Chapter 9 The Role of Social Capital in Family Firms to Explain the Innovation Capabilities in Recession Time: An Empirical Study

Valeriano Sanchez-Famoso and Amaia Maseda

Abstract This chapter investigates the internal social capital of family firms by studying the relationship between a family social capital and organizational innovation during recessions. We predict that the social capital of family members will has a positive effect on firm innovation. We test our hypothesis by sampling respondents serving management functions in Spanish family firms.

9.1 Introduction

This chapter investigates family firms' innovation from the perspective of internal social capital (SC). Our interest in innovation stems from firms' increasingly turbulent environment, in which they must seek and execute innovation to overcome inertial forces and remain competitive (e.g. Floyd and Lane 2000). Our conceptualization of innovation follows Craig and Moores (2006), among others, and we define "innovation" as the use of opportunities to create new products, services, or process thus allowing businesses to obtain an important competitive advantage.

It is widely accepted that organizational innovation is extremely important for the survival, sustainable competitive advantage, and performances of many firms (e.g. Damanpour 1991), including family firms (e.g. Craig and Moores 2006; De Massis et al. 2013a, b). The family firm that survives through generations requires renewal through innovation (Hoy 2006). However, the effects of family involvement on a firm's ability to develop new products and processes are still not well understood. While some studies highlight organizational relationships' potential to stimulate innovation (e.g. Le Breton-Miller and Miller 2006), others suggest that such relationships may constrain it (e.g. Dunn 1996). Accordingly, an overarching theoretical approach is necessary. To that end, we utilize the lens of internal SC (Nahapiet and

V. Sanchez-Famoso (⋈) • A. Maseda University of the Basque Country (UPV/EHU), ElCano, 21, Bilbao 48008, Spain e-mail: valeriano.sanchezfamoso@ehu.es

Ghoshal 1998; Sanchez-Famoso et al. 2013; Yli-Renko et al. 2001), which defines SC as the knowledge embedded within, available through, and utilized by interactions among individuals and their interrelationship networks inside family firms.

Several studies have analysed the effect of internal SC on innovation (e.g. Moran 2005; Nahapiet and Ghoshal 1998; Tsai and Ghoshal 1998) and have shown that internal SC is critical to the development of innovation (Subramaniam and Youndt 2005). However, to our knowledge, few of these studies have analysed the relationship between internal SC and innovation in the context of family firms. We close this gap by studying the relationship between family social capital (FSC) and organizational innovation from an internal perspective during recessions.

The rest of this chapter is organized as follows. After the introduction, we provide the theoretical background of the SC concept and its dimensions in the context of family firms in an atmosphere of crisis, using the "groups" theory (Oh et al. 2004). We also explain the influence of SC on family firm innovation by proposing a specific model and testing it. Finally, we enunciate some reflections about this work and its limitations and then propose avenues for future research.

9.2 Conceptual Framework

Tsai and Ghoshal (1998) found that social interaction and trust are significantly correlated with innovation. However, innovation is often risky in financial and non-financial terms, especially in family firms (Cassia et al. 2012), where the family's impact on the business and innovation occurs through a combination of social interaction, networks, family goals, values, and culture, all acting on the firm through behaviours, acts, decisions, and plans. Thus, the success of a family firm will depend on its capacity to manage social interactions to achieve common goals. Consequently, this study follows Chua et al. (1999) in defining a family firm as a "business governed and/or managed with the intention to shape and pursue the vision of the business held by a dominant coalition controlled by members of the same family or a small number of families in a manner that is potentially sustainable across generations of the family or families" (p. 25). Through this definition, we can use the term "family firm" to refer to organizations in which the behaviour of their actors and the nature of their relationships are influenced by common goals and visions.

Nahapiet and Ghoshal (1998) have pointed out that the fundamental theme of social capital theory is that network ties provide access to resources, constitute a valuable source of information benefits, and reduce the amount of time required to gather information. Social capital enables organizations to either reinforce or transform their prevailing knowledge (Subramaniam and Youndt 2005).

