 2016). The necessity and benefits for strategic agility is obvious at all levels of markets (local, national, and international), through effectively meeting customers' changing needs, introducing new products, adapting to

negatively progressing political change, establishing strategic partnerships, and offering top-level service (Frynas et al. 2006; Oyedijo 2012).

As a consequence, agility must be seen not as a mere advisable option but as an essential condition, particularly for firms with operations in different foreign markets, which are influenced by political, economic, social and cultural factors that are often opaque and/or erratic (Boso et al. 2018; Luo 2003; Wright et al. 2005). For these reasons, we can infer that strategic agility generally impacts on sales growth, and thereby we set forth an austere, yet significant hypothesis...

Hypothesis 1 *Strategic agility impacts positively on sales growth for both companies active in developed markets, and for foreign ones active in emerging markets.*

Though it is logical to assume that agile firms, especially international firms, are able to explore new opportunities and boost their performance, strategic agility alone is sometimes not enough (Kiessling et al. 2009). In fact, it is not uncommon for firms to operate under conditions of resource scarcity (Peteraf 1993), which potentially refers to the lack of knowledge of the reference context, such as when firms operate in foreign markets (Li and Scullion 2010). As suggested by the RBV, competitive advantage is achieved through unique tangible and intangible resources (Barney 1991; Barney et al. 2001). In addition, the KBV advanced the RBV, indicating that knowledge is a vital dual factor (both asset and resource) for firms (Del Giudice and Maggioni 2014; Hock-Doepgen et al. 2021; Scuotto et al. 2022). In a similar context, albeit terminologically different, extant works approach tangibility through the notion of 'soft' and 'hard' factors, relating these to both external and internal resources and linking them to the changing landscape of the organisational and the market (consumer) contexts (Campanella et al. 2020).

However, these theories focused on internal assets and elements. According to the open innovation paradigm, companies should open up to external sources of strategic resources to renew themselves and improve their performance (Santoro et al. 2018; Abdulkader et al. 2020; Mokhtarzadeh et al., 2020). Specifically, through inbound open innovation practices, ideas and resources flow into the organization from external partners, and are used with ideas developed internally (Giampaoli et al. 2017; Martinez-Conesa et al. 2017), and access to specialized, complementary assets is argued to be the main reason firms engage in innovation through open processes (Natalicchio et al. 2017; Chaurasia et al. 2020; Pomegbe et al. 2020).

In the vein of the above works, acquiring knowledge and resources has been suggested as an effective method for addressing the increasing complexity and uncertainty of the competitive landscape (Díaz-Díaz and de Saá Pérez 2014; Ortiz et al. 2018). To improve the flexibility to adapt to environmental changes, it is suggested that firms broaden their knowledge base by acquiring external knowledge from diverse sources (Katila and Ahuja 2002; Teece et al. 2016; Tian et al. 2021). A number of studies, in fact, have found that the breadth of external knowledge sources, which is the number of external sources exploited to acquire

knowledge and resources, is positively associated with performance (Laursen and Salter 2006). Acquiring knowledge and resources from many sources, thus, appears to be a precondition to operating in an agile way. This could further allow global firms to be agile in foreign markets and adapt to the local context. Hence, the reasonable assumption is that this openness towards many different sources of knowledge facilitates firms' exploration of new opportunities (strategic sensitivity) and their acquisition of apt resources to exploit the specific opportunities (resources fluidity). Moreover, being open allows the development of a value proposition in line with the targeted market, and the political, legal and social contexts, thus boosting sales. Therefore, a logical inference is that strategic agility can be fostered through being open to diverse sources of knowledge, which gives rise to the second hypothesis.

Hypothesis 2 *The relationship between strategic agility and sales growth is moderated by the breadth of external knowledge acquisition for companies active in developed markets and for foreign ones active in emerging markets.*

As stated above, the breadth of external knowledge sources regards the number of external sources exploited to acquire knowledge and resources, and the literature has found it to be positively associated with performance (Laursen and Salter 2006). Nevertheless, the literature on openness also advocates that the acquisition of external knowledge cannot guarantee the exploitation of knowledge (Fleming and Waguespack 2007). In these terms, some scholars proposed that the depth of external sources of knowledge, which is the intensity of the relationships with external actors, can often guarantee higher performance (Laursen and Salter 2006). Collaboration refers to the development of knowledge through relationships with specific partner organizations, and it involves a mutual exchange of knowledge (Bstieler et al. 2017). Thus, in order to explore and to exploit new opportunities, and to enhance their overall performance, firms can form alliances or joint ventures with other industrial companies carrying complementary knowledge to their own.

Unlike a mere external knowledge sourcing activity, collaboration involves dense interaction and exposure of knowledge, and thus requires trust (Fleming and Waguespack 2007). Although some risks are inherent to deep and formal collaboration agreements, a close and sound relationship with several partners or knowledge sources (search depth), allows a precise and timely application of knowledge to specific projects (Katila and Ahuja 2002) and may support the agile organization in developing and pursuing its strategy. In fact, while knowledge sourcing activities are often suitable for acquiring new knowledge (knowledge exploration), formal and deep collaborations are often associated with specific projects that have precise targets, stated deadlines and expected outcomes (knowledge exploitation). Therefore, it is reasonable to assume that while search breadth can be useful for an exploratory phase, search depth allows exploratory open innovation activities to be transformed into exploitative activities, increasing performance.

Hypothesis 3 *The relationship between strategic agility and sales growth is moderated by the depth of external knowledge acquisition for companies active in developed markets and for foreign ones active in emerging markets.*

Figure 1 shows the conceptual model along with the research hypotheses.

