Entrepreneurship: A Key to Minimizing The Risks Of Tunisian Family Businesses

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Abstract
The purpose of this paper is to measure the effects of each dimension of entrepreneurship on the risks of Tunisian family businesses. The data for this study were collected through a survey, conducted face to face, with 110 Tunisian family businesses chosen from the database constructed by the Agency for the Promotion of Tunisian Industry. The use of survey results leads us to emphasize, based on linear regressions and correlations, the existence of a statistically negative significant relationship between the dimensions of entrepreneurship and the types of risks of the Tunisian family businesses. The originality of this research appears in the fact that we were able to tackle a subject that has not been adequately studied before, either theoretically or empirically, by researchers, in one hand, and, it is a novel study in the Tunisian family businesses which aim to reduce costs and risks, and maximize value in order to assure their survival, on the other hand.

Keywords: Entrepreneurship, risk, family business, innovativeness, proactiveness, risk-taking.

1. Introduction
A large number of factors, including economic globalization and proliferation of technologies of information and communication, have marked, in these recent years, the life of the family businesses. Based on this fact, their survival is also threatened by the emergence of a number of risks that remain insufficiently studied by the researchers, insofar as if we want to refer to the specialized literature, we can find only the articles of Zahra (2005), Naldi et al. (2007), and Lee, Lim, and Lim (2003) which themselves did not clearly present the different risks that can affect this type of companies. This idea can be justified by the article of Benavides-Velasco et al. (2013) that, by a content analysis of papers focusing on family businesses and published in indexed journals in the period from 1961 to 2008, stressed the themes addressed by the researchers. These revolve around, in order of importance, the succession, the management and organizational theory, the governance, the interpersonal family dynamics, the strategic management and organizational change. Otherwise, the risks affecting family businesses were not clearly addressed by the researchers.

Moreover, the focus on these two articles and the points of view of other researchers who were interested closely or by far in the family businesses, we can highlight the existence of three
types of risk: the appropriation risk, the financial risk, and the risk of loss of wealth. To manage these risks as it should be, family businesses use several means in order to design innovative business models and winning strategies. Entrepreneurship is one of these means given the benefits which it generates. It can be defined, simply, by specific situations that create economic and social wealth, characterized by a high degree of uncertainty, therefore the existence of risks, in which individuals are involved and must develop behaviors based in particular on the acceptance of change and associated risks, initiative and independent functioning (Fayolle 2001).

The objective of this research is to measure the effects of each dimension of entrepreneurship on the risks of family. This will be achieved by studying the extent to which investment in entrepreneurship dimensions allow it to predict a reduced risk affecting family businesses. This research fits in a current of research that attempts to link closely entrepreneurship to risks characterizing the family business and to check this link empirically. It is a continuation of work begun thereabout twenty years ago by a limited number of researchers, while remaining in another dynamic, which gives greater importance to most known dimensions of entrepreneurship. On this point, this study proposes an empirical attempt to isolate potentially important variables in this regard. But first of all, a further review of the literature and a clear methodology are needed.

It is therefore clear to structure our article as follows: in the following section, we present the theoretical foundation of our various lines of research and hypotheses derived from them. Thereafter, and after the proposal of our conceptual model, the research methodology will be addressed, followed by analysis. We then discuss the results, implications and offer pathways for future research.

2. Theoretical background and research hypotheses

2.1 Entrepreneurship

Entrepreneurship is a very old concept which crossed the centuries, without finding a universal definition of the content of this notion, although the literature is abundant and provides multiple points of view as indicated by Fayolle (2007). The different definitions suggested in the literature highlight almost all the concept of approach or creative process of company in order to bring something different having a value, especially economic. The concept of entrepreneurship is, as emphasized, Fayolle (2001) complex, multidisciplinary, and multidimensional.

