Entrepreneurship Strategies in a Portuguese and in a Polish Region

NELSON DUARTE[1]; FRANCISCO DINIZ[2]; ANNA ARENT[3]; MATYLDA BOJAR[4]
[1]School of Management and Technology of Felgueiras – CIICESI – Polytechnic of Porto - CETRAD
Casa do Curral, Rua do Curral, Margaride, 4610-156 Felgueiras, PORTUGAL
[2]DESG – Trás-os-Montes e Alto Douro University – CETRAD
Av. Almeida Lucena, N.º 1, 5000 Vila Real
PORTUGAL
[3,4]Faculty of Management - Lublin University of Technology
Nadbystrzycka Str. 38, 20-618 Lublin
POLAND
[1]nduarte@eu.ipp.pt; [2]fdiniz@utad.pt; [3]a.arent@pollub.pl; [4]m.bojar@pollub.pl

Abstract: - In the present paper we will consider strategies of innovation, risk and proactivity as entre/ intrapreneurship strategies. This study was done in a Portuguese and in a Polish region. In Portugal the region was *Vale do* Sousa, located in the northern Portugal. The Polish region was Lublin Voivodeship and it is situated in the south-eastern part of the country. The study focused on Industrial and Construction sectors. In order to get a valid sample, a group of 251 firms were analysed in Portugal, and 215 in Poland. However, the minimum sample size in Poland should be 323. Since this is a work in progress, we are aiming for this number of questionnaires. Each strategy was analysed individually for both regions and the results pointed to a lack of culture of entrepreneurship in firms' management. Only Proactivity presented a positive result in firms' management. Polish firms tend to be more innovative and more risk takers, while in proactivity Portuguese ones present a slightly higher result. Combining the strategy results, it was possible to identify that 61.2% of Portuguese firms present a low level of entrepreneurship, while 60% of Polish firms present a moderate level. Considering intrapreneurship good levels, while Portugal account for 5.2% this figure is 19.1% in Poland.

Key-Words: - Innovation; Risk; Proactivity; Intrapreneurship; Portugal; Poland.

1 Introduction

Entrepreneurship strategies in the present work are closer to the concept of Intrapreneurhsip. These strategies are those related to innovation, risks and proactivity. At the same time, they assume a crucial role not only to measure intrapreneurship levels, but also in firms' management.

Entrepreneurship can be presented from an external [1], [2], [3], [4] or an internal perspective [5], [6], [7]. The strategies analysed in this paper will be taken into consideration mostly from an internal perspective. According to several authors [7], [8], [9], [10], this perspective can be described as Intrapreneurship.

'Entre' or Intrapreneurship can be measured by three factors: **(1)** Proactivity **(2)** Innovation and **(3)** Risk propensity [11]. Even finding some studies suggesting other factors, the overwhelming majority of literature review, present the concept of entrepreneurship as based on the original concepts (Innovation, Risk and Proactivity), though.

Entrepreneurship is undoubtedly present in firm creation, but the same innovative capacity must be present in firms' management. This capacity cannot be implemented by law, but rather depends on strategy, culture and group relationships that will contribute to competitive advantages. These relations must, however, be present in firms' environment and may be identified through the firms' organizational culture. This allows us to conclude that, if the firm has a culture of innovation, risk and proactivity, this is probably the result of the firms' mission and strategy.

The analysis of the relationship between entrepreneurship and strategic management has shown that entrepreneurial intensity is influenced by strategic management and firms' competitive advantages.

Innovation in strategic management is a concept very close to entrepreneurship [3]. It can be presented as a dimension of intrapreneurship [12].

In order to be competitive a firm must develop its innovative capacity [13], [14], [15], [16]. And,

since innovation also plays an important role on adding value to firms' production, one can argue that innovation is a way of becoming more competitive as well.

The importance of innovation on firm management has been widely acknowledged, but there are those who claim that it involves more than just firm growth; innovation also fosters regional and local development [4], [17], [18]. If firms in a region are able to develop an innovative culture, it will draw new talents, new capital, and generate more and better innovation for the region [19]. It can be said that innovation plays a major role both in the firms and the region.

In the early 20th century, two other concepts were added to the concept of innovation in entrepreneurship: those of risk and uncertainty [1]. Knight referred the probability knowledge on risk calculation as the main difference between these concepts. On the other hand, uncertainty poses the problem of dealing with non-predictable events. The concept of risk is frequently associated with the concepts of 'entre' and intrapreneurship [2], [30], [21]. Any activity or economic effort is based on a number of unknown and uncertain factors or opportunities for the simple reason that its subject is located in the future, meaning that risk is always present in firm management strategies [22]. These strategies receive both internal and external influences. A risk taking strategy may be a positive factor on or lead to market pioneering [23], which in turn is starting to make room for the concept of proactivity.