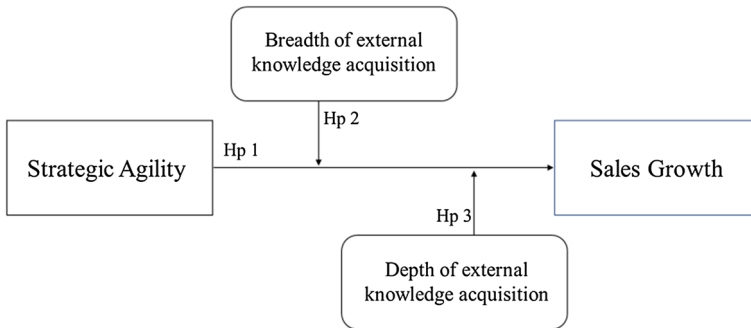


Fig. 1 Conceptual model

Table 1 Methodological tools

	Principal Tools	Auxiliary and Complementary Instruments
1	Survey 1 102 CEOs of firms active in emerging markets mean firm size of 226 employees (<i>comprehensive survey profile in subsequent section</i>)	Secondary data <i>Form</i> : confidential formal and informal documents, such as communications, memos and internal reports <i>Purpose</i> : to support, combine and/or inter-relate empirical findings
2	Survey 2 survey of 112 CEOs of firms operating in developed countries mean firm size of 119 (<i>comprehensive survey profile in subsequent section</i>)	Expert panel <i>Composition</i> : six experts (three academics and three industry practitioners) <i>Purpose</i> : conferred with to reinforce the methodological process itself <i>Exclusion</i> : contribution not utilised towards or as part of data gathering <i>Role</i> : acted as consultants and external procedural quality control 'safety nets' of the research
3	In-depth interviews 12 CEOs and managers of three Italian firms firms active in both developed and emerging markets (<i>comprehensive case-studies' profile in subsequent sections</i>)	

3 Research strategy

The scarcity of studies on strategic agility led us to build this research on a tripod of methodological foundations (Table 1), leveraging a mixed-method approach (Jafari-Sadeghi et al. 2021). The first leg comprises the requisite theoretical review that identifies the gap, lays down the scientific basis of the work, and leads to the hypotheses. The second leg incorporates the principal empirical tools utilised through a mixed quantitative–qualitative method research design (Henkel et al. 2014; Trąpczyński and Banalieva 2016). This format has enabled the testing of complex relationships and the effective and comprehensive exploration of the relationship between strategic agility, openness and performance. In this guise, the quantitative study verified the mutually complementary roles of strategic agility and openness, while the qualitative study explored how openness may contribute to strategic agility and firm performance (Venkatesh et al. 2013). The third leg includes the supportive instruments, namely secondary data and an expert panel.

In terms of its philosophical approach to the subject, the research adopts the ‘pragmatist’ paradigm, which, while considering theory and practice, also tends to include the standpoints of both qualitative and quantitative research methods (Johnson et al. 2007). The underlying reasoning of this choice is the nature of the research subject itself. With the core concepts under investigation being empirically tested for the first time, by considering both research and practice, a researcher needs to implement techniques that will reveal empirical data that can provide an in-depth understanding of the topic, and, at the same time, be generalizable to the wider population through means such as surveys and interviews, with both being primarily used for these research purposes (see subsequent sub-sections). The pragmatist paradigm facilitates the mixed methods design herein applied, which provides a complimentary clarification and verification of the results that cannot be realized by a single methodological approach (Bryman 2006), and the data can be triangulated to achieve greater validity (Creswell and Clark 2011).

4 Quantitative research design

The sample was compiled through a mix of random and purposive selection. Random selection is extensively used in the management field (Terziovski and Sohal 2000), and in this case it was conducted using the Italian database AIDA-Bureau van Dijk (full version), one of the most suitable sources in Italy of information on companies’ data. The targeted firms included those with ten or more staff members (as per EU commission specs) and the final sample mean size was 226 employees for sample 1 and 119 for sample 2, representing various industries of the manufacturing sector. Sample 1 is composed by foreign firms operating in emerging markets, while sample 2 by firms operating in developed countries.

For both samples, a questionnaire was sent to the direct email addresses of the company or the CEO of all the selected firms, along with a brief introduction of the research scope. The questionnaire explicitly inquired whether or not the company

sells abroad, and if so, they were given a list of countries to identify in which and to what extent they did business with. Overall, firms of sample 1 operate and/or sell in many emerging countries, such as China, Brazil, India and Russia. The size of both samples can be considered satisfactory and in line with previous studies on a similar topic (e.g., Ling-Yee and Ogunmokun 2001, with 111 companies) and using a similar method of analysis (Pangarkar 2008, with 94 companies; Trąpczyński and Banalieva 2016, with 100 responses; Zucchella et al. 2007, with 144 companies).

Firms of both samples belong to a wide array of manufacturing sectors such as automotive, food and beverage, and textile. The questionnaire, composed by both open and closed questions, was developed according to the previously discussed literature.

The hypotheses were tested through the ordinary least square (OLS) regression model, which is considered to be a suitable method in innovation management studies (Benner and Tushman 2002; Blindenbach-Driessen and Van Den Ende 2010; Chen et al. 2016). It is appropriate to test moderation effects, and it is a proper method for our dependent variable (sales growth).

The dependent variable is the percent of sales growth in emerging markets, and it was adapted from previous studies (Vila et al. 2015). For sample 2, which is represented by firms selling only in Italy, the dependent variable is percent of sales growth in the national context. In both cases, it is measured as the percentage change in sales over the previous three years. The independent variable is strategic agility, and it was taken from studies by Tallon and Pinsonneault (2011) and Kale et al. (2019). The variable was measured using eight items that were related to questions such as: *'How easily and quickly can your firm perform the following actions?'* (e.g., 1. respond to changes in aggregate consumer demand; 2. customize a product or service to suit an individual customer) and a seven-point Likert scale was used (1: do not agree; 7: agree completely).

We ran a confirmatory factor analysis (CFA) using principal component extraction with varimax rotation to assess the validity of the strategic agility variable.

The results of CFA for both samples, which are really satisfactory, are reported in Table 2.

