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# Contributions of Absorptive Capabilities to Export Performance

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RESEARCH ARTICLE

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### Abstract

The processes for absorbing external knowledge became an essential element for firms to adapt to changes in the competitive environment. Knowledge plays an important role in firms' internationalization process. Building on well established theories, our research explores the contributions of absorptive capacities to export performance.

This research adopted a quantitative methodological approach, conducting a descriptive, exploratory and transversal empirical study, having applied a questionnaire to a sample of Portuguese companies exporting footwear.

Based on survey data from 42 firms, our empirical results indicate that absorptive capacities have a positive and significant influence on export performance, and that the capacities that most contribute to this end are knowledge exploitation, transformation and general knowledge acquisition.

This study provide guidance to business practitioners because they indicate which absorptive capacities are the best predictors for export success.

While previous authors have attempted to analyse certain aspects of this process (linkage between absorptive capacities and export performance), this research developed an analysis that proposes an exploratory model of the constructs studied in the Portuguese footwear industry.

# Keywords

absorptive capacities, export performance, SMEs, Portuguese footwear industry

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### 1 Introduction

Competition in the global economy of 21st century is complex, demanding, and filled with opportunities and threats (Ireland and Hitt, 2005). The intensity of business competition has increased considerably, forcing organizations to seek and adopt new management perspectives and techniques. Developing and maintaining competitive advantage is a dynamic and never-ending activity (Hung et al., 2010).

Currently, Portuguese companies are in a complex, dynamic and globalized context therefore is essential to recognize the strategic variables that influence and enhance growth in foreign markets, and contribute to improve medium and long term performance. Business success depends not only on resources and capabilities, but also on the response to specific environment circumstances.

In a dynamic and turbulent environment, knowledge represents a critical resource to create value and to develop and sustain competitive advantages (Teece et al., 1997). However, fast changing environments, technologies and competitiveness intensify the challenges firms face in achieving knowledge creation self-sufficiency (Camisón and Forés, 2010). Moreover, factors related with country's economic development, firms own innovative capabilities, technological sophistication and workforce skills-related inputs (Fifeková and Nemcová, 2015) also contribute to constrain knowledge creation and firms' restructuring (Szabó, 1998).

Several strategic management scholars argue that Resource-Based View (RBV) has basically "in-ward" orientation. Although RBV recognizes that "the value of the firm's resources and capabilities is determined by the market context within which the firm is operating" (Barney, 2001, p.645), it does not address the processes of converting resources and capabilities into customer value (Möller, 2006).

A second body of literature in the field of strategic management has focused on dynamic capabilities (for a review see Barreto, 2010). The firms' success depends not only on its' resources and capabilities, but also the ability to adapt itself to the industry contingencies and the markets in which operates. Firms may possess resources but must display dynamic

capabilities otherwise shareholder value will be destroyed (Bowman and Ambrosini, 2003). It is in this context that emerges the Dynamic Capabilities View (DCV) (Amit and Schoemaker, 1993; Teece et al., 1997) to support the adjustment to environmental change.

DCV is not divergent but rather an important stream of RBV to gain competitive advantage in increasingly demanding environments (Ambrosini and Bowman, 2009; Barreto, 2010; Eisenhardt and Martin, 2000; Wang and Ahmed, 2007). Monteiro, Soares and Rua (in press) defend that in versatile markets the firms' capabilities should be dynamic and managers must display the ability to ensure consistency between the business environment and strategy in order to continuously renew skills.

Absorptive capacity (ACAP) has become one of the most significant constructs in the last twenty years. Absorptive capacity is the dynamic capability that allows firms to gain and sustain a competitive advantage through the management of the external knowledge (Camisón and Forés, 2010).

Cohen and Levinthal (1990) conceptualize ACAP as the firms' ability to identify, assimilate, and exploit knowledge aquired from external sources. As such, ACAP facilitates knowledge accumulation and its subsequent use. Zahra and George (2002) broaden the concept of ACAP from the original three dimensions (identify, assimilate, and exploit) to four dimensions (acquire, assimilate, transform, and exploit).

Studies within the strategic management literature have high-lighted the important role of ACAP in achieving higher firm performance. Indeed, absorptive capacity is a mean of attaining superior financial performance, and transforming external knowledge inflows into performance gains (Kostopoulos et al., 2011).

