

## Social Capital and Economic Performance for Small and Medium Firms: The Importance of Entrepreneurship Experience and Relationships

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### ABSTRACT

This work analyzes the networks of personal, institutional, associative, and professional relationships in which the entrepreneur is involved and the resources that are integrated into them, and it proposes that social capital resources are determinants of the performance of his business. The effect of social capital resources is moderated by the experience of the entrepreneur. A questionnaire survey and a quota sample of 310 small and medium-sized enterprises in Tunisia were used to test the proposed hypotheses during the period from May to December 2019. The results show that economic performance is positively influenced by the resources of the institutional and professional network than through other resources. However, in the sector, the experience of the entrepreneur reinforces the impact of institutional and professional resources.

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## 1. Introduction

Nowadays, small businesses face several difficulties in accessing resources. The problem of accessing financial resources has posed a major threat to the development of small businesses (Carter and Van Auken, 2006; Jansen et al., 2011; Bogáth, 2017), with insufficient technological capabilities tending to limit their

success competitive (Arinaitwe, 2006). Additionally, if the company is newly established, it will face organizational capacity gaps, such as communication and coordination systems, management skills, etc. (Bamford et al., 2006).

This concept is relevant in the case of a small business in which an entrepreneur manages the small business. In such cases, entrepreneurs, their traits, resources, even their spirit and relationships are inseparable from the business itself. These entrepreneurs could access technological resources by joining trade and professional associations (Teckchandani, 2014). Their business capabilities will benefit from establishing close relationships with suppliers (Sherry and Stubberud, 2013). A rich social life can involve many informal contacts appears to be a source of innovation if said contacts are with people who have different and new ideas (Komulainen et al., 2006). Finally, entrepreneurs' relationships with local institutions can give them access to financial resources (support, loans or grants, as well as access to private investors).

Studies have focused on the impact of entrepreneurs' social capital on the performance of small businesses (Baron and Markman, 2003; Davidsson and Honig, 2003; Liao and Welsch, 2003; Chen and Wang, 2008; Botelho, 2017). More specifically, there is exploration of the social competence of entrepreneurs (Baron and Markman, 2003) and to what extent certain network characteristics have influences on the performance of nascent entrepreneurs (Batjargal and Liu, 2004; Davidsson and Honig, 2003; Pirolo and Presutti, 2010). Several studies do not directly measure social capital, but analyze its sources (Payne et al., 2011).

The contribution of our study is to measure social capital as the resources embedded in the network of relationships. The basic definition of social capital states that social capital is defined as 'networks of relationships and assets located in these networks' (Batjargal, 2003: 535). It is precisely these resources that endow such networks with value and make them 'capital' in the sense that they may ultimately lead to future benefits in business. In this line, Lin (1999: 35) defines social capital as 'resources embedded in a social structure which are accessed and/or mobilized in purposive actions.' However, as pointed out by Gedajlovic et al. (2013), a common practice is to refer to social capital in terms of the characteristics of the relationships through which resources are expected to be derived. We assume that both the networks of relationships themselves and the resources embedded within them constitute social capital (Batjargal, 2003; Batjargal and Liu, 2004) and that the characteristics of these networks of

relationships are the conditions required to access the embedded resources (Casson and Della Giusta, 2007; Davidsson and Honig, 2003; Lin, 1999; Tsai and Ghoshal, 1998).

The second contribution of our study is to conduct a comparison-oriented joint and simultaneous analysis of all the generic types of relationship networks the entrepreneur is involved in: personal, namely, associational, institutional, and professional networks. In our framework, social capital is seen as a resource located in an actor's internal ties and external ties (Payne et al., 2011), such that the type and content of these linkages determine access to other embedded resources (Casson and Della Giusta, 2007; Davidsson and Honig, 2003; Nahapiet and Ghoshal, 1998; Botelho, 2017). Although prior research has explored the impact of professional and personal networks on entrepreneurs' success (Pirolo and Presutti, 2010; Chen et al., 2017), no works have thus far adopted a joint and comparative approach to exploring the influence of these four networks on entrepreneurs' access to resources and business performance.

## **2. Literature Review**

### **2.1 The Resource-Based View**

Resources 'are the inputs of the productive process of a firm' and 'the basic unit of analysis of the theory of resources and capabilities' Grant (1991: 118). The resource-based view theory starts from market imperfection and states that owning valuable, rare, inimitable, and non-substitutable (VRIN) business resources is a source of sustainable competitive advantage and the source of differences in the financial performance of firms competing in a similar industrial environment (Barney, 1991; Black and Boal, 1994; Dierickx and Cool, 1989). Resources are valuable when they enable firms to implement strategies that improve their effectiveness and efficiency. Rare resources are those not simultaneously possessed by many other firms. Resources are inimitable if firms that do not possess them are unable to obtain them. Finally, resources are non-substitutable if there are no strategically equivalent resources (Barney, 1991).