We employed the two variables, external knowledge search (EKS) breadth and external knowledge search (EKS) depth (Laursen and Salter 2006), to quantify respectively the number of sources exploited to acquire knowledge and the intensity with which they were exploited. With regard to the measure 'breadth', we asked the respondents which of the 16 available sources they had used in the past three years to acquire knowledge. For the measure 'depth', we asked them to assign a value of

Table 2 CFA for the strategic agility variable, for both samples

	Sample 1	Sample 2
Number of items	8	8
Observed variance	68.048%	73.565%
KMO	0.900	0.872
Cronbach's alpha	0.931	0.948

Table 3 Study variables

Variable	Explanation	References	Role within the model
ED	Environmental changes in our local market are intense (Likert scale 1–7)	Jansen et al. (2009)	Control variable
TD	The technology in our industry is changing rapid (Likert scale 1–7)	Jaworski and Kohli (1993)	Control variable
Firm size	The number of employees	Dewar and Dutton (1986)	Control variable
Firm age	The number of years since founding	Huego and Jaumandreu (2004)	Control variable
R&D intensity	% of R&D investments on total sales	Bliedenbach-Driessen and Van den Ende (2014)	Control variable
High/Low tech	Dummy variable regarding the industry (1 = high tech; 0 = low tech)	Ardito and Petruzzelli (2017)	Control variable
Performance	% of sales growth during the last 3 years (...in emerging markets for firms in sample 1)	Adapted from Vila et al. (2015)	Dependent variable
EKS breadth	Number of external sources of knowledge used to innovate	Laursen and Salter (2006)	Independent variable
EKS depth	Number of external sources of knowledge used to innovate steadily and with greater intensity	Laursen and Salter (2006)	Independent variable
Strategic agility	How easily and quickly can your firm perform the following actions? (1: Do not agree; 7: Agree completely) Respond to changes in aggregate consumer demand Customize a product or service to suit an individual customer React to new product or service launches by competitors Introduce new pricing schedules in response to changes in competitors' prices Expand into new regional or international markets Change (i.e., expand or reduce) the variety of products / services available for sale Adopt new technologies to produce better, faster and cheaper products and services Switch suppliers to avail of lower costs, better quality or improved delivery times	Adapted from Tallon and Pinsonneault (2011) and Kale et al. (2019)	Independent variable

Table 4 Descriptive statistics for sample 1

	No	Min	Max	Mean	St. dev
Size	102	33	5200	226.42	539.249
Age	102	11	160	62.01	29.810
R&D	102	.000	.260	.09547	.044066
TD	102	2	7	4.61	1.136
ED	102	3	7	4.92	1.069
High/Low	102	.00	1.00	.2843	.45331
EKS breadth	102	4	15	8.54	2.806
EKS depth	102	1	9	4.27	1.830
SA	102	3.00	6.75	4.9706	.93213
Perf	102	.00	.37	.1167	.07861

Table 5 Correlation between independent variables for sample 1

	Logsize	Logage	R&D	TD	ED	High/Low	EKS breadth	EKS depth	SA
Logsize	1								
Logage	.156	1							
R&D	.047	.074	1						
TD	-.249*	-.169	-.208*	1					
ED	.135	.011	.179	.170	1				
High/Low	-.013	-.093	.161	.199*	.230*	1			
EKS breadth	.235*	.066	.164	-.026	.262**	.088	1		
EKS depth	.197*	-.006	.133	.009	.259**	.012	.538**	1	
SA	.038	.151	.218*	.007	.341**	.134	.596**	.651**	1

* $P < 0.05$

** $P < 0.01$

Table 6 Regressions of sample 1

	Model 1	Model 2	Model 3	Model 4	Model 5
Logsize	0.185	0.221*	0.049	0.094	0.058
Logage	-0.072	-0.178*	-0.081	-0.158*	-0.073
R&D	0.057	-0.046	-0.059	-0.070	-0.062
TD	0.001	0.009	-0.026	-0.008	-0.018
ED	0.191	-0.031	-0.047	-0.043	-0.015
High vs low tech	-0.103	-0.144	-0.077	-0.143*	-0.077
EKS breadth			0.159*	0.458***	
EKS depth			0.624***		0.709***
SA		0.724***	0.214**	0.480***	0.272***
SA*EKS breadth				0.136*	
SA*EKS depth					0.125*

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 7 Descriptive statistics for sample 2

	No	Min	Max	Mean	St. dev
Size	112	8	445	119.14	92.244
Age	112	5	106	33.31	23.696
R&D	112	.000	.260	.07604	.045049
TD	112	1	7	4.88	1.583
ED	112	3	7	5.21	1.211
High/Low	112	.00	1.00	.8482	.36043
EKS breadth	112	2	14	6.63	2.140
EKS depth	112	1	5	2.22	.956
SA	112	1.75	7.00	4.2054	1.22058
Perf	112	.00	.36	.1059	.08219

Table 8 Correlation between independent variables for sample 2

	Logsize	Logage	R&D	TD	ED	High/Low	EKS breadth	EKS depth	SA
Logsize	1								
Logage	.267**	1							
R&D	-.128	.018	1						
TD	.088	-.106	.116	1					
ED	.055	-.063	-.040	.085	1				
High/Low	.074	.012	-.019	-.223*	-.007	1			
EKS breadth	.003	.063	-.003	-.035	.574**	-.039	1		
EKS depth	.068	-.100	-.145	-.166	.270**	.021	.301**	1	
SA	-.114	-.051	-.096	-.194*	-.093	.059	.069	.179	1

*. $P < 0.05$

** . $P < 0.01$

importance to the external sources (on a 5-point Likert scale), counting only those with a score of 4 or 5.

We finally included several control variables (Table 3).

4.1 Quantitative data analysis of sample 1

EKS breadth and EKS depth are on average 8.54/16 and 4.27/16 (Table 4), respectively. Respondents believe that their company is strategically agile (4.97/7).

This study follows specific procedures (Friedrich 1982) to reduce or eliminate any bias resulting from multicollinearity because of interaction terms. Before calculating the interaction terms, the variables were mean-centered to avoid multicollinearity issues. In addition, variance inflation factor (VIFs) for variables are smaller than 10, ranging from 1.119 to 2.766 (O'Brien 2007). Table 5 shows the correlation matrix.

