

## **Impact of dynamic capabilities and firm characteristics on the firm performance of Vietnamese small and medium-sized retail enterprises**

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**Abstract:** Within the research area of dynamic capabilities, one important context is SMEs, which are thought to be resource-poor and hence disadvantaged in the creation of such capabilities. We develop a model comprising of adaptive capability, entrepreneurial orientation, marketing capability and innovativeness, and investigate their link to firm performance using a sample of 243 Vietnamese retail-sector companies. We also include firm age and type (registered or traditional) in the hypotheses. The result of structural equation modelling indicates that entrepreneurial orientation and innovativeness are directly linked to firm performance in this context, whereas adaptive capability and marketing capability are indirectly linked. Additionally, firm age was found to link to performance. Our findings have implications to context-based research in dynamic capabilities for SMEs. They also suggest, particularly, that Vietnamese SMEs should strengthen their entrepreneurial orientations and innovativeness further to improve their performance.

**Keywords:** dynamic capability; firm performance; entrepreneurial orientation; marketing capability; adaptive capability; innovativeness.

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## 1 Introduction

In the literature, dynamic capability has received considerable interest and was found to be one of the main factors in strategic management since 1997 (Barreto, 2010; Driesch et al., 2015; Fainshmidt and Frazier, 2017; Mathivathanan et al., 2017). According to Teece et al. (1997, p.516), “dynamic capabilities are the firm’s ability to integrate, build and reconfigure internal and external competences to address rapidly changing environments.” As a result, dynamic capability usually connects closely to change and it

is the process of using resources – specifically the processes to integrate, reconfigure, gain and release resources – to match and even create the market change (Eisenhardt and Martin, 2000; Fainshmidt and Frazier, 2017).

While many candidates for dynamic capabilities have been identified it is not clear which are relevant in particular contexts (Barney, 2001). One such context is small and medium-sized companies, which represent the majority of all companies in most countries and therefore are an important part of the economy (OECD, 2002). By definition, the development of dynamic capabilities is seen to require significant effort and special resources which are not easy for SME's to acquire (Rashidirad and Salimian, 2020). This is particularly the case with SME's in emerging economies; companies in these countries typically face serious resource constraints (Mort and Weerawardena, 2006; Terziowski, 2010). As most of the literature has examined the issues from developed countries' perspectives (Delmar et al., 2003; Golovko and Valentini, 2011), scholars emphasise the need for more research addressing developing country SME's (Ibeh and Kasem, 2011; Kiss et al., 2012).

Although SMEs are usually seen as disadvantaged, many small companies manage to survive through entrepreneurial actions and innovation (Keh et al., 2007; Nofiani et al., 2020), and outperform their competitors (Genç et al., 2019; Davcik et al., 2020; Rashidirad and Salimian, 2020). Indeed, some researchers emphasise the innovation in these companies (Genç et al., 2019; Rosenbusch et al., 2011); however, retail SME's present a specific context for innovation that is detached from traditional manufacturing-centric product and process innovation (Quinn et al., 2013). The particular features of the context are underlined in an Asian developing country environment where personal relationships among SMEs and their customers and stakeholders are often strong, and where market-based competition is tempered by these relationships (Zhang and Hartley, 2018). Our interest to SME innovation in this context is motivated by contradictory evidence regarding the role of innovativeness (dimension of entrepreneurial orientation) as a determinant of firm performance in an emerging market context (Lee et al., 2018).

Furthermore, several researchers (Cannavale and Nadali, 2018; Hughes and Morgan, 2007) have questioned the composition of the concept of entrepreneurial orientation with its three components of proactivity, risk-taking and innovativeness. For example, Cannavale and Nadali (2018) combined innovativeness with proactiveness, and Nofiani et al. (2020), in their research concerning Indonesian SME's, divorced innovativeness from entrepreneurial orientation, treating it as an intermediate variable between entrepreneurial orientation and firm performance. As the composition of entrepreneurial orientation has been criticised also in the SME context (Soininen et al., 2012; Kreiser et al., 2013), it seems that entrepreneurial orientation in general and innovativeness in particular require more careful scrutiny in Asian retail SME contexts. Hence, in this research, we apply innovativeness as a construct that is separated from entrepreneurial orientation.

In addition to entrepreneurship and innovativeness, marketing capabilities are often considered to be important for SME's (Nofiani et al., 2020; Davcik et al., 2021). This would particularly be the case for retail SME's, because retail companies are intermediaries that must excel in customer relationships. According to Neill et al. (2014), the role of marketing capabilities and its influence on firm performance have been adequately explored in the developed country context, but more research needs to look at developing countries. Finally, having few employees and a centralised management structure, small companies are seen to be able to respond to changes in customer needs.

Adaptive capability indicates the speed at which a company is able to address market opportunities and capitalise on these opportunities (Oktemgil and Greenley, 1997). Having adaptive capability, companies are able to follow competitors' moves and maintain their advantage in the market while vying for market share.

Therefore, in this research, we investigate the links of entrepreneurial orientation, marketing capability, adaptive capability, and innovativeness to SME performance. We focus on Vietnam, an emerging economy where large-scale retail is controlled by foreign entrants such as Lotte (Korea), Aeon Mall (Japan) and Big C (France). These companies locate in the big cities, e.g., Hanoi, Haiphong, Ho Chi Minh City and Can Tho, and account for 80% of the supermarket market share. Smaller scale retail operations are mostly (76%) independent mom-and-pop stores or household businesses (Vietnam Report, 2018). A large number of SMEs in the retail sector are these family-owned shops (Pasquier-Doumer et al., 2017) called 'traditional retail stores' in this paper. With improved transportation and car ownership, the large-scale retail stores are favourably positioned, creating huge pressure on the traditional retail stores.

Since dynamic capabilities – by their resource-intensive and path-dependent nature – require effort to build, it is reasonable to assume that fresh, newly established businesses may be disadvantaged in this regard. Hence, together with the above variables, we also investigate firm age. Firm age has not consistently been found to predict performance in prior research. This makes sense because, although younger companies may be more innovative and fast-moving, they generally possess fewer resources than older companies and are less experienced. Linkages between firm age and performance may, however, appear in certain industries in certain countries during specific periods of market development (Pervan et al., 2017). There is some evidence that firms undergo a transition between 5–7 years of age, suggesting the accumulation of market experience (Coad et al., 2016; Coad, 2018).

Another variable related to the existence of dynamic capabilities is the availability of firm resources. As stated above, SMEs have severe limitations to their resources. Eshima and Anderson (2017) note that larger companies have better understanding of market expectations. In Vietnam, innovative companies are typically larger in size than those that are not innovative (Pasquier-Doumer et al., 2017). As will be explained later in this paper, we substitute firm size with firm type due to particular characteristics in the Vietnam SME policy.

The rest of the paper is set out as follows. The next section considers the previous literature and presents the hypotheses of this study. Following is the method for the study. Then, the paper presents the results of the empirical study in achieving the goals as those set out above. Discussion and conclusions are in the last section.