### **2.2 Definition of Social Capital**

Nahapiet and Ghoshal (1998) define social capital as networks of relationships that allow their members to access the different assets available in these networks. Following Burt (2000: 348), social capital theory agrees on "a metaphor for social capital in which social structure is a kind of capital that can create a competitive

advantage for certain individuals or groups when they pursue their ends”, so that socially, better connected people will be better placed to achieve their ends. Adler and Kwon (2002: 23) emphasize that the effects of the structure and content of the actor's social relations “stem from the information, solidarity and influence that he makes available to the actor which exists between groups of individuals. In fact, what differentiates social capital from other types of capital is that it resides in relational networks and only exists if it is shared among network members (Narayan and Cassidy, 2001; Lin, 2017).

Bonding social capital arises from relationships between people in a group who know each other well. These networks are linked to strong ties, trust and reciprocity, allowing the exchange of resources between members (Davidsson and Honig, 2003; Ferragina and Arrigoni, 2017). Bonding social capital can facilitate the pursuit of collective goals, and it is exclusive and available to members of a group (Adler and Kwon, 2002). Bridging social capital refers to the horizontal connections that shape more diverse groups of people from different backgrounds. As these networks are more diverse, they can provide their members with resources and explain the success of firms in their competitive rivalry (Adler and Kwon, 2002). Bridging social capital is linked to the concepts of weak ties (Granovetter, 1973; Burt, 2000; Lin, 2017) and structural holes (Burt, 1992; 2000).

In respect to network content, the embedded resources in a network of relationships are a core concept of social capital (Batjargal, 2003). Lin (1982)'s social resources theory proposed that access to resources embedded in social networks can lead to better socioeconomic status.

However, the main aspect of social capital resources is the fact that they can be accessed and/or mobilized in targeted actions (Lin et al., 2001). Social capital facilitates the acquisition of resources that promote a flow of information and funds from various sources, and stimulates the creation of intellectual capital by establishing the conditions to support the development of new resources. However, Payne et al. (2011) find few studies that measure the effect of network connections on outcomes.

As Gedajlovic et al. (2013) emphasize that despite the importance of such an approach (Batjargal, 2003; Batjargal and Liu, 2004; Davidsson and Honig, 2003; Klyver et al., 2008), we notice that little attention has been given to the measurement of real resources accumulated from social networks.

Some authors refer to social capital resources as the benefits derived from social capital (relational networks), essentially the acquisition and sharing of knowledge (Seevers et al., 2010; Wickramasinghe and Weliwitigoda, 2011).

### **2.3 Relationships Networks as Sources of Social Capital**

Relational networks constitute a link between social capital and the relationship marketing approach. In fact, social capital arises from relational networks and the assets found there. For its part, according to the relationship marketing literature, strategic outcomes, such as relationships with channel members and customers, become "market-based assets" that add to the company's stock of resources (Srivastava et al., 1998; Chen et al., 2017). Entrepreneurs integrate the resources provided by these relational assets for the development of core competencies. These relational assets are external to the company and are largely intangible. Indeed, from a resource perspective, a company's most important strategic assets are those based on intangible assets (Hitt et al., 2001).

Johannisson (2008), in his analysis of business activity, affirms the importance of professional, business and friendly links as well as associative and institutional links with the local community. In our research, we echo the propositions of Stone and Hughes (2002) and Johannisson (2008) and group entrepreneurial relationship networks into four categories according to the personal, associative, institutional or professional nature which predominates in the relationships:

- *Personal networks of relationships (PERS NR)* with relatives, friends, and neighbors are normally symmetrical and voluntary relationships, seen among individuals sharing common characteristics and interests. Literature on social capital often considers these relationships to be related to bonding social capital (Arregle et al., 2007; Davidsson and Honig, 2003; Sharma, 2008; Lin, 2017).

- *Associative relationship networks (ASSOC NR)* with other members of the entrepreneur's voluntary associations (such as commercial, civic, professional, union, cultural, social defense or sports associations). They are generally formal in nature, since these groups are often governed by rules that govern the membership, commitments and departure of members as well as their relationships with each other and with other groups (Putnam et al., 1993). Rather, these relationships are found between bonding and bridging social capital, as they can involve both weak and strong ties and both horizontal and vertical relationships (Sabatini, 2009; Teorell, 2003) in

addition to mixing formal and informal governance mechanisms (Casson and Della Giusta, 2007).

- *Professional networks of relationships (PROF NR)* with partners, workers, suppliers, customers, and colleagues. Since they are related to the entrepreneur's past and present professional activities, they occur in more formal contexts than the previous ones and have been considered as a source of bridging social capital (Davidsson and Honig, 2003; Sharma, 2008). This type of business network is usually oriented toward acquiring business-related resources (Casson and Della Giusta, 2007).

- *Institutional networks of relationships (INST NR)* with representatives or members of different public and private institutions. In the case of entrepreneurs, these relationships refer to direct contacts with government officials, the media, public authorities, financial bodies, or large companies, among others. These institutional relationships are not usually voluntary in nature and are normally regulated by very specific rules. They are generally asymmetrical and their quality depends, to a large extent, on how well the institutional and legal environment in which the business activity is performed is able to function (Woolcock, 2001). These relationships have been related to linking social capital (Sabatini, 2009; Woolcock, 2001).