Table 9 Regressions of sample 2

	Model 1	Model 2	Model 3	Model 4	Model 5
Logsize	.430***	.467***	.446***	.458***	.361***
Logage	.185*	.202*	.229*	.205*	.181*
R&D	-.010	.025	.041	.024	.065
TD	-.059	.005	.032	-.002	.000
ED	.102	.133	.115	.149	.047
High vs low tech	-.001	-.011	-.008	-.009	-.025
EKS breadth			-.052	-.029	
EKS depth			.173*		.113
SA		.383***	.360***	.365***	.314***
SA*EKS breadth				.060	
SA*EKS depth					.262**

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

The results of the hierarchical regressions are presented in Table 6.

The data confirm a positive and significant relationship between the dependent variable (*performance*) and the independent variable (*SA*) ($\beta = 0.724^{***}$). Moreover, we found a positive and significant moderating effect between SA*EKS breadth and performance ($\beta = 0.136^*$), and the one between SA*EKS depth and performance ($\beta = 0.125^*$).

4.2 Quantitative data analysis of sample 2

This section elaborates on the findings regarding sample 2. EKS breadth and EKS depth are on average 6.63/16 and 2.22/16 (Table 7), respectively. Agility is over the mean value (4.20/7). As for sample 1, before calculating the interaction terms, the variables were mean-centred to avoid multicollinearity issues. In addition, VIFs for variables are smaller than 10, ranging from 1.062 to 1.622 (O'Brien 2007). Table 8 shows the correlation matrix.

The results of the hierarchical regressions are presented in Table 9.

The data confirm a positive and significant relationship between the dependent variable (*performance*) and the independent variable (*SA*) ($\beta = 0.383^{***}$ in model 2, and $\beta = 0.360^{***}$ in model 3). In addition, while we found a positive and significant moderating effect between SA*EKS depth and performance, we did not find a positive moderating effect between SA*EKS breadth and performance ($\beta = 0.060$). This is confirmed by Model 5, which confirms that only depth moderates the relationship between SA and performance ($\beta = 0.262^{**}$).

4.3 Integrated discussion and findings of the quantitative analyses

The paper has proposed hypotheses, stemming from the literature review, regarding the relationship between strategic agility, openness and performance for both developed and emerging market companies.

Our results allow us to confirm hypothesis 1, as strategic agility has a positive and significant impact on performance in both samples. Regarding the moderating effects, the results show that in emerging markets, both search breadth and search depth play a key role in reaping the benefits of strategic agility. In fact, in both cases a positive and significant moderating effect is noted. In the context of companies operating in the developed market, however, only the moderating effect of search depth is significant. This means that, in order to benefit from strategic agility, companies should have few, but stable and deep relationships aimed at acquiring scientific and/or market knowledge. Therefore, hypothesis 2 can only be partially confirmed. In other words, search breadth (hypothesis 2) is only vital in the context of emerging markets; search depth (hypothesis 3) is vital in any context of analysis (both developed and emerging markets).

5 Qualitative research design

In keeping with the objectives of our research, the second study adopts a qualitative approach in the form of three case studies (Yin 2003). The qualitative method has been chosen to deepen and refine the results of the quantitative research and to give more precise answers to the research question. Different methods for data collection were used, including face-to-face in-depth interviews with the three CEOs of the three companies and with nine managers (three from each company). Internal validity (Yin 1994) is ensured by referring to the same literature on strategic agility and open innovation that was used for the variables of the quantitative study. The present study assures internal validity (e.g., Gibbert and Ruigrok 2010; Yin 1994) by further using the following procedures: first, all the questions have been formulated according to the well-established literature; second, we use pattern matching (Eisenhardt 1989), which compares the observed results with the predictions from previous studies; and third, we use theory triangulation (Yin 1994) to check findings in light of the theoretical grounds used. To ensure reliability, we employ widely accepted methods, such as transcriptions (Gibbert and Ruigrok 2010).

For the qualitative part, we chose to select three companies among those who participated in the survey. As a first step, we identified the 20 companies with the highest scores in the strategic agility, performance and openness (search depth and breadth) variables. We focus on those operating in both developed and developing markets. Second, we contacted them to check their interest in being interviewed. Third, we selected those that showed interest and willingness to participate within a reasonable period of time. They operate respectively in the food and beverage, raw materials and textile/apparel industries. All three companies operate in Italy and have been selling abroad for several years, including in emerging countries. They evidently are companies with

experience in emerging markets and are appropriate subjects to explore regarding strategic agility and openness.

To sum up, the main goal of the qualitative study was to explore how openness may contribute to strategic agility for firms operating in emerging markets. The interview protocol included questions related to strategic agility, taken from Kale et al. (2019), external knowledge sourcing (Laursen and Salter 2006) and performance (Vila et al. 2015). We further decided to include questions related to the three meta-capabilities of strategic agility, namely strategic sensitivity, resource fluidity and leadership unity (Doz and Kosonen 2008) in order to connect each meta-capability to openness. The interview started by commenting on the questions of the survey. After that we asked specific questions. Sample questions were like the following ones: What kind of partnerships do you usually look for in the target market? Which partners do you work with and why? What resources and/or knowledge do you usually seek to implement your strategy in the target market? Do you think collaborations allow you to implement your strategies more quickly and flexibly?

5.1 Qualitative findings—case study 1

The first company operates in the food and beverage sector and sells highly customized products adapted to the targeted emerging market. As proposed by the CEO, strategic sensitivity is a key factor to competing in new and emerging markets (Table 10—quote 1). And though strategic sensitivity is something that a company usually and inherently has or does not have, due to its leadership attributes, it can also be stimulated by the development of external relations, as suggested by the R&D manager (Table 10—quote 2). Both respondents, as well as other managers, maintained the importance of being agile even when products are performing well in the foreign market (Table 10—quote 3).