According to the Global Entrepreneurship Monitoring [24], risk presents a relationship with opportunity (one of the reasons that justify entre/intrapreneurship). Opportunity seeking and exploitation is an evidence of proactivity.

"*Being proactive is about making things happen, anticipating and preventing problems, and seizing opportunities. It involves self-initiated efforts to bring about change in the work environment and/or oneself to achieve a different future"* [25]. This definition of proactivity is valid both for individuals as well as firms.

Entrepreneurship is also a process or a progression that includes an opportunity sequence of events and behaviours (or activities) [26]. These events or behaviours are expected to be proactive in what concerns both market reply and market changes.

Together with innovation risk and proactivity strategies would lead the firm and region to an entrepreneurial culture that would improve regional development.

From this brief literature review it is possible to conclude that the concepts of entrepreneurship and intrapreneurship present strong links to the concepts of innovation, risk and proactivity.

In what regards differences between small and large firms, the results from a study on people's efforts to become small firm entrepreneurs through competency assessment and development indicate *"that the small firm entrepreneur generally excels in "building a mechanism for talent development", while a large firm manager is good at "knowing the different urgency of elements of a problem" or "making feasible solutions for actions". Thus, if a large firm manager wants to emulate a small firm entrepreneur, the suggestion is to de-emphasize methodical thinking and paper work, and to undertake more human networking*" [27].

The main question(s) that can be raised after this brief theoretical review are: How are firms (small ones) dealing with these concepts? Are they presenting a healthy strategy? These concepts will be analysed within the context of the region in the next chapters.

2 The Regions and the Questionnaire

2.1 The Portuguese Region – Vale do Sousa

The first region where this study was conducted is composed of 6 *concelhos* (*Castelo de Paiva, Felgueiras, Lousada, Paços de Ferreira, Paredes, Penafiel*) which together form the *Vale do Sousa Urban Community*. This region is located in the North of Portugal, and for statistical purposes it is a region within NUTE III – *Tâmega*. This region has 338,000 inhabitants of which a relatively high percentage is young people.

Nowadays the main activities in this region are: shoe making, textiles, manufacture of furniture and construction.

According to data from the Statistics National Institute, this region had 34,049 firms registered. However, information from CofaceMOPE and Work Ministry reveals the existence of 11,973 firms and 10,231, respectively. After contacts with local entities, it became clear there is no accurate information about the exact number of firms, which led us to believe that the number of firms was probably close to 12,000.

Small and micro firms account for 97% , which is well within the class distribution found for Portugal. The remaining 3% are classified as medium-sized firms (large firms were not considered).

2.2 The Polish Region - Lublin

Lublin Voivodeship is one of the largest voivodeships in Poland, it occupies over 25,000 sq. kilometres, which represents 8 % of the total Poland's area. The region has approximately 2.2 million inhabitants, and its population density is equal to 71.3 % of the national average, while urbanization index equals 46.7 % of the country's average [28]. This region is composed of 4 *subregions* (*Lubelski, Chełmsko-Zamojski, Bialski Puławski*) which together form the Lublin region. This region is located in the East of Poland.

Lublin Voivodeship belongs to the one of the most underdeveloped regions in Poland, and it has the most scattered urban network in Poland [29].

The region of Lublin has 166,027 firms, from which 99.8% are SMEs.

An important part of the region's economic structure is the mining industry. The Lublin Voivodship is the second biggest coal-mining centre in the county- after Silesia - and the Hard Coal Mine in Bogdanka has for many years been the leader among the most profitable and safest mines in Poland.

The economy of the region also encompasses chemical, wood and furniture, metal and machinery industries including the aviation industry.

2.3 Questionnaire (Sample Population)

In order to justify the sample used, it is important to justify the study sector's choice. Since firms belong to different activity sectors it not easy to analyse the firms' management strategies and their entrepreneurial and innovative actions using a single approach. The degree and type of entrepreneurship differs from a clothing store to a technology software industry [30]. So, it was decided to limit this study to industrial and construction businesses. This choice can be justified both by the number of firms operating in these sectors, and by the importance of these sectors in most economies. Both industry and construction are important activities concerning economic added value.

Considering the Portuguese data, the number of firms engaged in industrial and construction sectors are around 5,000. On Polish side, SMEs operating in these sectors account for 33,987.