The study of the concept of entrepreneurship also leads us to emphasize the concept of entrepreneurial orientation (Jeffrey and Danny 2014), which is, as suggested Cruz and Nordqvist (2012) a key factor for entrepreneurial families and their activities. This looks like a complex concept that has its origins in the intersection of two research areas: strategy and entrepreneurship. Within the company, it is presented as a set of behaviors and attitudes that support an innovative business design and a pursuit of new activities (Covin, Green, and Slevin, 2006). It is to Mintzberg in 1973 and to Khandwalla, later in 1977, which belongs the identification of the first two dimensions of entrepreneurial orientation: risk-taking and proactivitiveness. This typology was subsequently enriched, in 1982, by innovativeness as a third dimension added by Miller and Friesen. Lumpkin and Dess in 1996 added the fourth dimension, competitive aggressiveness and the fifth, the autonomy of action.

Lumpkin and Dess (1996) compared entrepreneurship to entrepreneurial orientation with the aim of filtering the terminological confusion between the two concepts. They concluded that the essential act of entrepreneurship is the creation of new products / services, the conquest of new markets, and the
creation of a new company. In their approach, entrepreneurial orientation refers more to the processes, activities, functions, decisions and the description of the implementation of these new entries.

Several typologies have been retained by the authors who are interested in the concept of entrepreneurial orientation. Indeed, Miller (1983), Covin and Slevin (1989), Kreiser et al. (2002), Marino et al. (2002), and Messeghem (2003) retained three dimensions in their studies: innovativeness, proactiveness and risk-taking. However Covin and Slevin (1989) and Lee and Peterson (2000) have identified five dimensions: innovativeness, risk-taking, proactiveness, autonomy and competitive aggressiveness. But it should be noted that the first three dimensions are the most cited by the authors. They were selected later by Osman et al. (2011) as characteristic dimensions, also of entrepreneurship. That’s why we will adopt it in our article.

2.1.1 Innovativeness

Innovativeness is a dimension which, for a long time, has long been linked to entrepreneurship (Vecchiarini and Mussolino 2013). Schumpeter (1934) is one of the first authors to emphasize its usefulness in the entrepreneurial context. It is a factor facilitating performance (Kellemanns et al. 2012). In a company, the investment in new products or services became an essential activity which reflects a tendency to engage in processes of idea generation, creativity and development of opportunities (Lumpkin and Dess 1996). Several other researchers have considered innovativeness as the ‘heart’ of entrepreneurship (Covin and Miles 1999; Jennings and Young 1990; Schollhammer 1982). Others, like Zahra (1993) show up that the discriminating characteristic of the entrepreneurial company is the commitment in the creation and the introduction of new products. In the same vein, Covin and Slevin (1999) describe innovativeness as the single critical factor in the definition of entrepreneurship. They gave to the innovativeness a very important value without neglecting other dimensions, which they consider its consequences.

2.1.2 Risk-taking

Evoking the concept of entrepreneurship without underlining the concept of risk-taking is to sully this term with incompleteness. These two concepts have always been closely associated (Vecchiarini and Mussolino 2013). The issues relating to the definition of risk-taking, its level of analysis and its measurement are complex because its meaning changes depending on the context in which it works. Risk- taking is, as Lumpkin and Dess (1996) stress, the extent to which a firm is willing to make large and risky resource commitments.

2.1.3 Proactiveness

The notion of proactiveness refers to that of the catch of initiative. But, in the sense where the initiative is a part of an anticipation and a vision of a desired future. Lumpkin and Dess (1996) also give information on this dimension as the initiative taken through the quest of new opportunities and participation in emerging markets. Thereby, proactiveness is found, at a high level, in companies that behave rather as a leader and less as a follower, on the one hand, and in family business, on the other hand (Vecchiarini and Mussolino 2013). Number of authors considers also that this dimension is quite close to that of competitive aggressiveness.