Co-development of products with a strategic partner has been suggested as a key open innovation strategy used to implement the strategic vision in the emerging market, as the CEO stated (Table 10—quote 4). Moreover, a prerequisite of being strategically agile is leadership's support for the corresponding strategic decisions and their implementation, as put forward by a manager (Table 10—quote 5). The link between strategic agility and open innovation was explicitly discussed with the R&D director, who underlined the importance of understanding what resources are vital for implementing the agile strategy (Table 10—quote 6). Regarding the scope of open innovation strategies, the R&D manager stressed the importance of establishing many different ties and relationships in the foreign market (Table 10—quote 7).

5.2 Qualitative findings—case study 2

The second company is active in the raw materials sector, and its primary business relates to orders from large customers. It has several production plants all over the world, with a strong presence in emerging markets such as Brazil, China and

Table 10 Case study 1

Case	Quote number	Quote
Case 1	1	<i>Before entering the emerging market, we make an in-depth analysis of the needs and preferences of end consumers, but also of intermediaries and distributors. This is important to create value for all networks involved and for all actors in the value chain</i>
Case 1	2	<i>In order to gain information about the customer and partners, an open approach to innovation is necessary. This means working with local consulting firms in order to acquire information and knowledge on customers, their preferences, and their characteristics, for example</i>
Case 1	3	<i>For us, being agile means being able to acquire information on the market and adopt a fluid and rapid strategic approach. This involves deciding what actions to take, choosing what resources to employ and ensuring that employees are aligned to the strategy on multiple levels. Ultimately, this means choosing the right partner and the proper knowledge sources to implement the strategy</i>
Case 1	4	<i>For example, when we want to develop and sell a new or adapted product to the target market, we look for a partner to co-develop the product quickly. Co-development may concern packaging, adapting the taste or name of the product to the target market, and, in general, any aspect of the marketing strategy</i>
Case 1	5	<i>Operating in emerging markets means dealing with a totally different reality from that of our own origin. This demands that managers must support and be able to apply the directives, and that employees are, appropriately, both knowledgeable and motivated to realise them</i>
Case 1	6	<i>When we evaluate our strategies, both at the business and the functional levels, we apply a model that allows us to identify which resources we need and how to use them. Once this is done, we identify which resources we already possess internally and which we need to acquire from external sources. This makes strategy implementation faster, more efficient and more effective</i>
Case 1	7	<i>In the case of emerging markets where we operate, we try to establish more relationships than the local Italian market. This is imposed by the fact that the emerging market is unknown to us. We need different sources of knowledge and information, and different relationships of collaboration</i>

Table 11 Case study 2

Case	Quote number	Quote
Case 2	8	<i>If you are already part of international networks, if you have many ties, if you cultivate your contacts globally, it will be easier to find opportunities. Often, international partners are active in presenting you with opportunities if they know you are working well, if you have a good reputation and especially if you have something valuable to offer in return (such as knowledge, unique resources, products, technologies and contacts)</i>
Case 2	9	<i>Being agile in emerging markets does not mean simply understanding the needs of customers and giving them the product they want. It means many things such as seizing new business opportunities, satisfying the specific needs of individual customers, reacting quickly to competitors, integrating new technologies and more. And this is harder than it sounds. For example, some customers simply ask us to provide the raw materials; others ask us to work in a particular way, using skills and competences we do not have. How do we respond? We answer 'yes' and then we decide on how to best satisfy their needs</i>
Case 2	10	<i>If the customer asks us to process particular raw materials and we do not have the skills to do so, we look for an external partner who can do the work for us. Outsourcing is a fundamental weapon of being agile</i>
Case 2	11	<i>For example, a new customer in an emerging market expressly asked us to provide a material for a technology they were developing. However, we were asked to follow some processes regarding environmental specifications' conformity, and to apply and secure the corresponding material certifications. We didn't know these aspects. Therefore, in order to act quickly and effectively, we set up two formal partnerships to meet the customer's needs. Therefore, in foreign markets we need more relations with external partners. There are institutional, political, and technical forces that are more complex than our domestic market. This requires a more open approach</i>
Case 2	12	<i>New laws are very often introduced, which are sometimes difficult to implement or understand/interpret. For this reason, the support of external bodies is essential to being agile. If not, the risk of 'getting stuck' is high</i>
Case 2	13	<i>With networking activities, we become attuned to our environment and we benefit from the potential pools of resources that reside in external networks. By leveraging on this networks, we are able to do things quickly and effectively</i>

India. The CEO and managers surveyed pointed out that the sector is very mature in Italy, but growing rapidly in many markets, especially emerging ones. As a consequence, they all highlighted that sensing new opportunities is the first vital step in competing in international markets, with the CEO supporting that a strong presence in global networks, social ties and versatile value offerings are antecedents to spotting opportunities (Table 11—quote 8). The CEO further stressed the imperative and multiple meaning of being strategically agile (Table 11—quote 9). This point was also touched upon by the R&D director, who confirmed that open innovation allows them to overcome resource scarcity in delivering the value to the customer (Table 11—quote 10).

Consistently, a manager pointed out the importance of establishing the right type of partnerships in order to implement the strategy in a timely manner (Table 11—quote 11). Another aspect highlighted by a manager concerns the political/legal aspects of the emerging market, indicating that external collaborations are vital also for being compliant with foreign laws (Table 11—quote 12). Therefore, the interviewees generally, individually and collectively advocated for operating in all the markets, but especially in the emerging ones, which portray particular dynamics, and that competitiveness is enhanced by the firm's ability to engage effectively in boundary spanning activities (Table 11—quote 13). Thus, the ability to access knowledge, technology, and information through relationships with other firms and actors facilitates open innovation, which helps the firm effectively implement strategies.

5.3 Qualitative findings—case study 3

The third company operates in the textile and apparel sector, and it has been selling for many years in foreign markets. It is a company that produces high quality raw materials for textiles (wool, cashmere, etc.) and finished clothes. This company operates in a very dynamic and competitive sector, and, with many competitors from all over the world, they hold quality as a distinctive competitive advantage. When the concept of strategic agility was introduced, a profound discussion took place regarding the very meaning of this term, especially with the CEO (Table 12—quote 14). Relevant to this point, the R&D director said that collaborations and partners are fundamental to quickly implement the strategy (Table 12—quote 15).

