LINKING ENTREPRENEURIAL ORIENTATION TO KNOWLEDGE'S EXPLOITATION

Alexandra França
Polytechnic Institute of Porto, Portugal

Orlando Lima Rua
Polytechnic Institute of Porto, Portugal

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Abstract

The processes for exploitation of knowledge became an essential element for firms to adapt to changes in the competitive environment. The exploitation of this knowledge should be undertaken with proactivity, innovation and risk-taking. Building on well established theories, our research explores the influence of entrepreneurial orientation in exploitation of knowledge of Portuguese small and medium enterprises (SMEs) of footwear associated to the Portuguese Footwear, Components and Leather Goods Association (APICCAPS). Based on survey data from 42 firms, and employing the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique, our empirical results indicate that the entrepreneurial orientation's dimensions that have a positive and significant influence on knowledge's exploitation are innovation and risk-taking, and that on the contrary proactiveness has a negative and a not significant influence on it.

Keywords: entrepreneurial orientation, absorptive capacities, knowledge's exploitation, SMEs, Portuguese footwear industry, PLS-SEM.

1. Introduction

In a dynamic and turbulent environment, knowledge represents a critical resource to create value and to develop and sustain competitive advantages (Teece, Pisano and Shuen, 1997). However, fast changing environments, technologies and competitiveness intensify the challenges firms face in attaining self-sufficiency in knowledge creation (Camisón and Forés, 2010).

Entrepreneurial orientation is a strategic orientation of a company that encompasses specific entrepreneurs aspects such as style, methods and decision-making practices (Frank, Kessler and Fink, 2010), constituting a capacity that can attract resources to exploit opportunities (Alvarez and Busenitz, 2001). 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.

Some researchers are establishing the link between entrepreneurial orientation (EO)-knowledge, namely knowledge transfer (or sharing) (Hormiga, de Saá-Pérez, Díaz-Díaz, Ballesteros-Rodríguez and Aguiar-Diaz, 2017; Rezazadeh and Mahjoub, 2016), knowledge acquisition (Fuentes-Fuentes, Bojica and Ruiz-Arroyo, 2015; Song, G. Min, S., Lee, S. and Seo, 2016), or knowledge creation process (Yong-Hui, Jing-Wen and Ming-Tien, 2009). Thus, there is a gap in the literature regarding the relationship between entrepreneurial orientation and knowledge exploitation.

DCV is not divergent but rather an important stream of Resource-Based View (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.

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).

Absorptive capacity (AC) 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).

Building on well established theories, our research aims at exploring the influence of entrepreneurial orientation in exploitation of knowledge of Portuguese SMEs exporting footwear, by analysing the contributions of this capability in such construct.

2. Theoretical Framework

2.1. Entrepreneurial orientation

Entrepreneurial orientation emerged from entrepreneurship definition which suggests that a company's entrepreneurial degree can be measured by how it take risks, innovate and act proactively (Miller, 1983). Entrepreneurship is connected to new business and entrepreneurial orientation relates to the process of undertaking, namely, methods, practices and decision-making styles used to act entrepreneurially. Thus, the focus is not on the person but in the process of undertake (Wiklund, 2006).

Companies can be regarded as entrepreneurial entities and entrepreneurial behaviour can be part of its activities (Covin and Slevin, 1991). Entrepreneurial orientation emerges from a deliberate strategic choice, where new business opportunities can be successfully undertaken (Lumpkin and Dess, 1996). Thus, there is an entrepreneurial attitude mediating the vision and operations of an organization (Covin and Miles, 1999).

Several empirical studies indicate a positive correlation between entrepreneurial orientation and organizational growth (e.g. Miller, 1983; Covin and Slevin, 1991; Lumpkin and Dess, 1996; Wiklund, 2006; Davis, Bell, Payne and Kreiser, 2010; Frank, Kessler and Fink, 2010). Similarly, other studies also confirm that entrepreneurial orientation has a positive

correlation with export's performance, enhancing business growth (e.g. Zahra and Garvis, 2000; Okpara, 2009).

The underlying theory of entrepreneurial orientation scale is based on the assumption that the entrepreneurial companies are different from the remaining (Kreiser, Marino and Weaver, 2002), since such are likely to take more risks, act more proactive in seeking new businesses and opportunities (Khandwalla, 1977; Mintzberg, 1973).