As the importance of internationalization grows for many firms around the globe, there is an increasing interest in the strategic determinants that predict export performance. Therefore, research on export performance has developed exponentially. This increase interest of the academia was originated from the various macro and micro-level benefits associated with export development. At the macro-level, superior export performance is a cost-effective vehicle for economic growth, employment creation and a general improvement in the standards of living. There are countless benefits at the firm-level including opportunities for growth, larger market shares, better margins and diversification of risk (Kahiya and Dean, 2014).

Building on well established theories, our research aims at exploring the influence of absorptive capacity in export performance of Portuguese SMEs exporting footwear, by analysing the contributions of this capability in such performance.

The findings of this study will have important implications for both academics and practitioners. By building on the literature of absorptive capacity and export performance, this study aims to support the strategic development of business management policies designed to increase firms' performance in

foreign markets and add value to the current context of change. In addition, the results will provide guidance to business practitioners; because they will indicate which absorptive capacities are the best predictors for export success. The study also adds to the absorptive capacity literature by empirically validating it as a latent construct that captures the dimensions of acquiring, assimilating, transforming and exploiting knowledge.

In the next section, we present the theoretical background of the research and develop our hypotheses. We then describe our methodology and present our results. Finally, we discuss our results and conclude with managerial implications, limitations and future research opportunities.

### 2 Theoretical framework

# 2.1 Dynamic capability view (DVC)

Dynamic capabilities as a mind-set constantly integrate, reconfigure, renew and recreate its core capabilities in response to the ever changing environment in order to achieve and sustain competitive advantage (Wang and Ahmed, 2007). Moreover, these capabilities sense and shape opportunities and threats, seize opportunities, and maintain competitiveness by enhancing, combining, protecting, and reconfiguring the businesses' intangible and tangible resources (Teece, 2007).

Barreto (2010, p.271) argued that a "dynamic capability is the firm's potential to systematically solve problems, formed by its propensity to sense opportunities and threats, to make timely and market-oriented decisions, and to change its resource base". Dynamic capabilities enable companies to create, develop and protect resources allowing them to attain superior performance in the long run, are constructed (not acquired in the market), dependent on experience and are embedded in the company's organizational processes (Ambrosini and Bowman, 2009), not directly affecting the outputs, but contributing through the impact they have on operational capabilities (Teece et al., 1997). These capabilities refer to a firm's capacity to deploy resources, usually in combination, using both explicit and tacit elements (such as know-how and leadership).

For this reason, capabilities are often firm-specific and are developed over time through complex interactions between the firm's resources (Amit and Schoemaker, 1993). An operational capability is a high level routine (or collection of routines) which, together with the inputs, provides the management a set of decision options for the production of outputs (Winter, 2000). We highlight the term routine, which is understood as a learned behaviour, extremely structured, repetitive and based on technical knowledge. Thus, these operational capabilities allow the company to sustain itself in the present (Winter, 2003), usually involving the execution and the coordination of a variety of tasks to perform an activity, such as production of a particular product (Helfat and Peteraf, 2003).

After a literature review, Wang and Ahmed (2007) identify three main component factors of dynamic capabilities, namely

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adaptive capability (ambidexterity), absorptive capability and innovative capability. Adaptive capability is the firm's ability to timely adapt itself by aligning resources and capabilities with environmental changes. Absorptive capability takes external knowledge combines it with internal knowledge and absorb it for internal usage. Innovative capability turns firm's innovativeness in marketplace-based advantage. In this paper the focus is on the absorptive capability.

### 2.2 Absorptive capability (ACAP)

In order to survive certain pressures, companies need to recognize, assimilate and apply new external knowledge for commercial purposes (Jansen et al., 2005). This ability, known as absorptive capacity (ACAP) (Cohen and Levinthal, 1990), emerges as an underlying theme in the organizational strategy research (Jansen et al., 2005).

ACAP is a good example of a dynamic capability since it is embedded in a firm's routines. It combines the firm's resources and capabilities in such a way that together they influence "the firm's ability to create and deploy the knowledge necessary to build other organizational capabilities" (Zahra and George, 2002, p.188).