With regard to the opening of the new production plant, interviews have highlighted how boundary spanning activities were proven essential in understanding where to locate the production plant, in developing the business plan, in acquiring local human and intellectual resources, and in fulfilling legal obligations appropriately. Another manager stressed the importance of adopting the right type of collaborations in the context of the competitive strategy that is developed (Table 12—quote 16). Finally, the CEO underlined the importance of boundary spanners in transferring knowledge between internal and external counterparts (Table 12—quote 17).

Table 12 Case study 3

Case	Quote number	Quote
Case 3	14	<i>For us to be strategically agile means making strategic choices, such as on how to distribute the product, in a short time and above all understanding what resources are needed to implement the choices. For example, in a couple of emerging markets, we were surprised by an incredibly growing demand. This made us very happy, but it also posed strategic issues and questions. Typically, whether we would raise prices to exploit demand or leave prices unchanged by increasing production output? If we increased production, would we do it in the country of origin or in the emerging market? For one emerging market we decided to open a new production plant (foreign direct investment), without lowering our standards and always using high quality Italian raw materials. This choice, however, naturally led to a series of economic and financial consequences that had to be assessed carefully</i>
Case 3	15	<i>To be able to quickly implement new choices, it is necessary to have collaborations and strategic partners, to acquire market information, and to obtain tangible but also intangible strategic resources</i>
Case 3	16	<i>In our industry, marketing is absolutely linked to innovation strategy. Exploiting partnerships is essential to targeting an emerging market. When we launch new collections, we need specific marketing activities, developed in collaboration with strategic partners who know the target market well. Collaborative marketing strategy is at the heart of innovation itself</i>
Case 3	17	<i>We have a few boundary spanners in our organization. Their role is to make sure that everybody (inside and outside the organization, in the home country and in the foreign countries) is on the same page regarding knowledge, strategies, objectives, goals. Their roles and responsibilities are even more vital since we operate directly in the foreign market</i>

6 Discussion, findings and conceptualisation

The research results have highlighted a complementary relationship between strategic agility of foreign firms operating in emerging markets and openness. Equally, being open to external resources, both tangible and intangible, was shown to favour the development of agile organizations that are capable of implementing strategy rapidly. The quantitative part of the research additionally showed that foreign firms that operate in emerging markets and are strategically agile are also the best performers therein. Moreover, acquiring external resources that are both intense and focused (depth) and less intense and wide (breadth) increases the benefits of strategic agility in emerging markets. However, our findings also show that search breadth is not vital in the context of developed markets. This means that, in developed markets, searching for knowledge deeply from one or few sources and/or partners is more effective than searching widely from many sources and/or partners (Laursen and Salter 2006).

These results are confirmed and refined by the qualitative study and auxiliary methodological tools. As suggested by the literature, the challenge of strategic agility lies in matching the firm's strategy with the firm's resources, such as capital, human resources, intellectual property, advanced manufacturing and information technologies, as well as in transferring knowledge, building a post-acquisition integration capability, having relevant coordination mechanisms between multinational headquarters and its subsidiaries, and adapting CEO's leadership style to the ever-changing business environment (Lewis et al. 2014). The interviews have underlined that, to different extents, having an open and collaborative approach fosters the search, acquisition and utilisation of key resources, such as capital, human resources, intellectual property, advanced manufacturing and information technologies, and the development of dynamic capabilities, which constitute the essence of agile companies' differentiating attributes. Against this backdrop, openness favours the ability to be sensitive to opportunities (strategic sensitivity), as it also favours the acquisition of tangible and intangible resources that the organization lacks (resource fluidity). Thus, according to RBV and KBV (Scuotto et al. 2022), firms are able to build new sources of competitive advantage through open innovation strategies. Although there are no explicit references regarding the relationship between leadership unity and open innovation, the interviews strongly indicate that strategic sensitivity and resource fluidity, which are directly supported by open innovation, are attributes of strongly competitive-oriented leadership unity.

More specifically, it has been shown that acquiring information and knowledge from external sources helps in exploring new business opportunities and especially in identifying the necessary resources towards implementing the firm's strategy. Moreover, the case studies highlighted the importance of deep collaborations (search depth) in guaranteeing that new business opportunities are exploited when customers ask for specific competences that are outside a company's normal range. It is therefore reasonable to infer that openness acts as a facilitator of the link between strategic sensitivity and resource fluidity.

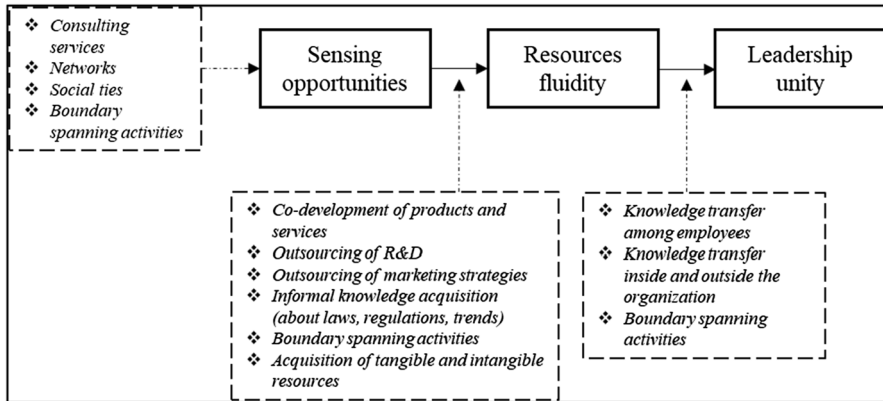


Fig. 2 Findings of the qualitative study

Finally, the qualitative study posited that boundary spanning activities are pivotal to strategy implementation in an emerging market. Conversely, with a closed approach strategy, implementation would have been slower and less effective. In this regard, different types of relationships and knowledge acquisition strategies result in heightened strategic sensitivity and improved resources fluidity.