Entrepreneurial orientation has been characterized by certain constructs that represent organization's behaviour. Starting from the Miller (1983) definition, three dimensions were identified: innovation, proactiveness and risk-taking, which collectively increase companies' capacity to recognize and exploit market opportunities well ahead of competitors (Zahra and Garvis, 2000). However, Lumpkin and Dess (1996) propose two more dimensions to characterize and distinguish entrepreneurial process: competitive aggressiveness and autonomy. In this study only innovation, proactiveness and risk-taking will be considered, as they are the most consensual and used dimensions to measure entrepreneurial orientation (e.g. Covin and Miller, 2014; Covin and Slevin, 1989, 1991; Davis et al, 2010; Frank et al, 2010; Kreiser et al, 2002; Lisboa, Skarmeas and Lages, 2011; Miller, 1983; Okpara, 2009; Wiklund and Shepherd, 2005; Zahra and Covin, 1995; Zahra and Garvis, 2000).

2.2. Absorptive capacity of knowledge's exploitation

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

AC 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).

According to Zahra and George (2002) AC is divided in Potential Absorptive Capacity (PAC), including knowledge acquisition and assimilation, and Realized Absorptive Capacity (RAC) that focuses on transformation and exploitation of that knowledge. PAC 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. RAC 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.

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). In this paper the focus is on the exploitation of knowledge.

3. Hypotheses and Research Model

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).

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". On the other hand, 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). 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).

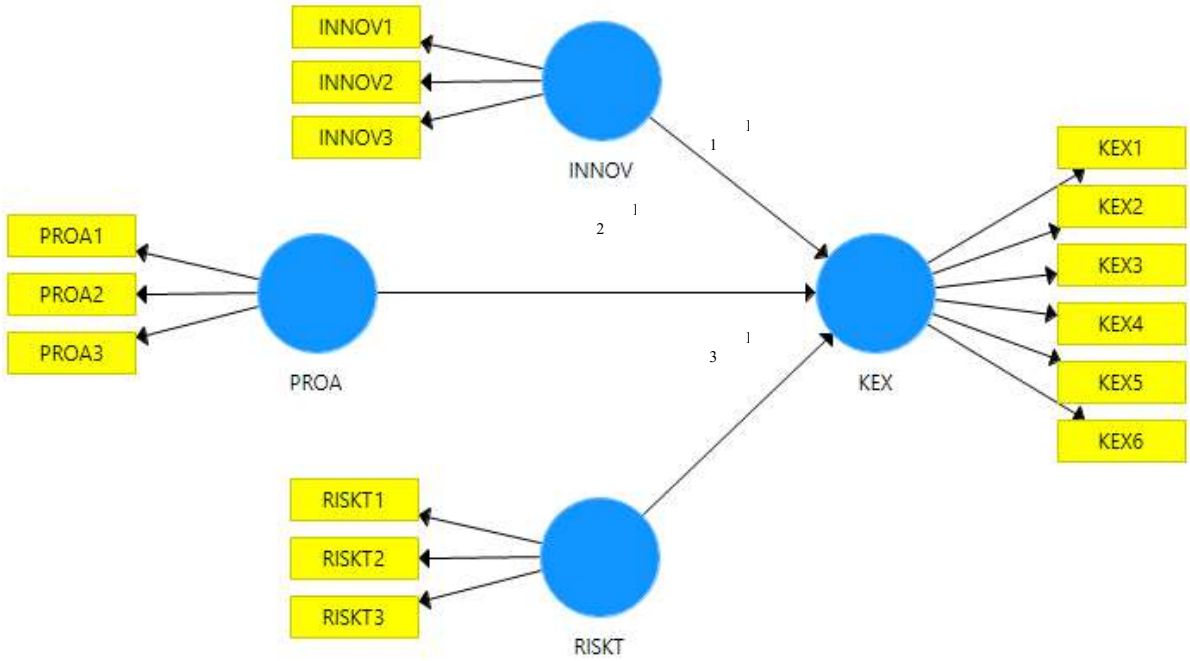
Firms, therefore, need to continually analyse and interpret changing market trends and quickly recognize new opportunities in order to create competitive products (Tzokas, Kim, Akbar and Al-Dajani, 2015). The AC construct encompasses an outward-looking perspective that deals with the identification and 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).

Ultimately, the following hypothesis is tested:

H1: *Innovation influences positively knowledge's exploitation.*
H2: *Proactiveness influences positively knowledge's exploitation.*
H3: *Risk-taking influences positively knowledge's exploitation.*

We present in figure 1 the theoretical model that will be explored in this research, which represents the explanatory variables (innovation, proactiveness and risk-taking) and explained variables (knowledge's exploitation).