Considering the difficulties in questioning the whole of the population, the study was focused on a valid sample. The following formula, which takes into account the variability of the factors studied, the confidence interval required and the error margin was used to calculate the sample size:

(1) $n=p\%*q\%*[z/e\%]^2$

where:
n: minimum sample size required;
p%: proportion belonging to the specified category;
q%: proportion not belonging to the specified category;
z: z value corresponding to the level of confidence required:
e: margin of error required;

According to Saunders [31], since the population is less than 10,000 (in Portugal) a smaller sample can be used without affecting the accuracy.
The adjusted formula is:

(2) $n'=\{n/[1+(n/N)]\}$

where:
n': adjusted minimum sample size;
n: the minimum sample size (as calculated above);
N: total population;

Taking innovation as the main factor and considering variability by country according to the results obtained on a pilot test that were:

Table 1. Innovation results variability

	Innovative	Non-Innovative
Portugal	20%	80%
Poland	70%	30%

It was possible to find out that a valid sample for Portugal – formula (2) – is *n'* = 235.47, so 236 observations, and for Poland – formula (1) – is 322.69, so 323 observations.

The type of questions asked followed a Likert-type scale (1 to 5), or a Yes or No pattern. The total samples comprised 251 firms for Portugal and for Poland, since this is a work in progress the results here analysed are for 215 firms. Even without reaching the minimum required, the obtained results allow us to draw some interesting results.

3 Innovation, Risk and Proactivity

As it was already mentioned in the beginning of this paper, the degree of entrepreneurship (or intrapreneurship) takes into consideration three factors: innovation, risk and proactivity. The results of each strategy are presented in the next section. For each strategy we present the results in a comparative basis between Portugal and Poland.

3.1 Innovation Strategies

In order to measure innovation, the questionnaire included a table with 14 strategies that could score 20 points, since some strategies were classified using different levels of weighting for that purpose.

Interviewees were asked to mark the strategies that firm had been following in the latest years (with the possibility of marking one or more strategies).

In order to classify each firm according to their degree of innovation, 5 categories were created:

[0 – 4[: averse to innovation (-)
[4 – 7[: averse to innovation
[7 – 10[: moderate
[10 – 15[: innovative
[15 – 20]: innovative (+)

Global results are presented in Figure 1:

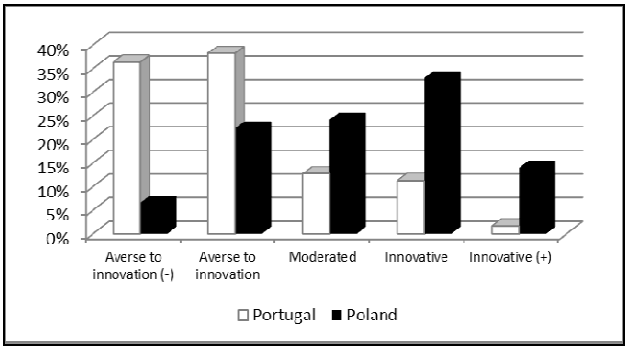

Fig. 1. Innovation strategies classification

According to figure 1, it is clear that Polish firms are much more innovative than Portuguese ones. While in *Vale do Sousa* (PT) most of firms are in the first two categories (Innovation aversion), in Lublin (PL) there is a significant percentage of firms classified as moderate or innovative. In fact, in *Vale do Sousa* most firms (75%) can be said to be averse to innovation. Considering the 75% of innovation averse firms together with the 12% moderate (also a negative result) is it possible to realize that 87% of the firms cannot be considered innovative and that this is an aspect which does not play an important role in these firms' management. In Lublin the negative results (up to moderated) account just for 53%. However, even with more than 50% of firms getting a negative result on innovation, a significant percentage (24,2%) present a moderate approach to innovation.

The explanation for the differences on these results may result, on a more recent process that Poland is leaving after European Union adhesion. While Portugal adhered to EU in 1986, Poland just did it in 2004. Since the results of membership are not immediate, but they occur more significantly over the first years, this may be a possible justification for the differences on innovation strategies followed by firms in these regions.

These figures indicate the existence of some innovative capacity in these regions (stronger in Lublin) but there is still a long way to go before a proactive attitude and behaviour towards organizational change is achieved.

This brief analysis about innovation procedures allows us to conclude that in these regions are differences on innovation behaviours.

3.2 Risk Strategies

In order to do the risk analysis, the same methodology as for innovation analysis was followed. Risk strategies could score a maximum of 10 points.

The results are presented on Figure 2, and risk categories were organized as follows:

[0 – 3[: very risk averse
[3 – 5[: risk averse
[5 – 7[: risk moderate
[7 – 9[: risk taker
[9 – 10]: risk taker (+)