Evidently, inbound open innovation allows firms to draw in ideas from outsiders to deepen their pool of available technological opportunities and, hence, contribute to adapting to the business environment and to exploiting identified opportunities (Papa et al. 2020). This, however, relates to much more than technology, to incorporate a wider range of resources, both tangible and intangible nature. Accessing these through external partners enhances resources' fluidity and increases the understanding of new information and potential changes, enhancing the firm's ability to detect remote opportunities and bestowing the flexibility to adapt to unpredictable changes, as are often met in the specific conditions of emerging markets. Figure 2 summarizes the findings of the qualitative study.

7 Typology and contextualisation

Our research findings further allow the development of a typology of companies, as well as the definition and refinement of a contextualised framework of Strategic Agility specific to emerging markets, which constitutes the most visible gap in extant literature. Firstly, overlying the various descriptive methodological findings, we can put forward four descriptive types of firms in terms of their approaches to strategy and innovation, which are shown in Table 13.

Integrating the above-presented and discussed findings, the research hereafter constructs the final research framework (Fig. 2), which refines and expands the notions and (the subsequently tested) suppositions of the findings. It further positions these notions and suppositions within a comprehensive conceptualisation that

Table 13 Types of firms

	Closed	Open
	Closed agile firms	Open agile firms
Agile	<ol style="list-style-type: none"> 1. Develop new knowledge and resources internally 2. Are agile in the sense that they are able to efficiently and effectively change strategy by <ol style="list-style-type: none"> (a) Identifying new strategic opportunities (<i>strategic sensitivity</i>) (b) Using and predisposing available resources (<i>resource fluidity</i>) (c) Having leaders that support and guide change strategies (<i>leadership unity</i>) 3. React to the environmental changes quickly, committing resources and taking decisions proportionately swiftly 4. Implementation is done wholly internally 	<ol style="list-style-type: none"> 1. Develop new knowledge and resources externally through collaborations 2. Are agile in much the same sense as 'Closed agile firms' 3. Implementation is done externally through collaborations and through acquisition of knowledge and resources
	Closed rigid firms	Open rigid firms
Rigid	<ol style="list-style-type: none"> 1. Develop new knowledge and resources internally 2. Are not agile in the sense that they struggle to change strategy in the short term, either because of path dependency or because they have rigid structures 3. Do not react to environmental changes 4. Tend to stick to their original strategic decisions, taking a long time before effecting change 5. Change itself is through internal implementation 	<ol style="list-style-type: none"> 1. Present a similar lack of agility and slow reaction to change as 'Closed rigid firms' 2. Develop new knowledge and resources through collaborative relationships and acquisition of external knowledge and resources 3. Tend to have rigid structures 4. Usually pursue long-term open innovation projects

interrelates these systemically, along with their critical contextual factors and forces, as supported by the empirical findings of this research and extant works.

The central system of the framework focuses on the relationship between agility and performance, intermediately positioning their mutual facilitator of openness. The latter is, in parallel, linked to external knowledge depth versus breadth and (purposefully termed) functional and attitudinal openness, to highlight the theoretically and empirically identified difference between the two. The strategic agility meta-capabilities of resource fluidity, strategic sensitivity and leadership unity are injected into the previous relationship to indicate their relationship therein. This sub-system is subsequently linked to resources, themselves separated into tangible and intangible ones, as per the findings. And the flow ends with three orientations, as derived from the research and hereby explicitly termed: contextual, pertaining to strategic orientations to fit a differing business environment; task, relating to orientations to fulfil tasks that are alien to the firm; and market, that is, associated with adaptations to local customer/consumer needs, behaviour, etc.

The previously described central system is enclosed by the contextual and peripheral elements/factors/forces, as derived through the empirical research and linked to theoretical findings. Specifically, the outer rim of the framework incorporates the emerging markets' differentiating factors, the necessary segregation between hard and soft contextual elements (also linked to tangible and intangible resources in the literature), the terminal strategic agility aims/values of adaptability, flexibility and reflexivity, the terminal strategic agility aims/values of adaptability, flexibility and reflexivity, and the internal and external stakeholders. The framework finally introduces the four identified types of firms: open agility, closed agility, open rigidity and closed rigidity (Fig. 3).