## **2 Literature review and hypotheses**

### *2.1 Dynamic capabilities review*

Dynamic capabilities refer to an organisation's activities aimed at sustained competitive advantage (Lockett et al., 2009; Newbert, 2007; Schilke, 2014) through the manipulation of its elementary resources (Eisenhardt and Martin, 2000; Zahra and George, 2002). Eisenhardt and Martin (2000) define this manipulation as the acquisition of new resources, release of outdated resources, and integration and reconfiguration of existing

resources. A great number of different dynamic capabilities have been suggested (Schilke and Goerzen, 2010; Peteraf et al., 2013; Pavlou and El Sawy, 2011; Lin and Wu, 2014). Teece (2007) argues that dynamic capabilities consist of essentially three types: sensing, seizing, and reconfiguring capabilities, which have been investigated by several studies such as Fainshmidt and Frazier (2017), Wilden et al. (2013) and Lin and Wu (2014). Such capabilities have also been confirmed for SME's (Rashidirad and Salimian, 2020). On the other hand, in contrast to cross-cutting functions such as identified by Teece (2007), dynamic capabilities can be identified in relation to an organisation's individual value chain activities, such as inbound and outbound logistics, operations, marketing and sales, and service (e.g., Driesch et al., 2015; Mathivathanan et al., 2017; Davcik et al., 2021; Nofiani et al., 2020).

We identified several dynamic capabilities to be of importance in this research. Entrepreneurial orientation is the first one; it appears to be particularly important in emerging markets (Lekmat et al., 2018), and the context of emerging markets has posed some surprises for the link between entrepreneurial orientation and firm performance (Bogatyreva et al., 2017). The second is innovativeness. As mentioned in the introduction part, in this research innovativeness was applied as a detached variable from entrepreneurial orientation. Despite their limits in resources, SMEs can still be innovative in their selection of which goods are bought and sold, and in the provision of service; this is one way they can distinguish themselves from each other to create their competitive advantage (Ferreira et al., 2015). As the third dynamic capability, we use marketing capabilities. As found by Lekmat et al. (2018) in their study of Thai SME's, entrepreneurial orientation needs to be accompanied by an examination of marketing capabilities. Marketing capabilities allow SME's to distinguish themselves from competitors even in the absence of unique products (Davcik et al., 2020). However, while entrepreneurial orientation and marketing capabilities imply that the company is able to create and maintain customer relationships in a competitive marketplace, these capabilities do not really capture the change of market and customer needs. When the business environment changes, companies must adapt quickly or lose their market share. For retail SME's, this adaptation often involves research to find a new supplier that carries a product that satisfies the customers' new need. Mathivathanan et al. (2017) identified a large number of dynamic capabilities for sustainable supply chains, one of which is adaptive capability. This is our fourth dynamic capability in this research. As adaptive capability denotes product-market opportunities, marketing activities for responding to these opportunities, and importantly, speed of response (Oktemgil and Greenley, 1997), it is highly critical to the survival of retail SME's. In summary, we claim these dynamic capabilities are critical to Vietnamese retail-sector SME success: innovativeness, marketing capabilities, entrepreneurial orientation and adaptive capability.

## *2.2 Relationship between dynamic capabilities and firm performance*

### *2.2.1 Firm performance (PER)*

Firm performance is the result achieved through business activity and reflects business success (Tangen, 2005). Firm performance is usually defined as outcomes of company activity and ability to meet the shareholders' expectation. In order to evaluate business performance, there are two main aspects, which are financial and non-financial (Wu and

Cavusgil, 2006; Keh et al., 2007). A combination of these two has been deemed to be most comprehensive (Clark, 1999; Haber and Reichel, 2005; Venkatraman and Ramanujam, 1986). In terms of the financial performance, revenue, profitability, cash flow, return on assets and equity are some of the measures used (Haber and Reichel, 2005), whereas perceived market share and sales growth, customer satisfaction and loyalty, and brand equity have been used as measures of non-financial performance (Clark, 1999; Haber and Reichel, 2005). In this research, we use both financial (expected profit level) and non-financial (the market share, the growth rate and new products/services) measures of firm performance.

### *2.2.2 Innovativeness (INO)*

Innovativeness involves developing new products and services meeting market needs (Szeto, 2000) or improving available product lines (Lumpkin and Dess, 1996; Slevin and Covin, 1995; Dibrell et al., 2014), which involve the ability to convert possessed resources toward company's innovation goals (Amit and Schoemaker, 1993). Innovativeness can be considered as a dynamic capability (Lawson and Samson, 2001; Khosravi et al., 2019). The activities involved in innovativeness are both internal and external, because the search for new ideas and opportunities, and the generation of new knowledge that is applied to an opportunity require interaction among the company and its environment (Elmquist and Le Masson, 2009; Cohen and Levinthal, 1990; Zahra and George, 2002; Teece, 2007; Genç et al., 2019; Ferreira et al., 2015).

By developing innovative products or services, firms can improve their performance and profitability (Lumpkin and Dess, 1996; Miller, 1983; Khosravi et al., 2019). This applies also to smaller companies: innovative SME's grow faster and have higher productivity and profitability (Geroski et al., 1993; Roper and Hewitt-Dundas, 1998; Genç et al., 2019; Nofiani et al., 2020). Innovation can also become a requirement in particularly challenging circumstances, such as rapidly changing or highly competitive business environments. For example, SMEs may not be able to survive without being sufficiently innovative (Rhee et al., 2010; Rosenbusch et al., 2011). Consequently, in this research we propose a hypothesis:

H1 Innovativeness has a positive impact on firm performance.

### *2.2.3 Marketing capability (MAR)*

Marketing capability aims at satisfying customer needs and business targets (Kotler et al., 2006; Vorhies and Morgan, 2005; Ahmed et al., 2014) such as competitiveness and brand equity (Day, 2011; Song et al., 2007; Kajalo and Lindblom, 2015) by means of different marketing activities. Research has found evidence on the link of marketing capability with innovativeness (Benedetto et al., 2008; Falasca et al., 2017; Kamboj and Rahman, 2017; Song et al., 2008; Nguyen and Nguyen, 2011; Genç et al., 2019). This is because marketing is responsible for communicating the benefits of products to customers using promotional activities (Ngo and O'Cass, 2012; Webb et al., 2011). The role of marketing is enhanced in emerging economies where B2C communication and distribution channels may be developing rapidly and infrastructure is underdeveloped (Mason and Chakrabarti, 2017). Therefore, marketing capabilities can have a positive relationship with innovativeness.

H2 Marketing capability has a positive impact on innovativeness of the firm.

Marketing capability allows a firm to successfully sell its existing products and achieve superior firm performance (Kotabe et al., 2002; Morgan et al., 2009; Martin and Javalgi, 2016; Vorhies et al., 2011; Davcik et al., 2020), but the role of marketing capability has also been recognised in new product development (Akdeniz et al., 2010; Theodosiou et al., 2012; Vorhies and Morgan, 2005; Yu et al., 2014). According to Reibstein et al. (2009), marketing capability facilitates product innovations to be transformed into customer value and firm performance. This is possible by the use of the marketing mix (Vorhies and Morgan, 2005) and the creation of a strong brand image (Ortega and Villaverde, 2008). Marketing capabilities have been repeatedly found to positively influence firm performance (Kajalo and Lindblom, 2015; Lekmat et al., 2018; Davcik et al., 2020). Therefore, in this research we propose the following hypotheses:

H3 Marketing capability has a positive impact on firm performance.