In this work, we argue that social capital resources contribute to the improvement of the economic performance of small businesses in terms of market share, increased sales and success in launching new products. The entrepreneur's resources provided by networks help him succeed in business. Access to advice, financing, technology, human resources or information can promote innovation (Andersson et al., 2007), the launch of new products (Hsieh and Tsai, 2007; Simon and Tellier, 2011) or entry into new markets (Coviello and Munro, 1997). Involvement in associations improves the size of a community's social capital (Putnam et al., 1993; Wollebaek and Selle, 2002), thus benefiting all its members. For example, trade associations provide entrepreneurs with advice and assistance in negotiations with suppliers and banks. But non-professional associations are more diversified and allow local entrepreneurs access to new business opportunities (Teckchandani, 2014). This training in negotiation is essential for the security of financing. Thanks to their institutional contacts, entrepreneurs can access public aid programs for the technological and commercial modernization of their businesses. Therefore, we propose that:

*Hypothesis 1 (H1):* The social capital resources of personal networks of small firms have positive effects on their economic performance.

*Hypothesis 2 (H2):* The social capital resources of associative networks of small firms have positive effects on their economic performance.

*Hypothesis 3 (H3):* The social capital resources of institutional networks of small firms have positive effects on their economic performance.

*Hypothesis 4 (H4):* The social capital resources of professional networks of small firms have positive effects on their economic performance.

If networks can provide resources improving economic performance, their effect will be different depending on the specific characteristics of each. Indeed, we can identify each network according to the value of the resources provided and according to the degree to which these networks are substitutable and imitable. These characteristics will impact firm performance in different ways, as we aim to show in our hypotheses.

#### 2.4 The Importance of Network's as Resources Value and Economic Performance

Resources are valuable when they allow companies to design strategies that improve their efficiency. Although all types of networks provide valuable resources, certain networks are more likely in offering resources tailored to entrepreneurs' business needs (Casson and Della Giusta, 2007).

**Table 1.** Characteristics of Entrepreneurs' Networks

	Network characteristics		
	Network inimitability	Embedded resources value	Network substitutability over time
<b>Personal networks</b>	Medium	Low	Medium
<b>Professional networks</b>	Low	Low	Low
<b>Associative networks</b>	Medium	Medium	Medium
<b>Institutional networks</b>	High	High	Low

**Source:** Research finding.

Characterizing the resources provided by social networks is supported by the social capital literature, which links the nature of the networks to various types of social capital, that is, different types of resources. Table 1 describes networks by their embedded resources value.

As already pointed out, institutional and professional relationships are linked to bridging social capital and weak ties (Davidsson and Honig, 2003; Sabatini, 2009).

Bridging social capital is characterized by connecting individuals with a wider range of agents that can provide them with a broader and, therefore, more valuable array of resources (Burt, 2004; Granovetter, 2005). In fact, institutional and professional networks may offer more specific resources and, therefore, more valuable resources since they are directly related to the entrepreneur's business or to the institutional and legal environment in which the business operates. For instance, a good relationship with suppliers may offer access to a wide range of markets in geographical terms or to new clients, which would never otherwise be possible through solely personal relationships. Relationships with professional colleagues may provide specific information concerning a particular sector (tools, technologies, forecasts, prospects, and so on) which would be difficult to secure through other means.

The nature of associative networks places them between personal (civic, social, religious, advocacy associations, etc.) and professional or institutional (labor unions, professional colleges, political parties, etc.) networks. Thus, they can provide both non- business-related as well as business-related resources. As Teckchandani (2014) points out, professional associations and business contribute to entrepreneurial activity more than other association types. Moreover, and regardless of type, associations can be based on strong ties and provide high cohesiveness and scarce access to diverse resources; or they can be based on weak ties, with higher access to diversity. Thus, we place them in the position of low-high (medium) valuable resources.

In short, we propose that resources will be more valuable than networks based on strong ties and horizontal relationships (Burt, 2004; Granovetter, 1973; Pirolo and Presutti, 2010). It is to be expected that professional and institutional networks have an effect on the performance of the company than personal networks since the resources provided by the former are more valuable and directly linked to the commercial activity of the company (Teckchandani, 2014). Thus, we propose that:

***Hypothesis 5 (H5):*** A positive effect of social capital resources on economic performance will be greater in institutional and professional networks than in personal and associative networks.



## 2.5 Network Substitutability over Time and The Role of the Entrepreneur's Experience

According to Batjargal (2007), the experience of entrepreneurs reinforces the positive effects of networks on business performance. Sasi and Arenius (2008) mention that in the beginning of a newly established business, entrepreneurs rely on family and friends to obtain the information, physical and capital resources and social support necessary for transforming an idea into reality commercial. In other words, personal networks provide the initial resources necessary for the successful launch of a business, when it is not yet easy to develop rich professional and institutional networks (Bennett and Robson, 1999; Davidsson and Honig, 2003). Entrepreneurs then increase their internal and external networks with business relationships that prove more important in key market areas. They thus replace the resources accessible via personal networks, less adapted and generic to companies, with resources provided by institutional and professional networks, more specific and business-oriented and allowing companies to develop (Chen and Wang, 2008; Sasi and Arenius, 2008). In short, associative and personal networks are characterized by a high degree of substitutability, while professional and institutional networks are difficult to substitute.