2.2 Family business and its risks

By analyzing the specialized literature, we note that the researchers who were interested in the topic of family business have rarely defined the concept of family; yet it is a central term. Thus, the term family for the Anglo-Saxon is different from that of the French-speaking and even of the Arab-Muslims. English design insists besides on the idea of co-residence. Whereas, the
French design further emphasizes the blood relationships. By contrast, American family is characterized by individualism and isolation from the kinship network (Déchaux 2003). But that remains relative, according to Anderson et al. (2005) in the sense that the relationship can exert influence without being either shareholders or directly involved in the management of the company.

In addition, the definitions are numerous and heterogeneous, but the review of the literature lead us to identify three main criteria: capital controls by the family, the active participation of the family in the management of the company, as well as the will to transmit the company to the next generation which is added the consideration of socio-cultural and institutional context. It is important to highlight the idea of Yordanova (2010) that family businesses show lower entrepreneurial orientation than non-family firms, because they prefer to operate alone.

About the risks, Zahra (2005) found that the family businesses take significantly less of risk than non-family companies. This is mainly due to the fear of jeopardizing the sustainability of the company and affects the wealth of future generations. As we have already indicated, the main risks of family businesses are of three types: the appropriation risk, the financial risk and the risk of loss of wealth. These risks influence considerably the flow of the incomes of a family business.

In regard to the appropriation risk, Lee, Lim and Lim (2003) state that it occurs with the involvement of an external agent in the affairs of a family business that generates a replacement cost for the family. This agent that can appear of a great capacity may require at the family business a higher premium to additional benefits. The premium increase associated with the bargaining agent is the appropriation risk. In this context, if the agent is of a low capacity, his knowledge of the firm's performance and his capacity are uncertain, hence the presence of appropriation risk in the commitment of the external agent. Thus, the family is confronted with an agency paradox with the commitment of the agent at the head of the company. Consequently, with the presence of an agent with low capacity, profitability may decrease and is likely it appropriation to increase.

For financial risk, Gallo and Vilaseca (1996) and Londstöm (2000) emphasize that the goal of family businesses is demonstrated independent from external sources of financing and promoting the use of funding private assets of family entrepreneurs. The request for capital by these companies proves voluntarily restricted. In the same vein, Masulis (1988) declares that any use of leverage in family firms indicates that the risk appetite of people is linked to opportunities to diversify their investments in a company. In this regard, it should be noted, in the definition of the family business that it is necessary to fix the share held by the family in the authorized capital and to make a distinction between patrimonial company and family business, from where the distinction between private property and professional assets. Thus, it is advisable to reintroduce the role of family influence in particular through the level of concentration of the capital between the hands of the family shareholders.

Concerning the risk of loss of wealth, we can note its presence in the article of Naldi et al. (2007) in their study of the relationship between entrepreneurial orientation, risk-taking, and performance of family firms, which themselves have highlighted the results by Sharma et al. 1997. It is a risk which induces a direct impact on the life of family businesses. In this vein, Luis et al. (2007), by using the behavioral theory argue that the loss of socio-emotional wealth obliges family businesses to accept the risk of their performance. In this context, decision makers in family businesses avoid losses even if they are forced to accept very high risks. They are more willing to accept a higher probability of failure of the organization and underperformed the budget in order to preserve family control.

2.3 Entrepreneurship and the reduction of risks of family businesses

Despite the lack of targeted research on this subject, we can still learn from the literature a set of information allowing to clearly highlighting the role that entrepreneurship can play in
reducing the risk of family businesses. Indeed, Zahra, Jennings, and Kuratko (1999) indicate that entrepreneurship is essential to the creation of new businesses, to the renewal of their operations, and to the reinforcement of the organizational capacities that increase the responsiveness of the family business on the market. Basically, entrepreneurship is also important for the creation and the maintenance of the generative capacity of the company. This is considered as the ability to renew the activities of a company through radical innovation, to create new capabilities, and to reduce risk. But it is important to note that the process of capacity building is complex because several organizational and technological skills must be integrated. Moreover, entrepreneurship requires risk-taking to recombine various tangible and intangible resources for innovativeness and proactiveness through various activities of a company.