#### 2.2.4 Entrepreneurial orientation (ORI)

A company having a high entrepreneurial orientation is one that “engages in product market innovation, undertakes somewhat risky ventures and is first to come up with ‘proactive’ innovations, beating competitors to the punch” [Miller, (1983), p.770], and comprises independence, risk-taking and ability to take offensive actions against competitors (Lumpkin and Dess, 1996; Runyan et al., 2008). It reflects the propensity of a firm to engage in identification and exploitation of untapped market opportunities (Baker and Sinkula, 2009; Walter et al., 2006; Wiklund and Shepherd, 2003; Lumpkin and Dess, 1996). Entrepreneurial orientation continues to be an important variable to assess firms’ strategic management and entrepreneurial characteristics (Zainol and Ayadurai, 2011; Covin and Lumpkin, 2011).

Even though entrepreneurial orientation has received significant attention in management research (Covin and Wales, 2012; Rauch et al., 2009; Wales et al., 2013), there is disagreement about the composition of entrepreneurial orientation. The original construct was composed of three dimensions; proactiveness, risk-taking, and innovativeness, which were proposed by Miller (1983), and later two other dimensions (autonomy and competitive aggressiveness) were added by Lumpkin and Dess (1996). While other studies have applied a unidimensional construct of entrepreneurial orientation (e.g., Covin and Slevin, 1989; Gruber-Muecke and Hofer, 2015; Kajalo and Lindblom, 2015; Linton and Kask, 2017), there have been criticisms related to the differential effects to firm performance from the individual dimensions of entrepreneurial orientation (Lumpkin and Dess, 2001). Potential redundancy among these dimensions has also been noted by researchers (Cannavale and Nadali, 2018). In fact, there are examples of studies in the SME context in particular that have either applied a modified representation of entrepreneurial orientation (Soininen et al., 2012) or found irregularities in the performance links of the dimensions (Kreiser et al., 2013).

Prior research in an emerging market business environment has questioned the role of innovativeness as a dimension in entrepreneurial orientation, with Cannavale and Nadali (2018) combining innovativeness with proactiveness and Nofiani et al. (2020) separating innovativeness from entrepreneurial orientation to be an independent construct. Because retail SMEs also exhibit different kind of innovation in comparison with larger companies in other business sectors (Quinn et al., 2013), we hold particular interest in the



concept of innovativeness in this study and believe it is justified to apply it as a separated construct, similar to Nofiani et al. (2020). Hence, taking into account the retail SMEs in the emerging market context of this study, in this research we consider entrepreneurial orientation to be a combination of two dimensions which are

- 1 risk-taking
- 2 proactiveness.

Innovativeness, as already explained, is treated as an independent construct.

An entrepreneurial orientation is critical for firm success because it represents an important means to explore and exploit profitable business opportunities (Barringer and Bluedorn, 1999; Lee et al., 2001; Wiklund and Shepherd, 2003). This allows firms to stay competitive in a competitive and uncertain environment (Lumpkin and Dess, 1996; Shane and Venkataraman, 2000). Many studies show a positive connection between entrepreneurial orientation and marketing capability (Keh et al., 2007; Martin and Javalgi, 2016; Covin et al., 2006; Lekmat et al., 2018; Kajalo and Lindblom, 2015). Therefore we provide below research hypothesis:

H4 Entrepreneurial orientation has a positive impact on marketing capability.

The link between a strong entrepreneurial orientation and innovativeness has been confirmed by previous studies (Chen et al., 2015; Bisbe and Malagueno, 2015; Baker and Sinkula, 2009). As innovation requires firms to be open and receive input from external entities such as customers, suppliers, and other stakeholders (Kafouros et al., 2012; Nieto and Santamaria, 2007), firms with high entrepreneurial orientation are active in establishing relationships with these actors (Porter and Stern, 2001), and thus increase their chances to improve their product offerings and production processes (Zahra and George, 2002; Kafouros et al., 2012; Genç et al., 2019). In the case of SMEs, these contacts become more important because such companies have less internal resources to conduct research and development activities (Frey et al., 2013; Chesbrough, 2003). Hence, we suggest the following hypothesis:

H5 Entrepreneurial orientation has a positive impact on innovativeness.

Entrepreneurial orientation is also strongly linked to firm performance (Keh et al., 2007; Soininen et al., 2012; Li et al., 2008; Lumpkin and Dess, 2001; Wiklund and Shepherd, 2003; Kajalo and Lindblom, 2015). Hence, companies with high entrepreneurial orientation perform better than those with lower entrepreneurial orientation. This is true not only for larger companies but also for SMEs (Wiklund and Shepherd, 2003). Therefore, we can hypothesise:

H6 Entrepreneurial orientation has a positive impact on firm performance.

### 2.2.5 Adaptive capability (ADC)

Adaptive capability is defined as a combination of product-market response, marketing activities and speed of response (Oktemgil and Greenley, 1997). Lockett et al. (2011) characterises adaptive capability as the firm's proficiency at altering its understanding of market expectations; essentially meaning that the firm is able to acquire a new stance in response to environmental change. An ability in strategic course correction implies that marketing strategies can be adjusted quickly to suit new customer needs and competitor

moves. As marketing activities form one dimension of adaptive capability, it is reasonable to assume that adaptive capability would link to marketing capability. Wiwoho et al. (2020) found that adaptive capability indirectly contributes to marketing performance. This enables the following hypothesis:

H7 Adaptive capability has a positive impact on marketing capability.

Proactiveness and risk-taking, components of entrepreneurial orientation, assume a future-oriented stance for the company, which is shared with adaptive capability. Companies with high adaptive capability are constantly scanning the environment for signs of change; threats and opportunities, that would necessitate adjustments (Lockett et al., 2011). Indeed, by doing so the firm acquires critical information about customer preferences. According to Ireland et al. (2003), this market understanding lowers uncertainty and helps the firm identify appropriate strategies. Because increased understanding about market expectations can stimulate entrepreneurial activities that are directed toward market opportunities (Hitt et al., 2001), adaptive capability can stimulate entrepreneurial activities. Eshima and Anderson (2017) found that adaptive capability links to entrepreneurial behaviours. Therefore, in this research we propose these hypotheses.

H8 Adaptive capability has a positive impact on entrepreneurial orientation.

The core idea of adaptive capability is that a firm will focus on changing its behaviour to accommodate market changes, both in respect to customers and competitors. Therefore, it is logical that firm performance will be higher for companies with high ability to adjust in this way, in comparison with companies that have relatively low abilities for adjustment. Indeed, several studies link adaptive capability to firm performance (Amburgey et al., 1993; Nayyar and Bantel, 1994; Singh et al., 1986; Smith and Grimm, 1987; Zajac and Kraatz, 1993; Zaheer and Zaheer, 1997). Hence, we propose:

H9 Adaptive capability has a positive impact on firm performance.

### *2.3 Firm characteristics*

Organisational variables, particularly firm size and age, have been found of importance to a company's internal structure and strategy (Aldrich and Auster, 1986; Evans, 1987; Freeman et al., 1983; Haveman, 1993; Kimberly, 1976; Shinkle and Kriauciunas, 2010). Firm size is connected to bargaining power and related benefits in the marketplace (Luo, 2000; Peng and Heath, 1996); however, it may make a firm less agile in its strategic decision-making. Similarly, firm age is a double-edged sword, benefiting the company in terms of reputation and legitimacy (Park and Luo, 2001), but hindering it in terms of readiness for change (Fichman and Levinthal, 1991; Henderson, 1999). Firm size and age have been commonly used as control variables in research designs (Fainshmidt and Frazier, 2017; Soininen et al., 2012; Zhang and Hartley, 2018) or as a moderating variable (Agyapong et al., 2016; Mabenge et al., 2020; Moreno-Menéndez and Casillas, 2021; Aziz and Samad, 2016; Manik et al., 2020; Valtakoski and Witell, 2018), but they have rarely been used as independent variables to investigate their linkage to firm performance.