The majority of works cited address the age of the company as a variable generating greater development of professional and institutional networks. Our contribution to this work is to underpin experience in the particular sector in which the entrepreneur is involved, rather than their overall experience in the corporate world. However, we must not only take into account the age of the company, but also the entire professional career of the entrepreneur. This professional experience will allow an entrepreneur to establish professional and institutional contacts that will prove useful to his newly created business. In this sense, we believe that over time, entrepreneurs replace resources drawn from personal networks with integrated resources acquired from institutional and professional networks as the latter consolidate. Therefore, the longer an entrepreneur has worked in a sector, the more relevant institutional and professional networks will prove to be for the economic performance of the firm.

**Hypothesis 6 (H6):** The lower the entrepreneur's experience in the sector, the greater the positive influence of social capital resources of personal networks on economic performance.

**Hypothesis 7 (H7):** The greater the entrepreneur's experience in the sector, the greater the positive influence of social capital resources of professional networks on economic performance.

**Hypothesis 8 (H8):** The greater the entrepreneur's experience in the sector, the greater the positive influence of social capital resources of institutional networks on economic performance.

### 3. Methodology

The target population of the study is small entrepreneurs in Tunisia, that is, business people who are at the same time owner and manager of a small business (50 or fewer employees). Since there is no sampling framework available for our target population. Our study drew on cooperation with Industry and Innovation Promotion Agency and Tunisian Business Directory in Tunisia.

The primary aim of these agencies is to promote economic development in the areas where they are located. Thus, they fully understand the reality of each area and can identify its key players, including local entrepreneurs (Corrales-Leal, 2003). Although not strictly probabilistic in nature, this method is suitable when no sampling framework is available, as in our case. The main risk of non-probability samples is that there is no specific sampling frame that can reliably represent the population. Therefore, the sample might not prove representative. Researchers have no accurate estimates to gauge whether the sample is representative of the population or not. Despite this, in judgment-based sampling, if the experts know the population well enough, results may prove more accurate than those obtained from probabilistic sampling (Parasuraman, Grewal, and Krishnan, 2004). Coviello and Jones (2004) indicate that judgment-based or purposive sampling dominates in international entrepreneurship studies.

The data was collected from May to December 2019, friends and relatives helped me in collecting the data, whether directly by contacting the entrepreneurs and completing the questionnaire or via emails sent to the entrepreneurs and the follow up by phone to get their answers, and after eliminating some incomplete questionnaires and those of firms with more than 50 employees, a useful sample of 310 entrepreneurs was obtained of those surveyed, 61.3 percent of the respondents belong to rural areas and 34.7 percent to urban areas. In terms of business size, in 32.5 percent of the cases, only the entrepreneurs themselves work in the firm; in 42.8 percent of the cases, there are two to four people; in 22.9 percent of the cases,

there are five to 16 workers; and in 4.3 percent of the cases, there are 17 to 48 workers. Finally, the type of businesses in the sample is quite varied vis-à-vis the main activity: manufacturing (25.9%), retailing (28.2%), tourism, hotels, and restaurants (19.1%), and other services (31.1%).

### **3.1 Variables and Data**

The widely embraced methodological proposals for measuring embedded resources in individuals' networks are the Resource Generator (Van der Gaag and Snijders, 2005). The Position Generator has been applied successfully in social science studies (Lin et al., 2001). It is based on the idea that social capital can be measured by the positional characteristics of network members as a proxy variable indicating the social resource collections embedded in an individual's social network. Based on the Position Generator, Van der Gaag and Snijders (2005) developed the Resource Generator. The Resource Generator is also a survey tool for measuring individual social capital. Unlike the Position Generator, however, Resource Generator information directly refers to accessed social resources rather than occupational prestige. This proposal heralds a step forward in the attempt to measure social capital resources since it avoids using a proxy variable to gauge the resources obtained, and it focuses directly on the resources provided by the individuals involved in the network, irrespective of the position they occupy.

However, our study measures the impact of social capital on the economic performance of companies, we focus on corporate resources considered strategic in the resources literature. To do this, we develop four formative scales to measure the social capital resources of personal, associative, institutional and professional networks, based on the classification of resources proposed by Rubio-Bañón and Aragón-Sánchez (2009). In all cases, five-point Likert scales were used, referring to the extent to which entrepreneurs consider that each type of network gave them the opportunity to acquire technology, financial resources, human resources, innovation capabilities, marketing resource capabilities, quality management and organizational capabilities. In addition, each question regarding access to resources was repeated for each of the entrepreneur's relational networks as suggested by Stone and Hughes (2002). The questionnaire includes a description of what we mean by associative, personal, institutional and professional networks. Entrepreneurs' experience was measured as the number of years entrepreneurs had been working in the industry.