Firms, therefore, need to continually analyse and interpret changing market trends and quickly recognize new opportunities in order to create competitive products (Tzokas et al., 2015).

Cohen and Levinthal (1990) presented a definition of ACAP most widely quoted by academic research, as the companie's ability to identify, assimilate and exploit new knowledge. Thus, this ability access and use new external knowledge, regarded as an intangible asset, is critical to success and depends mainly on prior knowledge level, since it is this knowledge that will facilitate the identification and processing of new one. This prior knowledge not only includes the basic capabilities, such as shared language, but also recent technological and scientific data or learning skills. By analysing this definition is found that absorptive capacity of knowledge only three dimensions: the ability to acquire external knowledge; the ability to assimilate it inside; and the ability to apply it.

The ACAP construct encompasses an outward-looking perspective that deals with the identification and generation of useful external knowledge and information and an inward-looking component that is related with how this knowledge is analysed, combined with existing knowledge, and implemented in new products, new technological approaches, or new organizational capabilities (Cohen and Levinthal, 1990).

According to Zahra and George (2002) ACAP is divided in Potential Absorptive Capacity (PACAP), including knowledge acquisition and assimilation, and Realized Absorptive Capacity (RACAP) that focuses on transformation and exploitation of that knowledge. PACAP reflects the companies' ability to acquire and assimilate knowledge that is vital for their activities. Knowledge acquisition the identification and acquisition

and assimilation is related to routines and processes that permit to analyse, process, interpret and understand the external information. RACAP includes knowledge transformation and exploitation, where transformation is the ability to develop and perfect routines that facilitate the integration of newly acquired knowledge in existing one, exploitation are routines which enhance existing skills or create new ones by incorporating acquired and transformed knowledge internally.

Jansen et al. (2005) defend that, although company's exposure to new knowledge, is not sufficient condition to successfully incorporate it, as it needs to develop organizational mechanisms which enable to synthesize and apply newly acquired knowledge in order to cope and enhance each ACAP dimension. Thus, there are coordination mechanisms that increase the exchange of knowledge between sectors and hierarchies, like multitasking teams, participation in decision-making and job rotation. These mechanisms bring together different sources of expertise and increase lateral interaction between functional areas. The system mechanisms are behaviour programs that reduce established deviations, such as routines and formalization. Socialization mechanisms create a broad and tacit understanding of appropriate rules of action, contributing to a common code of communication.

In conclusion, studying absorptive capacity offers fascinating insights for the strategic management literature and provide new information regarding how firms may develop important sources of sustainable competitive advantages (Jansen et al., 2005).

### 2.3 Export performance

The development of exports is of great importance, both at macro and micro levels, contributing to economic and social development of nations, helping the industry to improve and increase productivity and create jobs. At company level, through market diversification, exports provide an opportunity for them to become less dependent on the domestic market, gaining new customers, exploiting economies of scale and achieving lower production costs while producing more efficiently (Okpara, 2009).

In this sense, exports is a more attractive way to enter international markets, especially for SMEs, in comparison with other alternatives, either joint ventures or setting up subsidiaries, which involve spending a large number of resources (e.g. Dhanaraj and Beamish, 2003; Piercy et al., 1998), does not create high risk and commitment and allows greater flexibility in adjusting the volume of goods to different export markets (Lu and Beamish, 2002).

On one hand, a company's export activity starts to fulfil certain goals, which may be economic (such as increasing profits and sales) and / or strategic (such as diversification of markets, gaining market share and increasing brand reputation) (Cavusgil and Zou, 1994). On the other hand, the export motivation may result from proactive or reactive actions. The proactive actions are advantage of profit, introduction of a single

product, technological advantage, and exclusive information, commitment of management, tax benefits and economies of scale. The reactive motivations are identifying competitive pressures, excess production capacity, sales decrease in domestic market, saturation of domestic market and proximity of customers and landing ports (Wood and Robertson, 1997).

# 2.4 Hypotheses derivation

Dynamic capabilities refer to "the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments" (Teece et al., 1997, p.516). By "environment" the RBV literature usually refers to the competitive business environment. Markets had become hypercompetitive, making it increasingly difficult to maintain competitive advantage over time (Barreto, 2010).