Vietnamese SME's are defined as having 200 or fewer employees and satisfying one of these criteria: total capital shall not exceed VND100 billion (around USD4.4 million);

and/or total revenue of the preceding year shall not exceed VND300 billion (around USD13.2 million).

**Table 1** SME categories by Vietnamese Government's Decree No. 39/2018/ND-CP

<i>Business sector</i>	<i>Micro enterprise</i>		<i>Small enterprise</i>		<i>Medium enterprise</i>	
	<i>Number of labourers</i>	<i>Total capital (C)/ revenue (R) in bil. VND</i>	<i>Number of labourers</i>	<i>Total capital (C)/ revenue (R) in bil. VND</i>	<i>Number of labourers</i>	<i>Total capital (C)/ revenue (R) in bil. VND</i>
Agriculture, forestry and fishery	$\leq 10$	$C \leq 3$ or $R \leq 3$	11–100	$C \leq 20$ or $R \leq 50$	101–200	$C \leq 100$ or $R \leq 200$
Industry and construction	$\leq 10$	$C \leq 3$ or $R \leq 3$	11–100	$C \leq 20$ or $R \leq 50$	101–200	$C \leq 100$ or $R \leq 200$
Trade and service	$\leq 10$	$C \leq 3$ or $R \leq 10$	11–50	$C \leq 50$ or $R \leq 100$	51–100	$C \leq 100$ or $R \leq 300$

In the trade and service sector, due to Vietnam's character as a transition economy, small retail firms exist in primarily two different types:

- 1 registered firms
- 2 traditional stores.

While registered firms are governed by enterprise law, traditional stores are governed by a decree. In practice, these two types of companies are different with respect to the public agency holding jurisdiction over business standards; there is a province-level agency for registered companies and a district-level agency for traditional stores (CIEM, 2017). A province is a higher-level administrative unit than a district, indicating the higher importance afforded to registered companies in comparison with traditional stores. Tax collection is also different: registered companies pay business tax, income tax and value-added tax with a tax code, whereas traditional stores pay an annual lump sum (Pasquier-Doumer et al., 2017). The main advantages gained by a business from registration are the access to capital and deals with larger companies. When traditional stores grow in size, specifically to larger than ten employees, they need to become registered firms by law. According to the survey conducted by the Vietnam Academy of Social Sciences and the French National Research Institute for Sustainable Development in 2016, the bigger a household business is, the more likely it is to be registered.

In this research, although data regarding firm size (number of employees) was available, it is thought that firm type can work as a reliable proxy to firm size. This is due to certain cultural characteristics in Vietnam. Traditional firms are usually family-owned, and the number of employees may include any and all family members, as well as relatives and close friends. Hence, the employee count is not very exact. Therefore, there may be very little difference between companies when they are so small, even though the number of employees may vary to some extent. Indeed, this discrepancy between firm size and firm type can be observed from the data in Table 2. Therefore, in the context of Vietnam, SME retail firms are usually identified with its types rather than the size. Thus, in this research we propose hypotheses:

H10 Firm type has positive impact on firm performance.

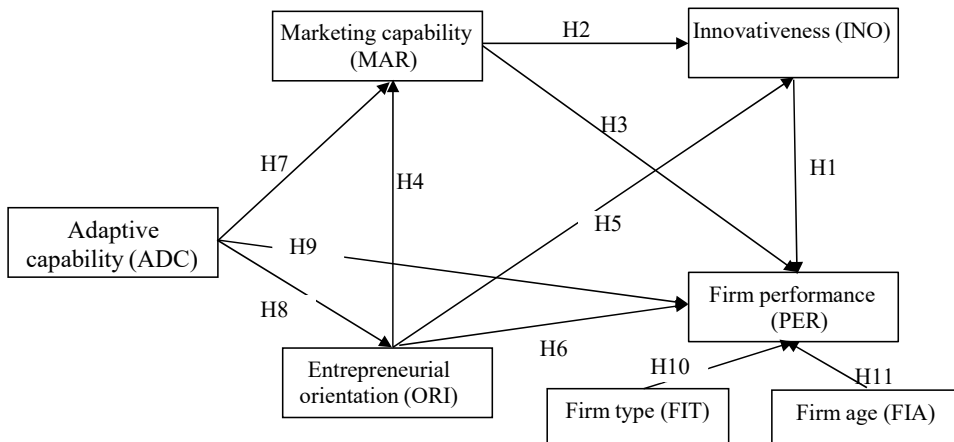
Firm age is a variable that is probably linked to performance through intermediates such as reputation and experience (Coad et al., 2018). Different theories have perceived the effects of firm age to relate to an organisation's natural lifecycle (Hannan and Freeman, 1984) or its evolutionary development (Jovanovic, 1982; Nelson and Winter, 1982). There is some evidence about older firms being more productive than younger firms, at least those that are in the first few years of their existence (Coad et al., 2018). Start-up companies have no established routines, capabilities, or shared tacit knowledge; and the firm has no reputation, creating a disadvantage that should be overcome. Such resources will be developed during the first 5–7 years of a business, bringing these start-ups to a relatively even footing with older companies (Coad, 2018). Moreover, older firms are well-established in their networks and might be better attuned to selecting the most profitable business opportunities and capturing value from their customers (Coad, 2018). Thus, we have the following hypothesis.

H11 Firm age has positive impact on firm performance.

## 2.4 Research model

Building on the above theoretical background, we present our theoretical model in Figure 1.

**Figure 1** Research model



## 3 Methodology

### 3.1 Data collection

Data for testing research hypotheses was collected through a survey of SMEs in the retail sector in Haiphong City, Vietnam in 2017. The questionnaires were translated from English to Vietnamese and back to ensure the reliability and similarity of the translation process. In addition, prior to running the survey, a pilot test (interviews) was conducted

with researchers from the university where this study was hosted and firm managers from the network of researchers to verify the content and to clarify the questionnaire (Teijlingen and Hundley, 2002; DeVellis, 2003). After having the comments and suggestions from these persons regarding the wording of the statements, some questions were edited to ensure the relevance of the scales in the context of SMEs in Vietnam.

The sampling frame was setup based on the business directory published by Haiphong Department of Planning and Investment and the list of convenience stores from Haiphong Department of Industry and Trade. The participants were the senior managers or owners of retail enterprises, which have fewer than 100 employees and are officially registered under the law on enterprises. The traditional retail shops, which are registered as household businesses and convenience stores, but are registered as enterprises under the law on enterprises, were also included in this study. A list of 350 potential enterprises divided by the percentage of enterprises in the selected districts was targeted in the investigation. Questionnaires were given directly to senior managers or enterprise owners by students of Haiphong University, who were trained on the data collection. After sorting to eliminate invalid responses (which have missing values for any of the relevant variables), the number of valid responses was 243 (Table 2). This was in the range of minimum sample size from 100 to 500 according to the model complexity and measurement model characteristics (Mundfrom et al., 2005; Hair et al., 2006).