Figure 1 - Research conceptual model



Key: INNOV – Innovation; PROA – Proactiveness; RISKT – Risk-taking; KEX – Knowledge's exploitation.

4. Methodology

4.1. 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 (company name, telephone contact, email, economic activity classification, export markets, export intensity and capital origin). 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, Bharadwaj, Adidam and Edison, 1999).

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

4.2. Measures

For assessment of entrepreneurial orientation was used Covin and Slevin's scale (1989), that consists in nine items: three for innovation, three for proactiveness and three for risk-taking, having been used a five point Likert scale, where 1 means "strongly disagree" and 5 "strongly agree".

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

5. Results

5.1. Descriptive analysis

Findings show that the sample is mostly composed by small firms, where 93% are SMEs and 7% micro businesses. Regarding their experience in foreign markets, we found that 69% have exported for over 15 years, 19% between 11 and 15 years, 5% between 6 to 10 years, while only 7% have less than 5 years' experience. Regarding their sales, more than 50% revenues are from exports. SMEs in our sample export up to 6 or more countries (67%), being Europe the main market, followed by Asia and Africa.

Table 1 – Mean, standard deviation and correlation coefficients

Item	**(1)**	**(2)**	**(3)**	**(4)**
(1) PROA	1.000			
(2) INNOV	-.016	1.000		
(3) RISKT	-.064	-.056	1,000	
(4) KEX	.161	.532*	.161	1.000
Mean	3.97	2.83	2.74	3.87
Standard deviation	.764	.671	.946	.736
N	42	42	42	42

* All relationships are statistically significant at the $p<0.01$ level.

Table 1 presents descriptive statistics and the correlations between the items. We have used a non-parametric test, Spearman correlation, due to the nature of variables (ordinals), data and sample size (Marôco, 2011; Pestana and Gageiro, 2008). Even though correlations being an indicator of items convergent validity, we proceed with the process of properly validate the scale.

5.2. Reliability analysis

In order to verify the reliability of overall variables we estimated the stability and internal consistency through Cronbach's alpha (α). Generally, an instrument or test is classified with appropriate reliability when α is higher or equal to 0.70 (Nunally, 1978; Chin, 2010). The result of 0.855 achieved for all variables is considered excellent, confirming the sample's internal consistency (Pestana and Gageiro, 2000). Table 2 show all constructs largely achieved the required level.

Table 2 - Cronbach's Alpha of multidimensional variables

Construct	Cronbach Alpha	*p* values
INNOV	.825	.000
PROA	.852	.000
RISKT	.821	.000
KEX	.898	.000

5.3. 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, Black, Babin and Anderson, 2014; Pestana and Gageiro, 2008).

Common method bias (CMB) is one of the main sources of measurement error. This error threatens the validity of the conclusions about the relationships between measures (Podsakoff, MacKenzie, Lee and Podsakoff, 2003; Podsakoff, MacKenzie, & Podsakoff, 2012). Harman's single factor test is one technique to identify CMB (Podsakoff et al., 2003). Factor analysis of all latent variables limited the number of factors to "1". According to Mat Roni (2014) the first component of "Total Variance Explained" should be less than 50%. Hence, in this study the measurement instrument is free from significant CMB effects since the variance value is 35.518%.

Entrepreneurial orientation

Concerning the factor analysis of *Entrepreneurial orientation*'s construct, with Varimax rotation, we got a scale with 9 items, distributed by 3 factors, and there was no need to delete items, that explained 77.09% of total variance, with 35.52% of variance explained by the first factor - *Proactiveness* (saturations range between 0.887 and 0.786), 27.48% for the second factor - *Innovation* (saturations range between 0.856 and 0.840), and 14.09% by the third factor - *Risk-taking* (saturations range between 0.918 and 0.770). Analysing the internal consistency of the three factors, we found that Cronbach's Alphas have a reasonable internal consistency. KMO test indicates that there is a reasonable correlation between the variables (0.695). Bartlett's sphericity test registered a value of $\chi^2(36, n=42)=171.176$, $p<0.05$, therefore it is confirmed that $\chi^2>\chi_{0.95}^2$, so the null hypothesis is rejected, i.e. the variables are correlated.

Knowledge's exploitation

Factor analysis, with Varimax rotation, of these construct reveals that we got a scale with one factor and there also was no need to delete items. A scale with 6 items was obtained, which explained 66.57% of total variance, whose saturations range between 0.821 and 0.533.