In consideration of the foregoing, entrepreneurship, through its dimensions, reduces various types of risks affecting family businesses. Indeed, for the financial risk, it makes it possible to solve the problem of dependence on external sources of funding, and this, through the behavior of the leader, his influence on the family business, and its search of opportunities. Whereas, as regards the appropriation risk, entrepreneurship reduces the agency cost and replacement cost through the various factors that influence it. As for the risk of loss of wealth, entrepreneurship allows to establish certain values such as confidence, motivation, loyalty, leadership development, creative thinking and responsiveness to changes in the environment.

The above advanced ideas allow us to propose the following model:

**Figure 1: Conceptual model**

Under such circumstances, we hypothesize that:

**H1:** the encouragement of entrepreneurship in family businesses reduces the incurred risks.

- **H1.a.** more the family business invests in innovativeness less will be the level of the incurred risks.
- **H1.b.** more the family business develops proactiveness, less will be the level of the incurred risks.
- **H1.c.** more the family business supports the behavior of risk-taking, less will be the level of incurred risks.

### 3 Methods

**3.1 Sample and data collection**

With the aim of study the impact of entrepreneurship in reducing the risks of family businesses and to test the hypotheses, we used the method of questionnaire survey research. Indeed, before the design of the questionnaire, seven exploratory interviews were conducted with managers in five companies. The questions were developed from ideas obtained from interviews.
and review of the literature, and were then pre-tested with ten managers to adjust some ideas. Following this, three interviews were conducted with three leaders of three companies for their comments and experiences by filling out the questionnaire. Their comments were considered in preparing the final questionnaire that was subsequently filed in the central office order of each company. A sample of two hundred family businesses (each with at least fifty employees - a criterion for small and medium business, size defined by the Agency for the Promotion of Industry ‘A.P.I.’) randomly selected from a list provided by ‘A.P.I.’ has been selected. In this survey, we focused on family businesses working in manufacturing industry, given the important role which they play in the economic system of the country. But it is important to note that these companies, although they have shown that they carry many positive factors such as personal attachment to the owner to his business and the realization of the profits, which led him to adopt development strategies well developed, to use performance management systems and the use of performance indicators or accounting standards, these companies lose of their strength during the transition of ownership from one generation to another and have a low rate of growth, generally due to the existence of a number of risks and an inability to raise funds to finance the development, conflicts of interest, lack of consensus in decision-making within the family, etc.

As the recipient was asked to fill out the questionnaire, as appropriate, or indicate a qualified person to fill it. The respondents were mainly chief executive officers. After three reminders, a total of 110 usable questionnaires were received, representing a response rate of 55%. ANOVA tests were carried out in order to examine the bias of non-response possible, as advised by Armstrong and Overton (1977) and the results revealed that there was no proof of systematic non-response bias.

3.2 Variables and measures

3.2.1 Independent variables: measurement of dimensions of entrepreneurship

The independent variables correspond to the three dimensions of entrepreneurship, namely innovativeness, risk-taking, and proactiveness. They are developed from scales used by Covin and Slevin (1989), Lumpkin and Dess (1996), and Naldi et al. (2007). They are as follows, firstly, innovativeness, the three items refer to the degree of importance given by business leaders in research and development, technological leadership and innovation (1) the degree of importance over the past five years, the marketing of a wide variety of new product lines and / or services (2), and character development of the products (or services) or lines products (or services) over the last five years. Then, to take risks, we also used three items, involving the expression of leaders on their high propensity for high risk projects (1), the behavior taken, necessary to achieve the objectives of the organization (2) and ‘waiting’ position to minimize the probability of making costly decisions under uncertainty (3). Finally, proactiveness, we selected three items as the respondent is required to express the active management response to the adoption of new ways of doing things by major competitors (1), the ability of leaders to try new ways of doing things and seek unusual new solutions (2), and encouragement from leaders, people thinking and behavior in an original and innovative way (3).