**Table 2** Characteristics of surveyed enterprises

Traditional enterprises	138 (56.8%)
Officially registered enterprises	105 (43.2%)
Number of employees per enterprise	
<10	49 (20.16%)
10–20	181 (74.49%)
>20	13 (5.35%)
Average number of employees per enterprise (min-max)	12.79 (3–40 employees)
Average floor area of an enterprise (min-max)	182.39 (15–6,000 m <sup>2</sup> )
Average operating year for an enterprise (min-max)	5.13 (3–50 years)

### 3.2 Measures

Despite a wealth of research, there is no commonly accepted formula to measure components of dynamic capability (Dixon et al., 2014). The constructs in the model were adapted from the literature review and previous empirical research (Appendix). In particular, marketing capabilities and entrepreneurial orientation are multidimensional scales (second order constructs), and the measures of innovativeness, adaptive capability and firm performance are unidimensional scales.

Marketing capability is evaluated by three components including: customer responsiveness (RES) (Homburg et al., 2007; Nguyen and Nguyen, 2011), business relationship quality (REL) (Wu and Cavusgil, 2006) and competitor responsiveness (COM) (Homburg et al., 2007). Customer responsiveness is defined as providing right services satisfying customer needs; understanding the customers, using collected information, and the response ability toward customers and competitors (Homburg et al., 2007; Nguyen and Nguyen, 2011). Business relationship quality reflects the ability to

establish a relationship among the firm and other organisations and concerned partners such as public authorities, suppliers, the market channel system, and the customers (Wu and Cavusgil, 2006; Krasnikov and Jayachandran, 2008; Srivastava et al., 2001). Competitor responsiveness is indicated by understanding the competitors, responding ability to competitor moves and collection of proactive data relating to competitors and customer moves (White et al., 2003; Homburg et al., 2007; Menguc and Auh, 2006).

Entrepreneurial orientation was evaluated by two components, which are risk taking (RIS) and proactiveness (PRO). Risk-taking is the propensity to taking risks in the market, and readiness to participate in high risk projects. Risk-taking also encourages making new products/services available for customers. Proactiveness is forecasting ability and reaction in advance of the movements of the market and the competitors. Proactiveness is characterised by offensive business strategies, readiness to launch new products ahead of the competitors, and initiative in market movements and competitors' offensive actions (Keh et al., 2007). Risk taking was measured by three items and proactiveness was measured by three items adapted from Keh et al. (2007).

Innovativeness was evaluated by four items based upon Covin and Slevin (1989) and Keh et al. (2007). Adaptive capability was developed from literature and studies of Oktemgil and Greenley (1997), Zhou and Li (2010) and Homburg et al. (2007) with four items. Firm performance was evaluated on both financial and non-financial aspects by four items adapted from Wu and Cavusgil (2006) and Keh et al. (2007). All items were measured by a five-point Likert scale, anchored by 1: strongly disagree and 5: strongly agree.

We have two different firm types, which are traditional enterprises and officially registered enterprises. Regarding firm age, it was defined as the number of years the firm had been in existence (Jiang et al., 2011). Depending on the research context, different authors have used different age thresholds:

- less than 5 years old, 5 to 10 years old, and over 10 years old firms (Keh et al., 2007; Aziz and Samad, 2016; Fainshmidt and Frazier, 2017)
- less than 12 years old and more than 12 years old firms (Manik et al., 2020)
- 1–8 years old, 9–20 years old, 21–30 years old, 31–50 years, and more than 51 years old firms (Pellegrino, 2018).

In this research, based on the research result of Coad (2018) and the Vietnamese retail SMEs, we selected the age classes of less than 5 and more than 5 years old firms. This type of categorisation serves to divide SME's into two age groups that are – with respect to our sample – relatively even in size.

### *3.3 Data analysis*

The collected data was analysed using multivariate data analysis methods in the SPSS software program. In order to evaluate the reliability and validity of each construct in the model, we used confirmatory factor analysis (CFA) with measurement model and saturated model. First, we used measurement model to evaluate for each multidimensional scale (marketing capability and entrepreneurial orientation) and unidimensional scale. Next, the saturated model was used to assess the final model that evaluates the model's reliability and overall model fit to actual data.

Criteria commonly used to assess overall fit include chi-square/df, CFI, TLI, IFI, and RMSEA (Hair et al., 2010; Hu and Bentler, 1999; Kline, 2011; Schreiber et al., 2006; Schumacker and Lomax, 2015). Different cut-off for model fit have been proposed, with some researchers requiring chi-square/df to be less than 2 or 3 (Hair et al., 2010; Kline, 2011), or less than 5 in a large sample (West et al., 2012). Cut-off criteria for CFI, TLI, and IFI are usually required to be higher than 0.9 (Hair et al., 2010; Hooper et al., 2008; Kline, 2011; Schumacker and Lomax, 2015), although also 0.95 has been proposed (Hu and Bentler, 1999; Schreiber et al., 2006; West et al., 2012). As for the RMSEA value, less than 0.05 are required by some researchers (Browne and Cudeck, 1993; Steiger, 1990), whereas other researchers require 0.08 (Hair et al., 2010; Hu and Bentler, 1999; Schumacker and Lomax, 2015).

In this study, as the first paper which investigated the four dynamic capabilities (i.e., innovativeness, entrepreneurial orientation, marketing capability and adaptive capability) in one comprehensive model in an emerging market (Vietnam) context, we judged chi-square/df to be sufficient with a value of less than 3 (Hair et al., 2010; Kline, 2011), required CFI, TLI, IFI to be greater than 0.9 (Hair et al., 2010; Kline, 2011), and RMSEA to be less than 0.08 (Hair et al., 2010; Hu and Bentler, 1999; Schumacker and Lomax, 2015). If the factor loadings on items in the constructs are larger than 0.5, the constructs in the model achieve convergent validity with each construct (Hair et al., 2010). The constructs achieve reliability when composite reliability (CR) and Cronbach's alpha are larger than 0.6 (Hair et al., 2010). The test by 95% confidence interval of correlation coefficients between factors in the measurement model and saturated model was used to assess discriminant validity between constructs. If 95% confidence interval of correlation coefficient between factors do not contain value 1 show that the constructs reach discriminant validity (Torkzadeh et al., 2003). Structural equation modelling was applied to test hypotheses with statistical significance at the level of 5%.

### *3.4 Common method and non-response bias*

In behavioural research, common method bias is one of the main sources for measurement errors (Podsakoff et al., 2003). It can cause the true relationship between constructs producing bias in parameter estimation (Malhotra et al., 2006). In this study, recommendations suggested by Podsakoff et al. (2003) were used to limit the common method bias phenomenon. First, when designing the survey, questions which were adapted from previous research were stated clearly and concisely. In addition, the scale items were improved through consultation with experts in both academia and the industry. When conducting the survey, we attempted to promote honest responses and increase the confidence of respondents by informing them that there were no right or wrong answers. Following the data collection, Harman's one – factor test was used to evaluate the common method bias. The result of Harman's test showed that when fixing the unique factor of all items in the model, the total variance explained was less than 50% (to be exact 29.964%). Thus, there is no evidence for common method bias in this study.

Non-response bias is another problem in the survey research which can affect the research findings. In this study, we used T-test to compare early respondents and late respondents by dividing them at a ratio of 70:30 (Armstrong and Overton, 1977). The results indicated that there was no differences between the two groups ( $p\text{-value} > 0.05$ ). Therefore, the sample was free of non-response bias.