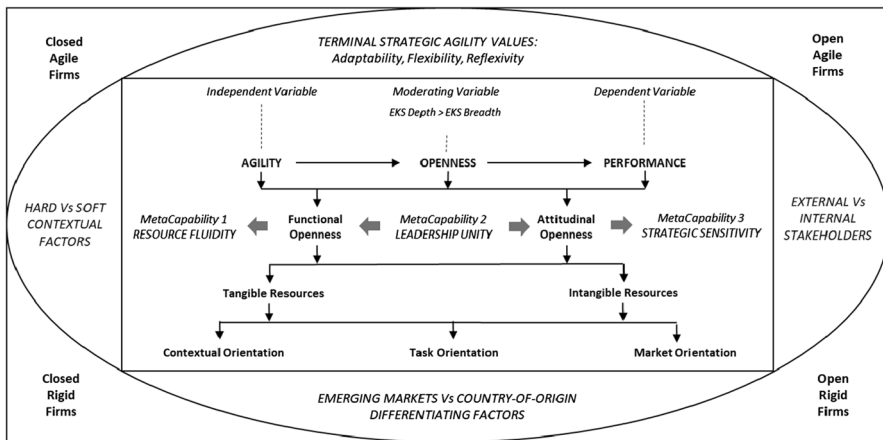


Fig. 3 A Strategic Agility Framework for Emerging Markets

8 Implications, future research and conclusion

8.1 From theoretical implications to executive implementation

The research findings carry a number of implications to theory. First, the research shows that strategic agility impacts positively on performance, thus adding to the limited empirical studies on the subject (Kale et al. 2019). We add to the literature, underlining the benefit of being agile in both contexts of analysis, namely developed and developing markets. Second, it delineates the nature and significance of strategic agility for foreign firms operating in emerging markets versus the developed and/or generic perspective of extant works (Fourné et al. 2014). In this regard, our findings add to the literature by showing that strategic agility is a vital organizational capability in all contexts of analysis. Third, it provides insights regarding the relationship between strategic agility and openness, suggesting that being open to external sources of knowledge and other resources increases the impact of agility on performance, thus extending and/or reinforcing the findings of relevant studies that suggest the positive benefits of open innovation (Anzola-Román et al. 2019; Hung and Chou 2013). Accordingly, the study contributes to the body of literature on strategic agility that found openness to be a moderator of the relationship between agility and performance. Evidently, according to both RBV and KBV, acquiring resources like knowledge helps in pursuing and implementing new strategies quickly. This represents a new source of competitive advantage for firms (Rohrbeck et al. 2009). We also show that, while companies in emerging markets should establish both wide and deep relationships, in the context of developed markets, deep relationships (search depth) are those that allow strategic agility to be leveraged. Fourth, the research offers a framework that schematically presents the various research elements along with their critical contextual factors and forces. These are within a comprehensive conceptualisation that interrelates them systemically towards the understanding of the different types of strategic orientations based on the strategic agility and openness variables. In this guise, the empirical research showed that the best performing firms are the *open agile* ones.

Fifth, we add to the literature on open innovation (Ferreira and Teixeira 2019; Milici et al. 2021), showing its role in increasing the benefits of strategic agility in both developed and developing markets. As such we show that while search depth amplifies the above relationship in both contexts, search breadth does it only in the context of foreign firms operating in emerging markets.

In terms of *managerial implications*, this paper argues that firms in any context should embrace open innovation as requisite means to achieving better performance. Knowledge sourcing strategy should be considered essential for managing the complexity of emerging markets, especially for firms lacking in knowledge and/or other resources needed for strategy development and implementation. Such companies, thus, need to be open to external sources not only to innovate, specifically, but also to operate in foreign markets that present exogenous factors that could affect the business. This research posits that searching for knowledge, both widely and deeply, is vital for a firm's international activities and performance in

emerging markets. And, involving different and varied stakeholders and knowledge sources in the business processes can be effective in developing products/services that are appreciated across markets and in acquiring knowledge on the requisite means and processes for growth in emerging markets. These may relate to tangible business aspects (materials, technologies, logistics, etc.) or intangible ones (procedural innovation, internal human resource, customer knowledge, communicational factors, etc.). Collaborating with partners or even with competitors can be the key to successfully penetrating foreign markets while adopting a wide-open approach, i.e., including different sources allows firms to increase both their tacit and explicit knowledge, allowing them in turn to increase their strategic agility and, thus, performance. Companies operating in the developed market, on the other hand, should pursue selective open innovation strategies, i.e. oriented towards a few deep relationships with key partners. One explanation could be that these companies already know their developed markets and thus they need a few deep collaborations to innovate further.

In conclusion, this research does not establish openness as a panacea to the challenges and predicaments of the contemporary competitive conditions, but it does suggest openness as a catalyst to decision-making and strategic processes, based on agility, flexibility and the identification of business opportunities in highly dynamic contexts.

8.2 Limitations

Methodologically, the research is appropriately reliable and valid, albeit it does bear some inherent limitations, primarily consequent to its foci. In terms of market focus, the research covers ‘emerging markets’ generally, thus not taking into account potential significant differentiating contextual factors across these countries. In terms of country-of-origin focus, the research studied Italian firms, which are presumably representative of developed countries’ firms, but this does call for scientific validation. In terms of industry focus, the research is based on various industries of the manufacturing sector, so generalisations to other sectors, particularly substantially different ones, such as professional services etc., are precluded and require further testing. Furthermore, we note the rather secondary limitations of the subjectivity of the measure of ‘open innovation’, and the lack of differentiation between various potential types of ‘acquired knowledge’ (see also subsequent ‘*Avenues for further research*’ sub-section).

8.3 Avenues for further research

The findings of the research naturally open up avenues for further research in a quadriaxial direction: contextually, contentually, disciplinarily, and methodologically (*the term ‘quadriaxial’ is purposefully used to indicate the potential of spatially positioning the foci of further research by combining variables from two or*

more of the axes). Specifically, (a) contextually, further research can be transcribed to fit different/differing contexts, like industry, geography or markets; (b) contentually, the focus may shift to other or specific factors or interrelations from the framework developed; (c) disciplinarily, future research may redefine the perspective to apply this research within an associated or different discipline of business science; and (d) methodologically, it may adopt different or enhanced methodologies to study the same subject, perhaps through a cross-target-market or cross-country-of-origin multi-study, focusing on other countries/markets.

8.4 Concluding remarks

This paper has shown the value of strategic agility in supporting business performance, regardless the context of analysis (developed and developing markets) along with the importance of opening up the innovation boundaries to external sources of knowledge. From a RBV and KBV perspective, open innovation allows to build agility, a prerequisite of sustainable performance in these dynamic times. More specifically, the paper's main conclusion is that search depth plays a key role in acquiring knowledge for agility, whereas a few strong ties with external sources of knowledge may represent a competitive advantage. This advances the literature on both strategic agility and open innovation, whereas, to the best of our knowledge, no previous studies have explored the relationship between these two constructs.

More than strategic direction or a scholarly vogue, strategic agility transcends the sum of its constituent components, presenting us with a comprehensive philosophical notion and a practicable systemic approach to contemporary business. Our research has empirically identified and substantiated the role and importance of strategic agility in the exigent environment of emerging markets, consequently contributing new and significant theoretical and executive knowledge. Our study, however, has further sought and achieved a requisite balance between content and context. *Id est*, it has not simply explicated individual factors and forces but has positioned and interrelated them in the systemic context, empirically conceptualising a framework that reflects the true and whole importance of the strategic agility business philosophy.

In spite of their unadulterated scientific foundation, we do not claim our findings and conceptualisation to be absolute, complete, infallible or definitive. By their very nature, both the context (developed versus emerging markets) and content (strategic agility) of this research are ever-changing and unpredictable, and incorporate elements that are sometimes open to subjective interpretation. We do trust, nonetheless, that our work has elucidated the scholarly aspects of its subject, that it has paved the way for further research to follow and that it shall indeed find practicable application in the realm of industry.

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