In our study, all items were measured on a Likert type scale ranging from 1 ("strongly disagree") to 5 ("strongly agree"). All the measures used in this research are based on the literature and adopted, after revision, based on previous studies and validated by researchers taking into account the Tunisian context. They were subjected to an analysis in principal components analysis with varimax rotation. We examined the unidimensionality and the convergent construct validity of built with a confirmatory factorial analysis. Two factors with a
value greater than 1 explained 79.05% of the total variance). Cronbach’s alpha equal to .917, shows the cohesion of selected indicators (mean = 40, SD = 5.779).

3.2.2 Dependent variables: measurement of risks of family businesses

The dependent variables are the risks of family businesses which refer to three types: the appropriation risk, the financial risk and the risk of loss of wealth. We measured the appropriation risk using five items emerged from the literature and including the acceptance of the family business the entry of a high-capacity external agent (1), the engagement of an external agent business of the company can generate conflicts (2) the acceptance instead of replacing an agent, is it rational or not (3), the presence of a low capacity agent may be the cause of declining profitability (4), and the presence of an agent of low capacity is the source of agency cost (5).

For measuring financial risk, we also used five items developed from the literature. It is to speak about the independence of the company in relation to external sources of financing (1), the debt ratio which may be distorted due to a confusion between private and family patrimony and the heritage of the company (2), the conflicts between the owner and the shareholders which can be generated due to the concentration of the capital (3), the significant withdrawals from equity following the disengagement of certain persons of a family (4), and the manifestation of the family members of their own interests which can increase the rate of debt inside the company (5).

To measure the risk of loss of wealth, we selected two items relating to both, the importance of the emotional side which affects the strategic decisions (1) and the preservation of the family control which is mandatory even in the presence of a large probability of failure (2).

Similarly, as the independent variables, all items were measured on a Likert type scale ranging from 1 (‘strongly disagree’) to 5 (‘strongly agree’). All the measures used in this research are based on the literature and are adopted, after modification, based on previous studies and validated by researchers taking into account the Tunisian context. They were subjected to principal components analysis with varimax rotation. We examined the unidimensionnality and the convergent construct validity with a confirmatory factorial analysis. Three factors, with a value higher than 1, explained 94.52% of the total variance. Cronbach’s alpha, equal to .954, shows the cohesion of selected indicators (mean = 24.2, SD = 10,869).

3. Analysis and Results

Our procedure of estimation of the conceptual model consists of two process steps following the recommendations of Anderson and Gerbing (1988), which is, firstly, to estimate the reliability and validity of the model, and secondly, test the theoretical model. Our hypotheses listed above are tested using regression technique.

3.1 Reliability and construct validity

We used SPSS 18.0 software to administrate responses. Table 1 provides the descriptive statistics of the variables and the reliability of the measurement scales of the study. It should be noted that the means and standard deviations of the independent variables and the dependent variables are relatively high.

For Nunnally (1978), the alpha value should be greater than .7 for an exploratory research. As shown in Table 1, all of the scales have reliability greater than this value (.744 - .954). It is possible to note that this result shows the cohesion of selected indicators.

From this table, we can say that more family businesses are proactive, accept the risk of failure or success, and encourage innovation, they have less risk or reduce their risks. In addition,
the effect of the relationship between the three couples: Innovativeness - risks of family businesses, risk-taking - risks of family businesses, and proactiveness - risks of family firms, is large and that the combination is great.