## 4 Research result

### 4.1 Reliability and validity

#### 4.1.1 Measurement model of multidimensional scales

The research model had two second order constructs: marketing capability and entrepreneurial orientation. Marketing capability was measured by three components: customer responsiveness, business relationship quality and competitor responsiveness, and entrepreneurial orientation was measured by two components: risk taking and proactiveness. The result of the CFA analysis showed that the measurement model fit the actual data (Table 3). In particular, chi-square/df was smaller than 3 (Hair et al., 2010; Kline, 2011), CFI, TLI, IFI were all larger than 0.9 (Hair et al., 2010; Kline, 2011) and RMSEAs were smaller than 0.08 (Hair et al., 2010; Hu and Bentler, 1999; Schumacker and Lomax, 2015). All factor loadings were larger than 0.5, which showed that the components in the multidimensional scales achieved convergent validity (Hair et al., 2010). Even though AVE is less than 0.5, CR and Cronbach's alpha coefficients of each factor were all larger than 0.6, and therefore the convergent validity of the construct is still adequate (Fornell and Larcker, 1981). Therefore, the model could be considered as reliable.

#### 4.1.2 Measurement model of unidimensional scales

There are three unidimensional scales: innovativeness, adaptive capability and firm performance. The result of the CFA analysis for each factor showed that the model achieved overall fit to the actual data, chi-square/df was smaller than 3 (Hair et al., 2010; Kline, 2011), CFI, TLI and IFI all are larger than 0.9 (Hair et al., 2010; Kline, 2011) and RMSEA was smaller than 0.08 (Hair et al., 2010; Hu and Bentler, 1999; Schumacker and Lomax, 2015). The factor loadings of items in each factor were larger than 0.5 which indicated that the constructs reached convergent validity (Hair et al., 2010). As above, even though AVE was approximately 50%, Cronbach's alpha and CR coefficients were larger than 0.7, and therefore the constructs reached reliability (Fornell and Larcker, 1981).

#### 4.1.3 Saturated model

The saturated model contains the relationship of all constructs in the final model. The result of data analysis showed that the model achieved overall fit to the actual data (chi-square/df =  $1.583 < 3$ , CFI = 0.920; TLI = 0.910; IFI = 0.921, all were larger than 0.9 and RMSEA =  $0.049 < 0.08$ ).

#### 4.1.4 Discriminant validity

We evaluated discriminant validity between constructs in each multidimensional scale and research model with 95% confidence interval of the correlation coefficients by the bootstrap method. The result showed that in multidimensional scales, the 95% confidence interval did not contain value 1 (Table 4). This indicated that the components of the marketing capability scale and entrepreneurial orientation scale achieved within-construct discriminant validity in a multidimensional construct. The saturated model also showed



that 95% of the correlation of constructs (multidimensional and unidimensional construct) did not contain value 1, therefore, we can conclude that the constructs in the research model reached discriminant validity.

**Table 3** Reliability, convergent validity and model fit index

<i>Constructs (N of items)</i>	<i>Mean (SD)</i>	<i>Minimum of loadings</i>	<i>CR</i>	<i>AVE</i>	<i>Cronbach's alpha</i>	<i>Model fit index</i>
<i>Measurement model</i>						
<i>Multidimensional scale</i>						
<i>Marketing capability (MAR)</i>						
Customer responsiveness – RES (3)	4.079 (0.517)	0.660	0.728	47%	0.724	Chi-square/ df = 1.675; CFI = 0.970; TLI = 0.961; IFI = 0.970; RMSEA = 0.053
Business relationship quality – REL (4)	4.627 (0.550)	0.707	0.850	58%	0.865	
Competitor responsiveness – COM (6)	3.982 (0.506)	0.618	0.837	46%	0.784	
<i>Entrepreneurial orientation (ORI)</i>						
Risk taking – RIS (3)	3.255 (0.521)	0.512	0.701	45%	0.699	Chi-square/ df = 1.714; CFI = 0.979; TLI = 0.960; IFI = 0.979; RMSEA = 0.054
Proactiveness – PRO (3)	3.982 (0.506)	0.545	0.632	37%	0.628	
<i>Unidimensional scale</i>						
Innovativeness – INO (3)	3.922 (0.557)	0.539	0.737	48%	0.748	Chi-square/ df = 2.377; CFI = 0.987; TLI = 0.961; IFI = 0.987; RMSEA = 0.075
Adaptive capability – ADC (4)	4.174 (0.544)	0.652	0.794	49%	0.793	
Firm performance – PER (5)	3.473 (0.459)	0.582	0.776	41%	0.776	
<i>Saturated model</i>						Chi-square/ df = 1.583; CFI = 0.920; TLI = 0.910; IFI = 0.921; RMSEA = 0.049

**Table 4** Discriminant of constructs in the model

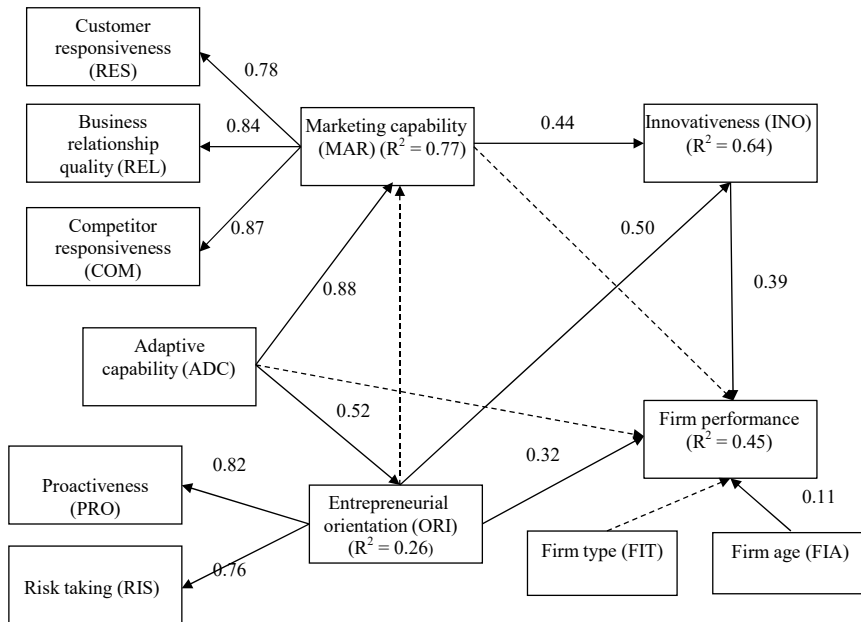
<i>Saturated model</i>		<i>Measurement model</i>	
<i>Relationships</i>	<i>Correlation (95%CI)</i>	<i>Marketing capability (MAR)</i>	
		<i>Relationships</i>	<i>Correlation (95%CI)</i>
INO – ADC	0.649 (0.500–0.768)	RES – REL	0.697 (0.510–0.825)
INO – ORI	0.600 (0.429–0.756)	RES – COM	0.667 (0.514–0.804)
INO – MAR	0.653 (0.501–0.772)	REL – COM	0.733 (0.613–0.815)
INO – ORI	0.695 (0.503–0.833)	<i>Entrepreneurial orientation (ORI)</i>	
ADC – PER	0.492 (0.301–0.636)	RIS – PRO	0.634 (0.483–0.812)
ADC – MAR	0.870 (0.772–0.970)	-	-
ADC – ORI	0.479 (0.240–0.653)	-	-
PER – MAR	0.423 (0.217–0.571)	-	-
PER – ORI	0.592 (0.375–0.768)	-	-
MAR – ORI	0.484 (0.121–0.726)	-	-

Notes: INO – innovativeness; ADC – adaptive capability; MAR – marketing capability; RES – customer responsiveness; REL – business relationship quality; COM – competitor responsiveness; ORI – entrepreneurial orientation; RIS – risk taking; PRO – proactiveness; PER – firm performance.