Dynamic capabilities enable companies to create, develop and protect resources to achieve superior performance in the long run, are built (not acquired), experience dependent and are embedded in organizational processes (Ambrosini & Bowman, 2009), not directly affecting outputs, but contributing through the impact they have on operational capabilities (Teece et al., 1997). Maintaining these capabilities requires a management that is able to recognize adversity and trends configure and reconfigure resources, adapt processes and organizational structures in order to create and seize opportunities, while remaining aligned with customer preferences. Indeed, dynamic capabilities allow businesses to achieve superior long-term performance (Teece, 2007). Ultimately, the following hypotheses are tested:

- H1: Absorptive capacity has a positive effect on export performance.
- H2: Knowledge exploitation has a positive effect on export performance.
- H3: Knowledge assimilation has a positive effect on export performance.
- H4: General knowledge acquisition has a positive effect on export performance.
- H5: Knowledge acquisition in the industry has a positive effect on export performance.
- H6: Knowledge transformation has a positive effect on export performance.

# 3 Methodology

# 3.1 Setting and data collection

To test the hypothesis a sample of Portuguese footwear companies was used, that meet the following criteria: companies in which at least 50% of income comes from exports of goods, or companies in which at least 10% of income comes from exports of goods and the export value is higher than 150.000 Euros (INE, 2011).

Data collection was implemented through electronic questionnaire, associating a link to the survey that was online. To

reduce misunderstandings, the questionnaire was validated by the research department of Portuguese Footwear, Components and Leather Goods Association (APICCAPS).

We were provided with a database of 231 companies. Only 167 companies fulfilled the parameters, and were contacted by email by APICCAPS to respond to the questionnaire. Subsequently, all companies were contacted by the authors via e-mail and telephone, to ensure a higher rate of valid responses. The questionnaires began on April 22 and ended on July 22, 2014. After finishing the data collection period, 42 valid questionnaires were received, representing a 25% response rate. This response rate is considered quite satisfactory, given that the average of top management survey response rates are in the range of 15%-20% (Menon et al., 1999).

In this investigation we chose a non-probabilistic and convenient sample since it respondent were chosen for being members of APICCAPS.

### 3.2 Measures

To measure absorptive capacity construct, and based in Jansen et al. (2005), it was operationalized the company's ability to acquire new knowledge through six questions, assimilate it through three questions, transform it through three questions and the ability to explore new external knowledge into their current operations, through six questions (e.g. Jansen et al., 2005; Zahra & George, 2002). A five point Likert scale was used to measure each item, where 1 means "strongly disagree" and 5 "strongly agree".

Okpara's scale (2009) was used to assess export performance, comprising profitability indicators of sales growth, profit, activities, operations and performance in general. A five point Likert scale was used to measure each item, where 1 means "strongly disagree" and 5 "strongly agree". It is important to note that companies evaluated absorptive capacity and export performance relative to their major competitors in the export market(s).

### 4 Results

# 4.1 Reliability analysis

In order to verify the reliability of overall variables we estimated the stability and internal consistency through Cronbach's alpha ( $\alpha$ ). Generally, an instrument or test is classified with appropriate reliability when  $\alpha$  is higher or equal to 0.70 (Nunnally, 1978). However, in some research scenarios in social sciences an  $\alpha$  of 0.60 is considered acceptable, as long as the results are interpreted with caution and the context is taken into account (DeVellis, 2012). For the present study we used the scale proposed by Pestana and Gageiro (2008).

The result of 0.939 achieved for all of variables is considered excellent, confirming the sample's internal consistency. It was also conducted an internal consistency test for all variables in each construct to assess their reliability (Table 1).

Table 1 Internal consistency test by construct (Cronbach's Alpha)

Construct	Cronbach's α	Items nr.	n	Analysis
Absorptive capacity	.924	21	42	Excellent
Export performance	.927	5	42	Excellent

We found that absorptive capacity and export performance have excellent consistency.

# 4.2 Exploratory factor analysis

Factor analysis is a technique whose primary purpose is to organize the structure of a large number of variables by defining sets of variables that are highly interrelated, known as factors. These groups of factors are assumed to represent dimensions within the data. The general purpose of factor analytic techniques is to find a way to summarize the information contained in a number of original variables into a smaller set of new dimensions with a minimum loss of information (Hair et al., 2014; Pestana and Gageiro, 2008). After factor extraction, we submit each factor to varimax rotation to achieve a simplified factor structure (Marôco, 2011).