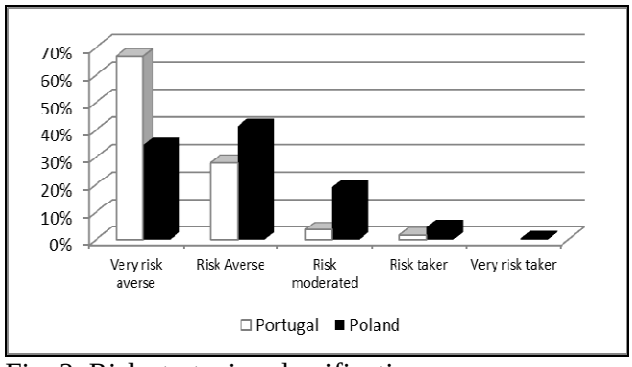

Fig. 2. Risk strategies classification

The results of the risk analysis are quite different from to those obtained for innovation. In this strategy it is possible to identify higher percentages of risk aversion in both regions. However, it is possible to identify a higher risk aversion in *Vale do Sousa*. Accordingly, 95% of the firms present a very high level of risk aversion, which means that in recent years they have adopted a maximum of 4 risk strategies. In Lublin the same analysis present a result of 76%. On the risk takers analysis we got 1.6% to Portugal, and 5.2% to Poland. So, even with a difference not as clear as in innovation, it seems that Polish entrepreneurs, at least those operating in Lublin present a higher propensity to adopt a risk strategy.

3.3 Proactivity Strategies

After innovation and risk had been analysed, the next step was to look into proactivity behaviour in these firms. Proactivity strategies could score a maximum of 5 points.

Categories were organized as follows:

[0 – 1[: No proactivity
[1 – 2[: Weak proactivity
[2 – 3[: Moderate proactivity
[3 – 4[: Proactive firm
[4 – 5]: Very proactive firm

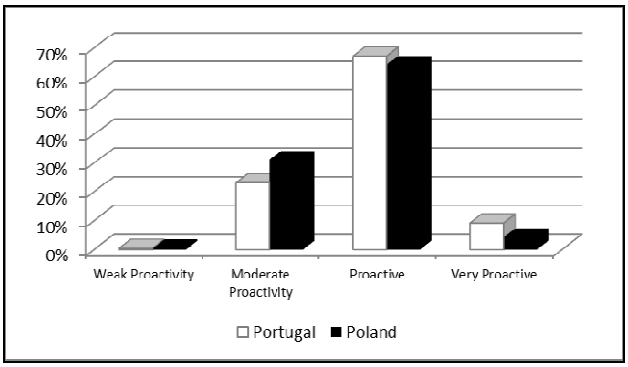

Fig. 3. Proactivity strategies classification

Proactivity is undoubtedly the strategy with the closest results between both regions. In both regions the result seems to be much better than those obtained for innovation and risk analyses. These results are clear for both regions, and it might allow to conclude, that in both countries, entrepreneurs are opened to change but just in short-run aspects, or by adopting strategies with short-term results. It seems that on what concerns structural (and long-run investment) changes are not so welcome.

4 Conclusion and Further Research

Bearing in mind the relationship between 'entre' and intrapreneurship, it is clear that the concepts of innovation, risk and proactivity are associated with entrepreneurship and, when applied to firm management (strategy), they could lead to intrapreneurship in firms' management.

The results revealed some differences between regions. They present a style of management that is poor in terms of the strategies analysed in this paper. Firms were mainly considered innovation and risk averse. The results are better for proactivity, though. Comparing the results of the strategies on a 1 to 5 scale, proactivity takes the lead:

Table 2. Strategies results

	Portugal	Poland
Innovation	1.27	2.36
Risk	1.06	1.72
Proactivity	3.49	3.31

Since on the one hand firms are classified as proactive but are, on the other hand, averse to risk and innovation, it can be argued that their managers are willing to change but only when it involves short-run factors. Innovation and risk are strategies that imply changes on a structural level, those being the most important changes.

From innovation, risk and proactivity results it was possible to calculate the level of intrapreneurship in these regions. As expected, since the strategies adopted are not focused on a sustainable growth, the level of intrapreneurship is low.

Table 3. Levels of Intrapreneurship

	Portugal	Poland
Very low level	2%	0.9%
Low level	59.2%	20%
Moderated level	33.6%	60%
Good level	5.2%	17.2%
Very good level	-	1.9%

As it is possible to understand from Table 3 in Portugal we found the lowest levels of intrapreneurship, while in Poland the results are not so disappointing.

The weak score does not necessarily entail the notion there are no entrepreneurs in these regions; however, according to some studies, these managers are closer to the definition of firm owners than that of entrepreneurs. Alternatively they can be described as passive entrepreneurs - they may be expected to act quickly, even proactively when there is a chance of rapid profit, but as a rule they follow the market in what regards structural changes.

The results obtained suggest new research lines starting by the analysis of some more questionnaires that are being applied in Poland, in order to have a valid sample and to perform statistical tests. At the same time the study will be enlarged in geographical terms in Portugal, and carried out in other countries in order to have different perspectives, understandings, and justifications for the characteristics found in different regions.

These results are also interesting because they show to what extent innovation and risk averse firms can be competing with other firms – although how long they will survive using their old strategies is difficult to say.

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