Table 1: Descriptive Statistics, Scale Reliabilities, and correlation coefficients\(^a\) (N=110)

<table>
<thead>
<tr>
<th>Variables</th>
<th>N(^\circ) of Items</th>
<th>Mean</th>
<th>S.D.</th>
<th>Scale Interval</th>
<th>Alpha reliabilities</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurship</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td>.917</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1. Innovativeness</td>
<td>3</td>
<td>40.009</td>
<td>5.779</td>
<td>1-5</td>
<td>.744</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Risk-taking</td>
<td>3</td>
<td>12.936</td>
<td>2.189</td>
<td>1-5</td>
<td>.744</td>
<td>.727**</td>
<td>.727**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Proactiveness</td>
<td>3</td>
<td>12.936</td>
<td>2.189</td>
<td>1-5</td>
<td>.848</td>
<td>.744</td>
<td>.727**</td>
<td>.727**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risks</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td>.954</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Appropriation risk</td>
<td>5</td>
<td>10.427</td>
<td>4.290</td>
<td>1-5</td>
<td>.847</td>
<td>-.682**</td>
<td>-.682**</td>
<td>-.629**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Financial risk</td>
<td>5</td>
<td>10.427</td>
<td>4.290</td>
<td>1-5</td>
<td>.847</td>
<td>-.682**</td>
<td>-.682**</td>
<td>-.629**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Risk of loss of wealth</td>
<td>2</td>
<td>3.345</td>
<td>2.359</td>
<td>1-5</td>
<td>.932</td>
<td>-.679**</td>
<td>-.679**</td>
<td>-.655**</td>
<td>.961**</td>
<td>.961**</td>
<td>1</td>
</tr>
</tbody>
</table>

\(^a\) S.D., Standard deviation. **Correlation is significant at the 0.01 level (two-tailed).

3.2 Test of the conceptual model
To measure the causal relationship between the dimensions of entrepreneurship and the different types of risks, we conducted tests of simple regression because our two explanatory and explained variables were quantitative. In terms of assessing the quality of the regression, four indicators have guided us to know the R: correlation coefficient, measuring the intensity of the relationship between two variables whose value is good when it is close to 1, R\(^2\), coefficient of determination which measures the proportion of the dependent variable explained by the variation on the explanatory variable also interesting coefficient when near to 1, the F measuring the significance of the model i.e. its robustness considered as such when the meaning is equal to .000 and finally the t measuring the significance of the regression coefficient to be different from 0. Indeed, the regression coefficient is said to be significant when the t is greater than 2. And finally, the test of independence of the error terms was done with the Durbin -Watson. And for this purpose, the assumption of independence of the errors was checked when the DW statistic had a value close to 2. Thus, at the conclusion of these tests, we obtained results that should be presented.

The results of our statistical analyses allowed us to validate the hypotheses H1, H2, and H3. The main indicators that allowed us to get these results can be found in the three tables below.

Table 2: Summary between innovativeness and the risks of the Tunisian family businesses (appropriation risk, financial risk, and risk of loss of wealth)

<table>
<thead>
<tr>
<th>Indicators</th>
<th>R</th>
<th>Adjusted R-square</th>
<th>F</th>
<th>Significance of F</th>
<th>Beta</th>
<th>t</th>
<th>Durbin Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Values of innovativeness - appropriation risk</td>
<td>.682</td>
<td>.460</td>
<td>93.711</td>
<td>.000</td>
<td>-.682</td>
<td>- 9.680</td>
<td>1.518</td>
</tr>
<tr>
<td>Values of innovativeness - financial risk</td>
<td>.682</td>
<td>.460</td>
<td>93.711</td>
<td>.000</td>
<td>-.682</td>
<td>- 9.680</td>
<td>1.518</td>
</tr>
<tr>
<td>Values of innovativeness - risk of loss of wealth</td>
<td>.679</td>
<td>.457</td>
<td>92.576</td>
<td>.000</td>
<td>-.679</td>
<td>- 9.622</td>
<td>1.622</td>
</tr>
</tbody>
</table>

Source: our analysis
Thus, this table shows that in addition to the existence of a strong connection ($R = .682$, $R = .682$, $R = .679$) between innovativeness and the three types of risks (taken two by two), innovativeness explains 46% of the different risks (Adjusted R-square). We also have confidence that the error terms are independent with a value $DW = 1.5180$ (for the relationships innovativeness – appropriation risk and innovativeness - financial risk) and $DW = 1.622$ (for the relationship innovativeness and risk of loss of wealth). In addition, the regression coefficient between innovativeness and risks of family businesses taken one by one is significantly different from 0 as already evidenced by the t ($-9.680$ (in the case of the relationship between innovativeness and the appropriation risk and innovativeness and financial risk) and $-9.622$ in the case of the relationship between innovativeness and the risk of loss of wealth). The value of F indicates that there is a statistically significant relationship between the type of the risk affecting the Tunisian family business and innovativeness. And from all of the foregoing, we conclude that the hypothesis H1 is accepted.