# Absorptive capacity

In the factor analysis, with Varimax rotation, of these construct we got a scale with 21 items, distributed by 5 factors, that explained 73.89% of total variance – 44.35% by the first factor (*Knowledge Exploitation*, with 7 items, whose saturations range between 0.838 and 0.328), 10,92% by second factor (*Knowledge Assimilation*, with 4 items, whose saturations range between 0.807 and 0.670), 8.28% by third factor (*General Knowledge Acquisition*, with 3 items, whose saturations range between 0.768 and 0.670), 5.46% by fourth factor (*Knowledge Acquisition in the Industry*, with 3 items, whose saturations range between 0.816 and 0.404) and 4.88% by the fifth factor (*Knowledge Transformation*, with 2 items, whose saturations range between 0.696 and 0.580).

The internal consistency of the five factors are  $\alpha$ =0.931,  $\alpha$ =0.860,  $\alpha$ =0.710,  $\alpha$ =0.650 e  $\alpha$ =0.796, respectively, for the 1st 2nd, 3rd, 4th and 5th factors. These values indicate that these dimensions presented a reasonable and excellent internal consistency. Kaiser-Meyer-Olkin test (KMO) confirm a medium correlation between the variables (0.796). Bartlett's sphericity test registered a value of  $\chi^2(210, n=42)=630.742, p<0.05$ , therefore is confirmed that  $\chi^2>\chi_{0.95}^2$ , so the null hypothesis is rejected and the variables are correlated.

# Export performance

In the factor analysis, with Varimax rotation, of these construct we got a scale with one factor and there was no need to delete items. A scale with 5 items was obtained, which explained 77.9% of total variance, whose saturations range between 0.918 and 0.850.

The internal consistency is excellent ( $\alpha$ =0.927). KMO test point to a good correlation between the variables (0.814). Bartlett's sphericity test registered a value of  $\chi^2$ (10, n=42)=171.982, p<0.05, therefore is confirmed that  $\chi^2$ > $\chi_{0.95}^2$ , so the null hypothesis is rejected and the variables are correlated.

# 4.3 Multiple regression analysis

Multiple regression analysis is a statistical technique that is used to analyse the relationship between a single dependent (criterion) variable and several independent (predictor) variables. The objective of multiple regression analysis is to use the independent variables whose values are known to predict the single dependent value selected by the researcher. Each independent variable is weighted by the regression analysis procedure to ensure maximal prediction from the set of independent variables. The most commonly used measure of predictive accuracy for the regression model is the coefficient of determination (R<sup>2</sup>). This coefficient measures the proportion of total variability that can be explained by regression  $(0 \le R \le 1)$ , measuring the effect of independent variables on the dependent variable. When R2=0 the model clearly does not adjust to data and when R<sup>2</sup>=1 the adjustment is perfect. In social sciences when R<sup>2</sup>>0.5 the adjustment is considered acceptable (Marôco, 2011). In the Table 2 we present the results of the multiple regression analysis of our model.

Table 2 Summary of multiple regression analysis<sup>g</sup>

Model	R	R <sup>2</sup>	Adj. R <sup>2</sup>	Standard error
1ª	.664	.540	.363	.79838784
2 <sup>b</sup>	.442	.196	.176	.90801912
3°	.241	.058	.034	.98269099
4 <sup>d</sup>	.280	.078	.055	.97199064
5 <sup>e</sup>	.103	.011	014	1.00704164
6 <sup>f</sup>	.313	.098	.075	.96156221

- a. Predictors: (Constant) Absorptive capacity.
- b. Predictors: (Constant) Knowledge exploitation.
- c. Predictors: (Constant) Knowledge assimilation.
- d. Predictors: (Constant) General knowledge acquisition.
- e. Predictors: (Constant) Knowledge acquisition in the industry.
- f. Predictors: (Constant) Knowledge transformation.
- g. Dependent variable: Export performance.

The coefficient of determination R<sup>2</sup> of model 1 is 0.540, which mean that 54.0% of export performance total variability is explained by the absorptive capacity. We can, therefore, conclude that the model is adjusted.