We performed Harman's single-factor test to assess the possible impact of common

method variance. Evidence for common method bias exists when a single factor emerges from the factor analysis or when one general factor accounts for the majority of the covariance among the measures. Exploratory factor analysis with all the indicators gave eight factors with an eigenvalue of greater than 1.0 (total variance explained was 84%), with a first factor explaining only 24 percent of the variance.

### **3.2 Control Variables**

To have a competitive position in a market, it is not enough to have access to appropriate resources. The right strategies must be adopted by companies. In accordance with this classification, the entrepreneur profile can be classified into one of the following categories.

- Prospector strategy. This places the emphasis on the search for new business opportunities starting from the development of new products or entry into a new market. The prospector is usually associated with the pioneering launch of innovations adapted to the changing needs of the market.
- Analyzer strategy. As well as working closely with customers, firms that embark on this follower strategy analyze competitors who use prospector strategies to identify their successes and failures and develop new versions of the product or service that enhance the good qualities.
- Differentiated defender strategy. Like the previous one, this strategy seeks to defend the firm's target and to retain present customers by offering a product that provides a greater added value or any other distinguishing feature.
- A fifth strategy, the reactor strategy, although certain authors (Matsuno and Mentzer, 2000) omit it since they do not believe it is a strategy in the strict sense, rather a non-strategy, given that reactor organizations do not plan their actions and display no common behavior patterns. In addition, their passive attitude is not normally the result of any deliberate intention on the part of the firm's managers.

Although our work concerns small businesses, the size of small businesses has been considered as a determining variable of business performance (Orser, Hogarth-Scott and Riding, 2000). We therefore include it as a control variable. Firm size was measured as the logarithmic transformation of the number of employees (logsize) rather than as a raw measure of size, as suggested in previous

work (Camisón-Zornoza et al., 2004). We include industry as a control variable to remove possible effects on firm performance. Sector was measured using four dummy variables: manufacturing, tourism-restaurant, retail and other services). Table 2 presents the variables used in the study, their measurement indicators and the corresponding descriptive statistics (mean and standard deviation).

### **3.3 Analysis and Results**

In order to test hypotheses, we used moderated hierarchical regression, previously reducing the scales to a single index. As for the formative constructs, we used the partial least squares approach (PLS), an analytical technique that makes to estimate models with formative constructs and can work with nonmetric variables and data that present non-normal distributions. Specifically, Smart. PLS software (Ringle et al., 2005) was used. PLS estimation comprises estimating both the measurement and the structural models. The measurement model can involve variables measured with formative indicators and variables measured with reflective indicators. Reflective indicators are functions of the latent variable. Therefore, changes in the variable are reflected in changes in the observable indicators. Contrastingly, formative indicators are specific components of the general construct they collectively constitute. In these cases, changes in the indicators determine changes in the value of the variable (Diamantopoulos and Siguaw, 2006).

**Table 2.** Descriptive Statistics: Standard Deviations, Means, Weights, and Loadings

<b>Variables</b>	<b>Items</b>	<b>Mean</b>	<b>S.T.</b>	<b>VIF</b>	<b>PLS outer weights</b>	<b>PLS outer loadings</b>	<b>Factor loadings<sup>a</sup></b>
Contribution of the professional network	Financial resources	3.21	1.33	1.44	-0.048	0.475	
	Technological resources and innovation capabilities	3.37	1.26	1.55	0.344***	0.722	
	Commercial and business capabilities	3.68	1.13	1.58	0.322***	0.768	
	Quality management capabilities	3.74	1.15	1.48	0.192*	0.683	
	Human resources	3.65	1.22	1.51	0.233*	0.752	
	Organizational capabilities	3.58	1.18	1.62	0.325***	0.765	
Contribution of the associative network	Financial resources	2.22	1.26	1.88	0.176	0.692	
	Technological resources and innovation capabilities	2.34	1.87	2.27	0.094	0.732	
	Commercial and business capabilities	2.72	1.33	2.15	0.615***	0.952	
	Quality management capabilities	2.56	1.33	2.25	0.258*	0.829	
	Human resources	2.54	1.28	2.00	0.005	0.675	
	Organizational capabilities	2.53	1.78	1.12	0.005	0.676	
Contribution of the associative network	Financial resources	3.15	1.33	1.48	0.380***	0.755	
	Technological resources and innovation capabilities	2.94	1.32	2.13	-0.063	0.668	
	Commercial and business capabilities	2.94	1.28	2.43	0.316*	0.822	
	Quality management capabilities	2.88	1.31	2.36	0.233	0.786	
	Human resources	2.83	1.34	2.02	0.243*	0.874	
	Organizational capabilities	2.78	1.32	2.22	0.174	0.758	
Contribution of the personal network	Financial resources	2.62	1.33	1.54	0.156	0.678	
	Technological resources and innovation capabilities	2.44	1.26	1.63	0.537***	0.878	
	Commercial and business capabilities	3.02	1.32	1.56	0.237*	0.702	
	Quality management capabilities	2.65	1.32	2.03	0.117	0.716	
	Human resources	3.03	1.28	1.65	0.065	0.598	
	Organizational capabilities	2.65	1.26	2.06	0.191	0.746	