The internal consistency is excellent ($\alpha=0.898$). KMO test point to a good correlation between the variables (0.866). Bartlett's sphericity test registered a value of $\chi^2(15, n=42)=140.869$, $p<0.001$, therefore is confirmed that $\chi^2>\chi_{0.95}^2$, so the null hypothesis is rejected and the variables are correlated.

5.4. PLS modeling

The structural equation model is a multiple regression analysis, with reflective indicators that are presented as an image of the unobserved theoretical construct, representing observed variables or measures, with the objective of strengthening the relationship of influence between the constructs (Maroco, 2010). The simple correlation between these indicators with their

construct must have a value equal to or higher than 0.707 so that the shared variance between the construct and their indicators is higher than the error variance (Carmines and Zeller, 1979).

Partial Least Squares (PLS) is a technique that best fits predictive applications (exploratory analysis) and theory development when it is not soundly established (Roldán and Cepeda, 2014). This technique, on one hand, maximize the explained variance of the dependent variables (latent or observed, or both) and estimate structural models with small samples (Chin and Newsted, 1999; Reinartz, Haenlein and Henseler, 2009). On the other hand, it estimates reflective and formative measurement models without identification problems (Chin, 2010). PLS appear to be a preferable option for researchers with samples below 250 observations (42 in this study) (Reinartz *et al.*, 2009).

We also use the composite reliability coefficient to assess construct validity (Chin, 1998). This coefficient reflects construct adequacy for a level higher than 0.6 using confirmatory factor analysis (Gefen and Straub, 2005), as in our case. Table 3 illustrates that the studied constructs (all multidimensional) highly exceeded the minimum required for a good fit.

Table 3 - Composite reliability coefficient of multidimensional variables

Construct	**Composite reliability**	***p* values**
INNOV	.895	.000
PROA	.908	.000
RISKT	.881	.000
KEX	.922	.000

For validity assessment, two subtypes are usually examined: convergent and discriminant validity. Convergent validity implies that a set of indicators represents one and the same underlying construct (Henseler et al., 2009). Fornell and Larcker (1981) suggest using the *Average Variance Extracted* (AVE) criterion and that an AVE value of at least 0.5 indicates sufficient convergent validity. Table 4 demonstrates that only entrepreneurial orientation is below the minimum required.

Table 4 - Convergent validity

Construct	**AVE**	***p* values**
INNOV	.740	.000
PROA	.767	.000
RISKT	.713	.000
KEX	.665	.000

Discriminant validity is the degree to which any single construct is different from the other constructs in the model. To have discriminant validity a construct must exhibit weak correlations with other latent variables that measure different phenomena. There are two measures of discriminant validity in PLS. The Fornell–Larcker criterion (1981) recommends that the AVE should be greater than the variance between a given construct and the other with which it shares the model. The second criterion suggests that the loading of each indicator is expected to be greater than all of its cross-loadings (Henseler *et al.*, 2009).

We can observe the explanatory power of each variable in the model. Entrepreneurial orientation is the only purely explanatory variable and reputational resources and absorptive capacity of knowledge exploitation the explained variables. Chin (1998) distinguishes the explanatory power from moderate to substantial. Table 5 expresses the good results in terms of discriminant validity of the research model, confirming that constructs do differ significantly.

Table 5 - Discriminant validity

Fornell-Larcker Criterion	INNOV	KEX	PROA	RISKT
INNOV	.860			
KEX	.506	.815		
PROA	.276	.310	.876	
RISKT	-.100	.323	.331	.844

A mere comparison of the regression coefficients is not valid to evaluate the importance of each independent variable models, since these variables have different magnitudes. Thus, it is essential to use standard variables, known as Beta (β) coefficients, in the models adjustment so that the independent variables can be compared.

Beta coefficient allows a direct comparison between coefficients as to their relative explanatory power of the dependent variable. Table 6 shows that the variables that have higher contribution to knowledge exploitation are *Innovation* (β=0.445) and *Risk-taking* (β=0.325).

Table 6 - Standardized beta coefficient[a]

Variables	Beta	Sig.
ENTREPRENEURIAL ORIENTATION		
Innovation	.445	.002*
Proactiveness	.076	n.s.
Risk-taking	.325	.021*

* $p<0.05$.
n.s. – non significant.
a. Dependent variable: Knowledge's exploitation.

In order to determine the significance of the studied relationships and the confidence intervals of the path coefficients, we used bootstrapping technique. The weighted coefficients indicate the relative strength of each exogenous construct. According to Chin (1998), relationships between constructs, with structural coefficients higher than 0.2, are considered robust. From table 7, we thus conclude that the original model does present only a non-significant path (PROA --> KEX).