Univariate analysis of variance (ANOVA) is used to determine, on the basis of one dependent measure, whether samples are from populations with equal means (Hair et al., 2014).

An overview of the main findings is presented in Tables 3 and 4, which summarizes the empirical support for the six hypotheses examined in this study.

Table 3 ANOVA analysisg

Mo	del	Sum of Squares	df	Mean Square	F	Sig.
	Regression	18.053	5	3.611	5.664	.000*
1ª	Residual	22.947	36	.637		
	Total	41.000	41			
	Regression	8.020	1	8.020	9.727	.003**
2 <sup>b</sup>	Residual	32.980	40	.824		
	Total	41.000	41			
	Regression	2.373	1	2.373	2.457	n.s.
3°	Residual	38.627	40	.966		
	Total	41.000	41			
	Regression	3.209	1	3.209	3.397	.073***
$4^{d}$	Residual	37.791	40	.945		
	Total	41.000	41			
	Regression	.435	1	.435	.429	n.s.
5e	Residual	40.565	40	1.014		
	Total	41.000	41			
	Regression	4.016	1	4.016	4.343	.044**
$6^{\rm f}$	Residual	36.984	40	.925		
	Total	41.000	41			

- a. Predictors: (Constant) Absorptive capacity.
- b. Predictors: (Constant) Knowledge exploitation.
- c. Predictors: (Constant) Knowledge assimilation.
- d. Predictors: (Constant) General knowledge acquisition.
- e. Predictors: (Constant) Knowledge acquisition in the industry.
- f. Predictors: (Constant) Knowledge transformation
- g. Dependent variable: Export performance.

Table 4 Hypotheses-testing results

Hypotheses	t-value	p-value	Result
H1. Absorptive capacity - Export performance	11.056	.000*	Supported
H2. Knowledge exploitation - Export performance	3.119	.003**	Supported
H3. Knowledge assimilation - Export performance	1.568	n.s.	Not supported
H4. General knowledge acquisition - Export performance	1.843	.073***	Supported
H5. Knowledge acquisition in the industry - Export performance	.655	n.s.	Not supported
H6. Knowledge transformation - Export performance	2.084	.044**	Supported

<sup>\*</sup>p<0.001; \*\*p<0.05; \*\*\*p<0.10; n.s. – non significant.

Beta coefficient allows a direct comparison between coefficients as to their relative explanatory power of the dependent variable. By analysing the standardized Beta coefficients (Table 5) we confirmed which variables have higher contribution to exports performance, which are Knowledge Exploitation ( $\beta$ =0.442), Knowledge Transformation ( $\beta$ =0.313) and General Knowledge Acquisition ( $\beta$ =0.280).

Tabel 5 Standardized beta coefficient

Variables	Beta	Sig.
ABSORPTIVE CAPACITY		
Knowledge exploitation	.442	.001*
Knowledge assimilation	.241	.062***
General knowledge acquisition	.280	.031**
Knowledge acquisition in the industry	.103	n.s.
Knowledge transformation	.313	.017**
Knowledge acquisition in the industry	.103	n.s.

<sup>\*</sup>p<0.001; \*\*p<0.05; \*\*\*p<0.10; n.s. – non significant.

# 5 Discussion and conclusion

The Portuguese footwear industry faces considerable challenges, not only concerning the international markets crisis, but also regarding consumption patterns. The reduction of shoe design lifecycles has consequences on the offer. On one hand, the products have to be adapted to different segments specific needs and tastes (custom design, new models in small series, etc.), on the other hand, manufacture processes must be increasingly flexible, adopt just-in-time production, invest in the brand, qualified personnel, technology and innovation (APICCAPS, 2013).

The main purpose of this study is to analyse the contributions of absorptive capabilities to export performance of SME's. We conducted an empirical research based on a sample of 42 companies, which were applied a questionnaire in order to exploit data to test hypotheses, using proceedings and statistical techniques. It is important to note that companies evaluated absorptive capacity and export performance relative to their major competitors in the export market(s), so the results should be interpreted based on these two aspects.

This study also demonstrated that the company's absorptive capacity has a positive and significant influence on their performance, especially knowledge exploitation, knowledge transformation and general knowledge acquisition. The analysed companies are able to acquire, transform and exploit knowledge through informal knowledge gather, clear definition of tasks, analysis and discussion of market trends and new product development, among others. Interestedly, however, firms do not value knowledge acquisition in the industry.