Economic performance	In recent years, our sales have increased.	3.26	1.12	0.807
<i>Cronbach's alpha = 0.790% of variance extracted = 62.2%</i>	In recent years, our positioning has improved.	3.52	0.94	0.826
	We have successfully introduced new products or services in our business.	3.38	1.12	0.783
	We have been successful in entering new business areas	3.02	1.18	0.732
	<hr/>			
Entrepreneur's experience	Number of years of entrepreneur's experience in this industry	11.72	9.46	
Prospector	prospector strategy	0.26	0.44	
Analyzer	analyzer strategy	0.14	0.35	
Low-cost defender	low-cost defender strategy	0.36	0.46	
Reactor	reactor strategy	0.12	0.32	
Size	Number of employees	4.63	6.16	

**Source:** Research finding.

**Note:** a. We performed a confirmatory factor analysis (CFA) for the reflective scales, the goodness of fit indexes being:  $X^2(27) = 177.89$  ( $p = 0.000$ ); GFI = 0.962; AGFI = 0.934; RMSEA = 0.078; CFI = 0.942; NFI = 0.932. \*  $p < 0.05$  ; \*\*  $p < 0.01$  ; \*\*\*  $p < 0.001$  (one-tailed test).

In Table 2, the values of the variance inflation factor (VIF) are also shown, as are the outer weights of each indicator. We observe that collinearity is not at a critical level. As for the significance of the formative indicators, Hult, Hair, Ringle, and Sarstedt (2014) explain that nonsignificant indicator weights should not be interpreted as indicative of poor model quality measurement. When an indicator's outer weight is nonsignificant but its outer loading is high (above 0.50), the indicator should be interpreted as absolutely important but not as relatively important. We have included the outer loadings in Table 2, the lowest being 0.475. The absolute contribution of the indicators can, thus, be interpreted as relevant.

We then multiplied the factors measuring the networks' social capital resources by the entrepreneur's experience so as to calculate the interaction variables. Independent variables were previously mean centered in order to reduce multicollinearity between the interaction terms and their constituent variables (Aiken and West, 1993). A correlation analysis was carried out prior to the regression analysis (Table 3). The highest correlation between the independent variables and the interaction terms was 0.61. Past studies suggest that correlations at this level might not pose a serious multicollinearity issue for the interaction results generated (Erramilli and Rao, 1993).

Our hypotheses were tested using hierarchical moderated regression. Four steps of regression analysis were conducted in this analysis. First, we introduced the control variables (prospector, low-cost, analyzer, differentiated, manufacturing, tourism, commerce, and logsize). Second, in order to verify H1 and H5, we included the block corresponding to the main and direct effects of the various network resources (NR): resources provided by personal, associative, institutional, and professional networks. Third, the direct effects entrepreneur experience were added. Finally, to estimate the effects suggested in, we incorporated a block with all the interaction terms among the variables in the last two blocks (of personal, associative, and institutional, professional NR with entrepreneur experience). Results are in Table 4.



**Table 3.** Correlation Matrix

	PERS NR	PROF NR	ASSOC NR	INST NR	Entrepreneur's experience	Size (log)	Economic performance
PERS NR	1						
PROF NR	0.393**	1					
ASSOC NR	0.578**	0.384**	1				
INST NR	0.468**	0.400**	0.572**	1			
Entrepreneur's experience	-0.037	0.042	0.040	0.004	1		
Size (log)	-0.078*	0.147**	0.068*	0.103**	0.363**	1	
Economic performance	0.198**	0.278**	0.203**	0.186**	-0.074*	0.079*	1

**Source:** Research finding.

**Note:** \* P < 0.05 ; \*\* P < 0.01 ; \*\*\* P < 0.001 (two tailed).

**Table 4.** Moderated Hierarchical Regression

	STEP 1		STEP 2		STEP 3		STEP 4 <sup>i</sup>	
	$\beta$ no standard.	S.E.	$\beta$ no standard.	S.E.	$\beta$ no standard.	S.E.	$\beta$ no standard.	S.E.
Constant	-0.512***	0.124	-0.464***	0.116	-0.335**	0.118	-0.342**	0.122
Prospector	0.758***	0.126	0.695***	0.122	0.652***	0.118	0.656***	0.118
Analyzer	0.597***	0.141	0.516***	0.132	0.468***	0.134	0.374***	0.134
Low-cost	0.415***	0.122	0.372***	0.112	0.342**	0.114	0.355**	0.113
Differentated	0.384**	0.134	0.356**	0.125	0.332**	0.123	0.336**	0.126
Manufacturing	-0.185*	0.095	-0.213*	0.086	-0.193*	0.088	-0.196*	0.088
Commerce	-0.053	0.088	0.034	0.087	0.005	0.086	0.012	0.086
Tourism	-0.036	0.103	-0.005	0.096	0.005	0.096	-0.013	0.095
LogSize	0.095*	0.038	0.070*	0.039	0.092*	0.038	0.092*	0.038
PERS NR			0.062	0.043	0.052	0.042	0.052	0.043
ASSOC NR			0.014	0.043	0.016	0.042	0.023	0.044
PROF NR			0.173***	0.036	0.166***	0.035	0.168***	0.035