Table 7 - Model's *Path Coefficients*

Hypotheses	Original Sample (O)	Sample Mean (M)	Standard Error (STERR)	T Statistics (|O/STERR|)	*p* values
INNOV --> KEX	.529	.514	.139	3.798	.000*
PROA --> KEX	.044	.082	.148	.299	.765***
RISKT --> KEX	.361	.345	.203	1.781	.075**

* $p<0.001$; ** $p<0.10$; *** n.s. – non significant.

The significance of structural coefficients and the magnitude of the total effects enabled us to test the research hypotheses, having registered the following results:

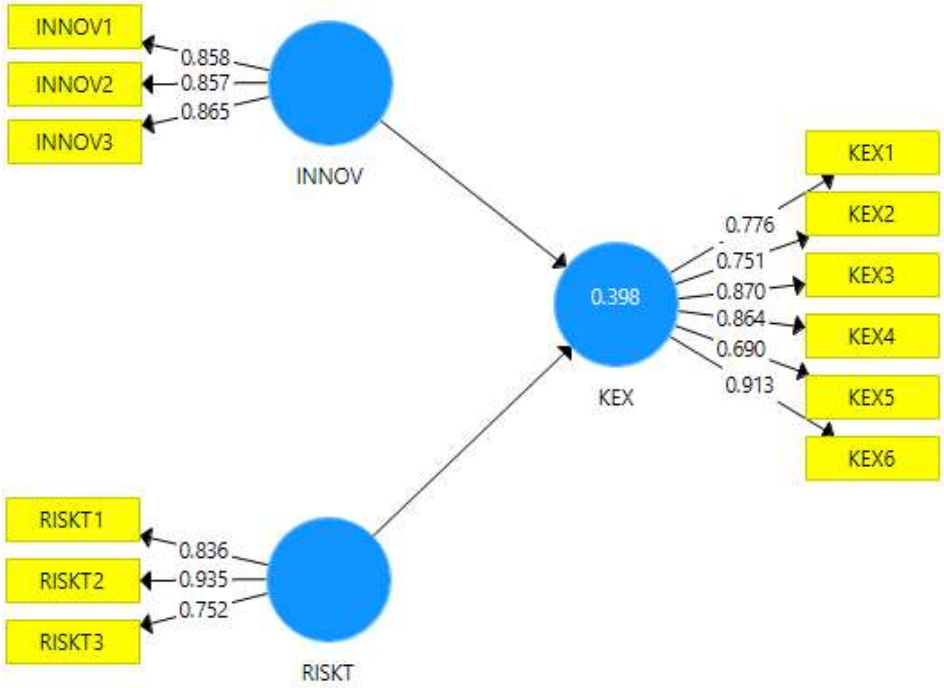
H1. INNOV --> +KEX – This hypothesis was supported.

H2. PROA --> +KEX – This hypothesis was not supported.

H3. RISKT --> +KEX – This hypothesis was supported.

Figure 2 presents the final research structural model with the (direct) effects and explained variance of latent variables.

Figure 2 - Research structural model



6. Discussion and Conclusions

The main purpose of this study is to analyse the influence of entrepreneurial orientation on knowledge exploitation. 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 entrepreneurial orientation and exploitation of knowledge relative to their major competitors in the export market(s), so the results should be interpreted based on these two aspects.

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).

This study demonstrated that the company's innovation and risk-taking have a positive and significant influence on knowledge's exploitation. The analysed companies are able to exploit knowledge through informal knowledge gather, clear definition of tasks, analysis and discussion of market trends and new product development, among others.

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 provide opportunities for knowledge gathering and sharing, constant updating the operational processes, interaction with the environment, and decision-making evaluations (Easterby-Smith, Lyles and Peteraf, 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 knowledge's exploitation enable firms to achieve superior long-term performance (Teece, 2007).

6.1. Theoretical and practical implications

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

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 entrepreneurial orientation as a predictor for exploitation of knowledge. 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 entrepreneurial orientation to the firms' exploitation of knowledge. 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 entrepreneurial orientation, absorptive capacity and exploitation of knowledge, 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.

6.2. 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.

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 exploitation of knowledge as an absorptive capacity can also be appointed as a limitation.

6.3. 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 absorptive capacity.

Finally, the moderating effect of strategic variables (e.g. intangible resources, competitive advantage, environment hostility, level of international engagement) in the relationship between entrepreneurial orientation and knowledge's exploitation should be studied.

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