Dynamic capabilities can take a variety of forms and be involved in different functions, but the most important common characteristics are that they are higher level capabilities which

<sup>\*</sup>p<0.001; \*\*p<0.05; \*\*\*p<0.10; n.s. – non significant.

provide opportunities for knowledge gathering and sharing, constant updating the operational processes, interaction with the environment, and decision-making evaluations (Easterby-Smith et al., 2009). However, the existence of common features does not imply that any particular dynamic capability is exactly alike across firms, rather they could be developed from different starting points and take unique paths (Eisenhardt and Martin, 2000).

In fact, according to the industrial organization, a company should find a favourable position in its industry from which it can better defend against competitive forces, or to influence them in his favour through strategic actions such as raising barriers to entry, etc. (Porter, 1980). This perspective is consistent with Eisenhardt and Martin (2000) regarding the uniqueness of paths. The results of this study confirm that dynamic capabilities enable firms to achieve superior long-term performance (Teece, 2007).

### 5.1 Theoretical and practical implications

The findings of this research will have important implications for both academics and practitioners. The study adds to the absorptive capacity literature by empirically validating it as a latent construct that captures the dimensions of acquiring, assimilating, transforming and exploiting knowledge.

It is known that strategy includes deliberate and emergent initiatives adopted by management, comprising resource and capabilities use to improve business performance (Nag et al., 2007). The findings are a contribution to clarify the influence of absorptive capacity on the company's exports performance. This study also enabled a thorough analysis of a highly important industry for national exports, such as footwear industry, allowing understanding that absorptive capacity, as an industry strategic determinant, enhancing exports performance.

To stay competitive, companies must make an internal assessment in order to find what resources and capabilities give them advantage over competitors. Thus, the challenge of strategy consists in selecting or creating an environmental context where capabilities and resources can provide competitive advantages (Porter and Montgomery, 1998).

Jansen et al. (2005) defend that companies need to develop organizational mechanisms to combine and apply newly acquired knowledge in order to deal and enhance each absorptive capacity dimension. In this study is notorious the importance of knowledge absorptive capacity to business performance. It is essential that business owners are able to interpret, integrate and apply external knowledge in order to systematically analyse change in the target market and to incorporate this knowledge in their processes to enhance performance.

In addition, the results provide guidance to business practitioners; because they indicate which absorptive capacities are the best predictors for export success. Companies are a bundle of resources and capabilities (Peteraf, 1993), it is essential to understand and identify which resources are relevant to gain competitive advantage and superior performance. In this study it is obvious the importance of absorptive capacity to the firms' performance. Business owners must be able to interpret, integrate and apply external knowledge in order to systematically analyse the changes that arise in their target market(s) and to incorporate this knowledge into their processes, to identify the present and future needs and market trends, anticipate changes in demand and seek new business opportunities.

By building on the literature of absorptive capacity and export performance, this study aims to support the strategic development of business management policies designed to increase firms' performance in foreign markets and add value to the current context of change.

### 5.2 Research limitations

The main limitation of this study is related to the sample size, since it was difficult to find companies with the willingness to collaborate in this type of research. The sample is non-probabilistic and convenience and cannot be used to infer to the general population. The study findings should therefore be analysed with caution.

Most responses were based on subjective judgment of respondents. Although the literature identifies the advantages of subjective measures to evaluate the exports performance, it is recognized that some answers may not represent the reality of business performance in foreign markets.

The fact that the research does not consider the effect of control variables such as size, age, location and target market of the respondents can be seen as a limitation.

Finally, the fact that this study considered only export as internationalization can also be appointed as a limitation.

### 5.3 Future lines of research

In future work, we suggest that the model is used in a sample with a higher number of observations to confirm these results.

We further suggest pursuing with the investigation of strategic management in Portugal, focusing in other sectors of national economy, so that in the future one can make a comparison with similar studies, allowing realizing and finding new factors that enhance exports performance.

Finally, the moderating effect of strategic variables (e.g. intangible resources, entrepreneurial orientation, competitive advantage) in the relationship between absorptive capacity and export performance should be studied.

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