INST NR		0.136***	0.042	0.124**	0.042	0.107**	0.042
Entrepreneur' experience				-0.012***	0.005	-0.011**	0.005
PERS NR*Entrepreneur's experience						-0.007	0.005
ASSOC NR*Entrepreneur's experience						0.002	0.005
PROF NR*Entrepreneur's experience						0.007*	0.004
INST NR*Entrepreneur's experience						0.010*	0.005
R <sup>2</sup> /R <sup>2</sup> adjusted	0.062/0.054	0.152/0.136		0.174/0.158		0.194/0.170	
F (sig)	7.12***	12.74***		12.82***		9.32***	
Change statistics R <sup>2</sup> change	0.062	0.088		0.024		0.022	
F change (sig.)	7.11***	22.62***		11.499***		2.76**	

**Source:** Research finding.

**Note:** +P<0.10 ; \*P<0.05 ; \*\*P<0.01 ; \*\*\*P<0.001 ; <sup>1</sup>. With regard to step3, including the effects of entrepreneur's experience individually yields the following change : R<sup>2</sup> change = 0.014 ; F change = 3.52 (0.006)

The explanatory capacity of the model is limited (low  $R^2$  values), which should not concern us since our goal was not to explain entrepreneurs' economic performance, but to test the existence of the foreseen effect of social capital resources on performance. Nevertheless, Table 4 (step2) shows the positive and significant effects of the social capital resources of the PROF ( $\beta = 0.173$ ;  $p < 0.001$ ) and INST ( $\beta = 0.132$ ;  $p < 0.001$ ) NR and the nonsignificant effects corresponding to personal and ASSOC NR. As a result, we can accept H3 and H4, but must reject H1 and H2.

Resources obtained through entrepreneurs' professional and institutional networks significantly contribute to improving their results, while resources derived from associative and personal networks do not appear to be relevant, which seems to point in the direction indicated by H5. In order to test that the standardized beta coefficients of PROF and INST NR were significantly higher than the coefficients of personal and ASSOC NR, we performed a t-test for mean differences (Table 5). Moreover, we estimated 95 percent confidence intervals. According to Cumming and Finch's (2005) rule, two estimates can be considered as statistically significantly different from each other when the corresponding 95 percent confidence intervals overlap by no more than 50 percent. As can be seen in Table 5, the coefficient of PROF NR can be considered significantly higher than the coefficients of personal ( $p = 0.06$ ) and ASSOC NR ( $p = 0.004$ ). Put differently, the effect of social capital resources on economic performance is greater in the case of PROF NR than in the case of PERS and ASSOC NR. Similarly, the effect of INST NR can be considered significantly higher than the effect of ASSOC NR ( $p = 0.03$ ). However, the effect of INST NR is not significantly higher than the effect of PERS NR. Hence, with this sole exception, we can accept H5.

**Table 5.** Comparison of estimates: t-test for mean differences (95%)

	Estimate	S.E.	Difference	t-statistic	p-value
PERS NR => Performance	0.062	0.042			
PROF NR => Performance	0.173	0.043	- 0.114	1.878	0.060
PERS NR => Performance	0.062	0.042			
INST NR => Performance	0.133	0.042	- 0.074	1.258	0.209
ASSOC NR => Performance	0.016	0.035			
PROF NR => Performance	0.176	0.043	- 0.158	2.796	0.004
ASSOC NR => Performance	0.015	0.035			
INST NR => Performance	0.133	0.042	- 0.118	2.182	0.029

**Source:** Research finding.

In regard to the moderating effects of the the entrepreneur's experience (H6, H7 and H8), we observe that the change in the F-statistic caused by adding the interaction effects is significant. Therefore, the interaction effects improve the explanation of economic performance. Step 4 confirms there are some significant interactions between the entrepreneur's experience and PROF ( $\beta = 0.09$ ;  $p < 0.05$ ) and INST ( $\beta = 0.011$ ;  $p < 0.05$ ) NR are significant and positive, but nonsignificant in the case of PERS NR. We, therefore, find support for H7 and H8.

To better understand the significant interactions, we used simple slope analysis as recommended by Aiken and West (1993). Each interaction effect was analyzed considering three conditional values of the moderator variable: the mean, one standard deviation below, and one standard deviation above the mean. This generates three alternative  $\beta$  values in each case, which appear in Table 6

**Table 6.** Simple Slope Analysis: B Values Conditioned By Moderator Variable Values

Moderator variable	Predictor variable	Moderator variable value		
		One standard deviation below	Mean	One standard deviation above
Entrepreneur's experience	PROF NR	0.104*	0.168***	0.237***
	INST NR	0.013	0.107**	0.186***

**Source :** Research finding.

**Note:** \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$  (two tailed).

H6, H7 and H8 (the effect of entrepreneur experience), the influence of PROF NR on economic performance is higher when entrepreneurs have more years of experience in the industry ( $\beta = 0.237$ ;  $p < 0.001$ ) than when their experience is limited ( $\beta = 0.105$ ;  $p < 0.05$ ). Similarly, the influence of INST NR on economic performance is significant when the entrepreneur has more years of experience in the industry ( $\beta = 0.186$ ;  $p < 0.001$ ), yet is nonsignificant when experience is limited.