Thus, innovativeness as a dimension of entrepreneurship, gives managers of family businesses a sense of urgency to limit the extent of the risks which may affect the family business. And the main impact of this risk minimization that allows managers to plan new projects and create new businesses, creating new products, and offering new services to meet the expectations of customers, which is likely to control risks. After testing the first hypothesis, let us see now what it is the second from the following table.

**Table 3:** Summary between risk-taking and the risks of Tunisian family businesses (risk of ownership, financial risk, and the loss of wealth)

<table>
<thead>
<tr>
<th>Indicators</th>
<th>R</th>
<th>Adjusted R-square</th>
<th>F</th>
<th>Significance of F</th>
<th>Beta</th>
<th>t</th>
<th>Durbin Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Values of risk-taking - appropriation risk</td>
<td>.682</td>
<td>.460</td>
<td>93.711</td>
<td>.000</td>
<td>-.682</td>
<td>-9.680</td>
<td>1.518</td>
</tr>
<tr>
<td>Values of risk-taking - financial risk</td>
<td>.682</td>
<td>.465</td>
<td>93.711</td>
<td>.000</td>
<td>-.682</td>
<td>-9.680</td>
<td>1.518</td>
</tr>
</tbody>
</table>

Source: our analysis

It is clear from this table that risk-taking is not only strongly associated with risks of Tunisian family businesses ($R = .682$ (for the case of the relationship between risk-taking and appropriation risk and financial risk) and $R = .679$ (for the case of the relationship between risk-taking and risk of loss of wealth), but moreover it explains more than 46% of their variations (Adjusted R-square). Furthermore, the absence of auto-correlation between the error terms is quite appreciable ($DW = 1.518$ (for the case of the relationship between risk-taking and appropriation risk and risk-taking and financial risk) and $DW = 1.622$ for the relationship between risk-taking and risk of loss of wealth) and the t (more than -9.6 in the three relations) shows that the regression coefficient is significantly different from zero. The value of F indicates that there is a statistically significant relationship between the type of risk affecting the Tunisian family business and the risk-taking. Thus, we accept the hypothesis H2.

After testing hypothesis 2, it is important to do the same for H3, and this is done through the table below.
Table 4: Summary between proactiveness and risks of Tunisian family businesses (appropriation risk, financial risk, and the risk of loss of wealth)

<table>
<thead>
<tr>
<th>Indicators</th>
<th>R</th>
<th>Adjusted R-square</th>
<th>F</th>
<th>Significance of F</th>
<th>Beta</th>
<th>t</th>
<th>Durbin Watson</th>
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</thead>
<tbody>
<tr>
<td>Values of proactiveness -</td>
<td>.629</td>
<td>.390</td>
<td>70.564</td>
<td>.000</td>
<td>-.629</td>
<td>-8.400</td>
<td>1.565</td>
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<td>appropriation risk</td>
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<tr>
<td>Values of proactiveness -</td>
<td>.629</td>
<td>.390</td>
<td>70.564</td>
<td>.000</td>
<td>-.629</td>
<td>-8.400</td>
<td>1.565</td>
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<td>financial risk</td>
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</tr>
<tr>
<td>Values of proactiveness -</td>
<td>.655</td>
<td>.423</td>
<td>81.024</td>
<td>.000</td>
<td>-.655</td>
<td>-9.001</td>
<td>1.629</td>
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<tr>
<td>risk of loss of wealth</td>
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Source: our analysis