#### 4.2 Structural model and hypotheses test

The results of structural model analysis indicated that the proposed model received an acceptable fit to the actual data (chi-square/df = 1.565 < 3; CFI = 0.922; TLI = 0.913; IFI = 0.923 all were larger than 0.9 and RMSEA = 0.048 < 0.08). The result also showed that innovativeness had direct impact on firm performance ( $\beta = 0.392$ , p-value < 0.001) (H1). Marketing capability had direct impact on innovativeness ( $\beta = 0.442$ , p-value < 0.001) (H2), but did not have direct impact on firm performance (p-value > 0.05) (H3). Entrepreneurial orientation had a direct impact on innovativeness ( $\beta = 0.500$ , p-value < 0.001) (H5) and firm performance ( $\beta = 0.323$ , p-value = 0.032 < 0.05) (H6); however, it did not have impact on marketing capability (H4). Adaptive capability has a positive impact on marketing capability ( $\beta = 0.878$ , p-value < 0.001) (H7) and entrepreneurial orientation ( $\beta = 0.514$ , p-value < 0.001) (H8). However, adaptive capability did not directly impact firm performance (p-value > 0.05) (H9).

Among the two factors of firm characteristics, the result showed that there is no difference between the type of business on firm performance (enterprises registered under the law of enterprises and traditional retail businesses) (H10). However, the duration of operation of enterprises had an impact on firm performance. Enterprises operating over five years have higher performances than enterprises operating less than five years ( $\beta = 0.106$ , p-value = 0.086 < 0.1) (H11). In summary, the result accepted hypotheses H1, H2, H5, H6, H7, H8, H11 and rejected hypotheses H3, H4, H9 and H10 (Table 5 and Figure 2).

**Figure 2** Results of the structure model

Notes: Chi-square/df = 1.565, CFI = 0.922; TLI = 0.913; IFI = 0.923; RMSEA = 0.048.

**Table 5** Hypothesis test results

Hypotheses	Relationships	Std. beta	p-value	Accepted or not
H1	INO → PER	0.392	0.048	Yes
H2	MAR → INO	0.442	<0.001	Yes
H3	MAR → PER	-0.110	0.637	No
H4	ORI → MAR	0.063	0.412	No
H5	ORI → INO	0.500	<0.001	Yes
H6	ORI → PER	0.323	0.032	Yes
H7	ADC → MAR	0.878	<0.001	Yes
H8	ADC → ORI	0.514	<0.001	Yes
H9	ADC → PER	0.121	0.301	No
H10	FIT → PER	-0.021	0.737	No
H11	FIA → PER	0.106	0.086	Yes

Notes: INO – innovativeness; ADC – adaptive capability; MAR – marketing capability; ORI – entrepreneurial orientation; FIT – firm type; FIA – firm age; PER – firm performance.

### 4.3 Direct, indirect and total effect

We used total effect coefficients to evaluate the relationships of factors on firm performance. The result of the analysis showed that firm performance was most influenced by entrepreneurial orientation ( $\lambda = 0.507$ ); the next most was adaptive

capability ( $\lambda = 0.418$ ), and then in decreasing order of influence, innovativeness ( $\lambda = 0.392$  and marketing capability ( $\gamma = 0.636$ ) (Table 6).

**Table 6** Direct, indirect and total effect coefficients

<i>Dependent variable</i>	<i>Effect</i>	<i>Adaptive capability (ADC)</i>	<i>Entrepreneurial orientation (ORI)</i>	<i>Marketing capability (MAR)</i>	<i>Innovativeness (INO)</i>
Entrepreneurial orientation (ORI)	Direct	0.518			
	Indirect				
	Total	0.518			
Marketing capability (MAR)	Direct	0.877			
	Indirect				
	Total	0.877			
Innovativeness (INO)	Direct		0.502	0.438	
	Indirect	0.644		0.000	
	Total	0.644	0.502	0.438	
Firm performance (PER)	Direct		0.323		0.392
	Indirect	0.418	0.182	0.159	
	Total	0.418	0.507	0.159	0.392

## 5 Discussion

Similar to previous research (Bisbe and Malagueno, 2015; Chen et al., 2015; Keh et al., 2007; Soininen et al., 2012), all dynamic capabilities in this study were found to have either direct or indirect impact on firm performance. However, against expectations, a direct link to performance was found only with entrepreneurial orientation and innovativeness, not adaptive capability and marketing capability.

*Entrepreneurial orientation* with its two dimensions, risk-taking and proactiveness, had the highest impact on performance. This finding suggests that in the case of Vietnamese retail SMEs, managers must select aggressive competitive strategies and take risks in order to be successful. This is consistent with the highly competitive situation in Vietnam's retail sector, where small firms have difficulties differentiating themselves. It is also supported by Pasquier-Doumer et al. (2017), who found that strategic actions directed at competitors and the discovery of new markets are of primary importance for Vietnamese traders. Secondly, *innovativeness* also showed a significant direct effect on firm performance. As the focus was the retail industry, innovation can mean the stocking of new products from suppliers (Pasquier-Doumer et al., 2017) and implementation of new retail concepts such as e-commerce, for example. Such innovativeness can be spurred on by increased inflow of new knowledge to the company from the outside environment, but it can also be fostered by better communications among employees.

Even though *adaptive capability* was found to not have direct impact on firm performance, it has a considerable indirect impact on firm performance through entrepreneurial orientation. This result suggests that adaptive capability operates through risky and uncertain managerial action often directed against competitors. The turbulent and rapidly developing retail market in Vietnam requires SME's to scan the market

environment and adjust quickly to be able to match competitors' actions. Similarly, no direct relationship between *marketing capability* and business performance was found in this study. This result is surprising and different from previous research such as Kotabe et al. (2002), Morgan et al. (2009), Martin and Javalgi (2016) and Vorhies et al. (2011). However, as this factor is mainly focused on relationship-building and information gathering, it may be that such activities are necessary but not sufficiently so to directly improve the performance of Vietnamese retail SMEs. This could explain why marketing capability was found to have an indirect impact on business performance. Retail SMEs have limited shelf space and focus on similar and often familiar consumer goods that are demanded by consumers in the immediate vicinity. Thus, they seem not to need to conduct market research for such products. In the case of new products, these companies can simply copy their marketing approach from competitors instead of inventing new approaches. Additionally, the need for relationships may be mitigated because customers select shops mainly based on proximity to their dwelling.

The *enterprise type*, whether traditional or officially registered, was not linked to business performance. In other words, the registered firms, which are usually bigger and more innovative and have better access to capital and market, did not perform better than the traditional stores. While registered companies have advantages over these aspects, it may be that smaller companies have relationship-based advantages with their local communities or, as found by Pasquier-Doumer et al. (2017), that they have significantly smaller legal compliance and administrative requirements than registered companies (CIEM, 2017).

In terms of firm age, the relationship between business operation duration and firm performance was not strongly supported ( $p = 0.086$ ). Although there appears to be a weak link, reflecting on prior research, which is largely inconclusive, our finding cannot offer a strong counterargument. Therefore, we recommend future research to continue focusing on the topic and explore different ways to accommodate firm age into research designs.