With regard to the control variables, some interesting results emerge. First, small firms' strategies impact economic performance. Although any strategy the firm actively embarks upon should be better than the reactor strategy, it seems that their impacts on performance differ. We conducted an ANOVA and a Tukey test to evaluate the different effects of strategies, with the relation between strategy and economic performance proving to be significant ( $F = 12.467$ ;  $p < 0.001$ ). These analyzes indicate that the prospector and analyzer strategies contribute most

to improving the firm's results. Compared to the reactor strategy, the analyzer, low-cost defender, and differentiated defender strategies also improve firms' performance, although we found no differences among the effects of these three strategies.

Second, the effect of size is significant and positive, indicating that larger firms obtain better economic performance than smaller firms. As we measure firms' size as the logarithm of the number of employees, this means that performance increases with size at a declining rate.

Finally, only in the case of the manufacturing sector do we find a negative effect, showing that economic performance in the manufacturing sector is lower than in the 'other services' sector.

#### **4. Discussion**

The main theoretical implication is that it furthers the role of small entrepreneurs' social capital resources in a firm's performance. In a small business context, certain resources must be sought in entrepreneurs' relationship networks themselves. The present work bears out the relevance of so-called social capital resources vis-à-vis obtaining enhanced economic performance in terms of market and innovation results. Moreover, not all networks allow entrepreneurs to access relevant resources, with only some of the resources provided by each network actually proving valid from the business standpoint. Results from the analysis show that entrepreneurs' various relationship networks are not all equally advantageous.

However, personal and associative networks do not appear to be so relevant. Yet, even though the resources afforded by personal and associative relations do not seem to impact entrepreneurial performance, this might be qualified if entrepreneurs' experience is taken into account. Entrepreneurs' business experience also helps explain the effect of the different networks' social capital on performance. As experience in the sector increases, so does the influence of professional and institutional network social capital resources on economic performance. Experience contributes to developing wider and more diverse professional and institutional networks whose influence on economic performance proves more relevant.

Previously, the literature on social capital (Putnam, 1995; Sabatini, 2009) tended to link the nature of relationships (personal, institutional, associative and professional) to various types of social capital in terms of the value of embedded

resources (links, bridging and connection). Our study shows that when there are no external determinants, such a link is true. As hypothesized, professional networks and institutional networks provide entrepreneurs with valuable resources. On the other hand, in personal networks (social bonding capital), entrepreneurs have more difficulty finding valuable resources. It is difficult to determine what type of social capital association networks are capable of providing in terms of access to resources.

Finally, the resources obtained via entrepreneurs' institutional networks (relationships with institutions or public authorities) that contribute to boosting the results of the small firm are financial, commercial (marketing), and human resources. These results are aligned with the propositions of Shipilov and Danis (2006), who suggest that a good fit between the managerial team's type of social capital, the company's strategic profile, and environmental stability, enhances organizational performance.

## **5. Conclusion**

This study analyzes the networks of associative, personal, institutional and professional relationships in which the entrepreneur is involved and the resources that are integrated into them, and it proposes that the social capital resources of an entrepreneur are determinants of the economic performance of his company. The results show that economic performance is more influenced by professional and institutional network resources than by other network resources. However, the experience of the entrepreneur in the sector reinforces the impact of professional and institutional resources. However, this study is not without limitations and possibilities for future research. The first limitation concerns the subjective measurement of performance. Future studies should analyze the impact of networks on performance, collecting objective data on growth, sales and profits. Furthermore, the present work defines the extent to which networks offer valuable, inimitable resources in the event of strong competitive competition over time. However, research should endeavor to assess entrepreneurs' perceptions of the characteristics of the resources offered by each network, exploring whether contextual or idiosyncratic factors in a given sector may alter the value, substitutability, and imitability of the integrated resources. In personal, professional, associative resources and institutional networks.

In addition, the study was carried out on a varied sample of small entrepreneurs. A differential analysis by sectors would allow us to specify the degree to which

social capital affects each type of business. A more detailed description of the strategies is also needed, bearing in mind the peculiarities of each business sector, as is an analysis of the relationship between entrepreneurs' strategies and their access to resources through relationship networks. Future research should also explore the implications of firm ownership for the type of resources accessed through networks, in particular for venture capitalists.

Our study of entrepreneurs' social capital resources was conducted in Tunisia, an emerged economy. It would seem feasible to replicate the study in other similar economies, also the Euro zone countries. In a different vein, one future direction of the current research is to extend the study to other quite distinct contexts, different cultural environments depending on the role of social institutions (families, social groups, associations, etc.), or countries with different transparency and efficacy in public institutions. Only then will it be possible to evaluate the generalizability of our findings. As a first step, with our sample and the available data, we would be able to carry out a comparative analysis between the subsample belonging to rural areas and the subsample belonging to urban areas.

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