Overall, the model is interesting. The intensity of the connection between the variables is strong (greater than .6, When R = .629 and R = .655). The proactiveness explains about 40% of the variation of risks affecting the Tunisian family businesses (Adjusted R-square = 39% and 42.3%). The error terms are independent (DW = 1.565 and 1.629) and the correlation coefficient is significantly different from 0. (Beta = -.629 (for the first two relations) and -.655 (for the third relation) as attests it besides the t (-8.400 (for the first two relations) and -9.001 for the third relationship). Thus, we can say that there is a negative linear relationship between proactiveness and minimizing risks. F value indicates that there is a statistically significant relationship between the types of risks affecting the Tunisian family business and proactiveness. From the foregoing, we conclude that the H3 hypothesis is validated.

4. Discussion

With regard to the results, several contributions distinguish our study. Firstly, our study makes progress our understanding of the role of entrepreneurship. Some research suggests a direct link between entrepreneurship and risks of family business, but the results are inconclusive (Zahra, Jennings, and Kuratko, 1999; Sathe, 2003; Zahra, 2005; Naldi et al., 2007). The contribution of this paper can be labeled in two ways. The first is to explore possible correlations between dimensions of entrepreneurship and the various risks that may incur the family business. While researchers continue to extol the importance of family businesses, the exact link between dimensions and risks of family business remains a subject that is not well studied and understood. The article thus provides an overview of these relationships, providing an empirical basis of current research and future analyzes. The second contribution of the article highlights the importance of the reduction or control of risk in family businesses, a topic that has not been systematically studied. Then we must understand why some family businesses are willing to engage in such activities while others do not make.

In sum, this paper advances our understanding of entrepreneurship and its relationship with risks of family businesses, on the one hand, and it provides an original empirical study of the context of Tunisia, on the other hand, a theme that is neglected in the entrepreneurship literature.

Moreover, the results enrich our knowledge about the importance of entrepreneurship dimensions that are important to achieve the involvement of the risks affecting family businesses. Indeed, our research has demonstrated how innovativeness, risk-taking, and proactiveness have a direct and significant impact on the risk of family businesses. This
relationship is explained as follows: an increase in the entrepreneurial dimension is followed by a decreased risk of family businesses. It is in this sense that entrepreneurship reflects the propensity of firms to engage in new ideas and creative processes that may result in new products, services or technological processes, and also have the spirit to be taking of risk and to be pro-active in the market and to seek more opportunities they are the key factors in minimizing risks of the family businesses.

5. Limitations and Future Directions

In addition to important contributions and managerial implications, our research also has some limitations. Firstly, the results of our research are based on the family businesses and should be conscientiously considered when we try to generalize them to non-family companies, especially, as the level of the risks of non-family companies is more important than that of the family businesses (Zahra, 2005). Also, we are very ‘shy’ regarding the generalization to other sectors or management because family businesses belong to different countries; they work in various sectors, and have varied characteristics. Thus, if the results of this research are adapted to the Tunisian context, they still in doubt in another environments. Secondly, the transverse data used in the study may update the causal statements being supported by the empirical results. Thus the longitudinal approach is necessary in future research.

In addition, this study convinced that entrepreneurship has a definite impact on the risks under the condition to continuously innovate, encourage initiative and have the risk appetite, which has been ignored by existing research. Future research on entrepreneurship should pay more attention to this issue.

Ultimately, the results indicate that the dimensions of entrepreneurship have a direct impact on the different risks affecting family businesses, but did not indicate the degree of importance of each dimension. Thus, three important research questions are necessary, which dimension of entrepreneurship for which type of risk? What is the degree of importance of each dimension in entrepreneurial risk reduction of family businesses? What are the sources of risk to be able to predict the type of innovation to develop within the company, with which leadership and how to calculate risk propensity? But, in the end, what we expect to win in the development of ideas can be lost in the generalization of the results of the study.

6. References