## 6 Research implications

The objective of this research is to find out whether and how dynamic capabilities including innovativeness, entrepreneurial orientation, marketing capability and adaptive capability could affect firm performance of retail SME companies in the context of emerging markets.

### 6.1 Theoretical significance

Our paper contributed to the literature in several ways. First, the research model was built based on the theory of dynamic capability and it demonstrated the performance link of several variables related to dynamic capability, particularly innovativeness, entrepreneurial orientation, marketing capability and adaptive capability. Hence, the findings support the theory of dynamic capabilities (Teece et al., 1997; Teece, 2018) also in the case of SMEs.

However, not all of the intangible resources had similar importance to Vietnamese SME's in this sector. The critical role of entrepreneurial orientation is affirmed in the study as a core factor in performance. It stands to reason that retail-sector SME performance is strongly dependent on aspects such as risk-taking and new product

sourcing. Our study also confirmed the direct impact of innovativeness and firm performance (Lumpkin and Dess, 1996; Slevin and Covin, 1995; Dibrell et al., 2014), as well as the indirect influence of marketing capabilities and adaptive capability to firm performance.

## *6.2 Practical significance*

Firstly, SMEs in the retail industry should hire and select managers who have strong entrepreneurial orientation. Managers with strong entrepreneurial orientation are highly active in business and willing to take business risk for great gains. Entrepreneurial orientation was not only the most influential factor directly on business performances but also indirectly via the innovativeness capability. In other words, strong business-oriented entrepreneurs do not only improve the business performance directly but also promote firm innovation to search for new potential business opportunities.

Along with entrepreneurial orientation, Vietnamese retail SMEs should increase their focus on innovativeness, meaning new products offered to customers that are likely to be embraced by them. Innovativeness also includes new ideas that can bring service innovation in the retail business. The need for innovation for developing country SMEs has been recognised also at the societal level (Lee et al., 2015), as it is important to upgrade the economy from a source of cheap labour to a country with a modern service industry.

Third, Vietnamese retail SMEs should concentrate on bolstering their marketing capability against market pressures due to the entry of international retailers. Improved marketing capability can be achieved through improving staff recruitment and training in terms of more customer-orientation, enhancing supplier connections and logistics, increasing market analysis and deepening relationships with key stakeholders such as local government agencies.

Finally, SMEs should attempt to nurture and transform internal resources, especially intangible resources, to become dynamic capabilities. Particularly, SMEs should focus on improving adaptive capability and innovativeness. Adaptive capability helps enterprises survive and overcome challenges, while innovativeness helps enterprises quickly innovate business methods, approach the market and satisfy customers.

## **7 Conclusions, limitations and future research**

This paper examined variables related to dynamic capabilities (entrepreneurial orientation, marketing capability, adaptive capability, and innovativeness) – as well as firm age and type – in Vietnamese retail-sector SMEs, and verified linkages between these variables and firm performance. Literature in dynamic capabilities has emphasised the effort and resource-intensity such capabilities require to be built, and hence cast doubt on possibilities for SMEs to possess dynamic capabilities. At the same time, many SMEs exist in an inherently uncertain environment, creating the impetus to form dynamic capabilities. Unlike larger companies, SME's are able to make decisions quicker and adapt to environmental changes (Rosenbusch et al., 2011). This forms the core motivation for the present study.

Our results show that, in this context of Vietnamese retail, the variables all linked to firm performance, although some (adaptive capability and marketing capability) did so indirectly. Entrepreneurial orientation and innovativeness showed a direct linkage to firm performance, as did the variable of firm age. We argue that these results reflect the features inherent in SME's, the retail industry, and the nature of competition in this sector in Vietnam. Future research is suggested to focus on contextualising the importance of various antecedents for dynamic capabilities in terms of SME competitive advantage. It is suggested that this present study is replicated as a longer term observation where firm behaviour can be understood more comprehensively.

There are four main limitations in the study. The first is that the sample was taken from a single city in Vietnam. While we have no reason to believe that SME's in the retail sector are any different in other Vietnamese cities such as Hanoi and Ho Chi Minh City, that is a possibility. A second limitation is that the instrument was not adjusted for the needs of the retail industry. This is to maintain compliance with other studies using the variables, but it could have impacted the results. The third limitation is that firm performance is examined as a snapshot, rather than as a window of observation. Hence, there is a possibility that situational factors have affected the findings of this study. Finally, the fourth limitation is that respondents might have been affected by bias as a result of the wording of questions referring to their subjective expectations (particularly relating to firm performance). This choice of wording was used because these questions were seen to better correspond to the Vietnamese cultural context, where direct comparisons to competitors can be perceived as sensitive and tactless.

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## Appendix

<i>Factors</i>	<i>References</i>
<i>Marketing capability</i>	
<i>Customer responsiveness</i>	
Your company/store is very knowledgeable about customer needs	Homburg et al. (2007) and Nguyen and Nguyen (2011)
Your company/store always uses market research to gather customer information	
In your company/store/information about customer needs is shared and discussed among departments	
Your company/store responded quickly with customer changes	
Your company/store will adjust customer service activities if they are not effective	
<i>Business relationship quality</i>	
Your company/store establish good relationships with customers	Wu and Cavusgil (2006)
Your company/store establish good relationships with agents and distributors	
Your company/store has a good relationship with your suppliers	
Your company establishes good relationships with government agencies	
<i>Competitor responsiveness</i>	
Your company/store often collects information about other providers in the same area	Homburg et al. (2007)
In your company/store, information about competitors is exchanged and shared among different departments	
Your company/store often analyse information of competitors to get the appropriate response	
Your company/store know clearly about the products/services of competitors in the same area	
Your company actively responds to competitors' changes in the same area	
Your company/store always implement plans related to competitors quickly	
<i>Adaptive capability</i>	
Your company/store actively adjusts business plans to suit each stage of the market	Oktemgil and Greenley (1997), Zhou and Li (2010) and Homburg et al. (2007)
The employees of your company/store work together in the processes of making new products/services	
Your company/store quickly adapt to the change from local consumers	
Employees at your company/store can quickly adapt to market changes	
<i>Innovativeness</i>	
Your company/store often brings new products/services into business	Covin and Slevin (1989) and Keh et al. (2007)
New products/services of your company/store that you introduce into your business are accepted by customers	
Your company/store searches innovative ideas from outside for the development of the company	
Your company encourages new initiatives/ideas in business from all departments	

**Appendix (continued)**

<i>Factors</i>	<i>References</i>
<i>Entrepreneurial orientation</i>	
<i>Proactiveness</i>	
Your company/store insists on taking offensive business measures against its competitors	Keh et al. (2007)
Your company/store often offers new products/services before competitors	
Your company/store often actively performs offensive business activities on competitors	
<i>Risk taking</i>	
Your company/store is willing to carry out high-risk business activities	Keh et al. (2007)
Your company is willing to accept the difficulties of the market to achieve business goals	
Your company/store dares to carry out business activities to take advantage of opportunities before competitors	
<i>Firm performance</i>	
Your company/store has achieved the desired market share in the last three years	Wu and Cavusgil (2006) and Keh et al. (2007)
Your company/store has achieved the expected growth rate over the past three years	
Your company/store has the expected profit level in the last three years	
Your company/store develops many markets as expected	
Your company/store offers many new products/services as expected	