This chapter analyses the relationship between FSC and innovation from an internal perspective by examining the family members' group's relationships in turbulent environment. The internal SC view focuses on the internal linkages among family members. In this sense, SC is concerned with the relationships across all organizational levels (Leana and Van Buren 1999). Nahapiet and Ghoshal (1998) identify three interrelated internal SC dimensions: structural, relational, and cognitive.

The *structural dimension* of SC provides channels for information and resource flows and offers certain advantages for family members (Tsai and Ghoshal 1998) like the generation and implementation of new ideas. The *relational dimension* of SC describes the types of relationships family members develop throughout the history of their interactions within a firm. The *cognitive dimension* of SC serves as a bonding mechanism that helps organizational partners integrate or combine resources.

Systematic interaction between the involvement of family and business is what creates the idiosyncratic resources and capabilities that Habbershon and Williams (1999) call *familiness*. The nature and composition of family firms' relationships vary, but all family members have strong and enduring ties, shared visions and goals, and a sense of shared responsibility and collective action (Chua et al. 1999; Coleman 1990; Nahapiet and Ghoshal 1998; Portes 1998). Familiness allows the family group to communicate more efficiently, exchange information with greater privacy, motivation, loyalty, and trust, and be more likely to generate SC than in non-family firms.

The family group, a distinct (indeed the dominant) feature in family firms, can shape and drive pursuit of the firm's vision for long periods. The family group consists of a group of people with varying expertise, abilities, knowledge, and experience; therefore, motivating interaction within the group is particularly important. This group needs to network with each other in order to exchange, transfer, and diffuse knowledge to develop new specifications and discuss technical solutions (e.g. Tsai and Ghoshal 1998; Yli-Renko et al. 2001). In this way, family group's members who engage in more social interaction will be more likely to obtain information and resources, communicate with each other, exchange opinions and ideas related to task issues, and generate novel ideas and concepts. This process affects the SC-building capacity of family firms (e.g. Arregle et al. 2007). Thus, the SC within familial relationships is an important factor in creating a competitive advantage (e.g. Arregle et al. 2007; Hoffman et al. 2006; Pearson et al. 2008; Sorenson et al. 2009) and involves the development of innovation. Given these arguments, we hypothesize the following relationship between FSC and innovation:

H: During Recessions there is a direct and positive influence of FSC on family firm innovation.

9.3 Methodology

9.3.1 Sample

We studied Spanish family firms that were included in the SABI¹ database in January 2013 (crisis time). We eliminated companies affected by special situations, and eliminated listed companies and firms with fewer than 50 employees. We also looked for companies with more than one family member employee because, when

¹Iberian Balance Sheet Analysis System.

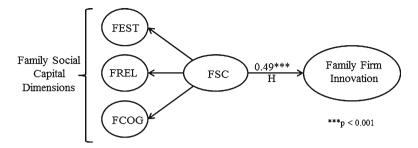


Fig. 9.1 Standardized path loading for hypothesized model (from authors' own research)

two or more members of the same group work in a family-owned company, they reinforce the use of group communication patterns (Sorenson 2012).

In this study, "family firm" refers to a firm that meets two conditions: (a) a substantial common stock is held by the founder or family members, allowing them to exercise control over the firm, and (b) they actively monitor it. As per Arosa et al. (2010), among others, we established 50 % as the minimum percentage of a firm's equity qualifying as a controlling interest. To find cases meeting these two conditions, we conducted an exhaustive review of shareholding structures (percentage of common stock) and composition (name and surnames of shareholders). The resulting sample consisted of 1,122 non-listed Spanish family firms. A questionnaire was used to collect information regarding the relationships inside family group and innovation perceptions inside the family firm. 172 family firms (15.30 % of the sample) provided responses.

To learn about the relationships among family members, we contacted multiple family employees with managerial functions. Moreover, we created a pretest to fine-tune the questionnaire; the preliminary questionnaire was pretested on eleven family firms from different sectors, and the pretest interviews were conducted face-to-face with family employees.

9.3.2 Data Analysis

The model presented in Fig. 9.1 was tested using SEM, concretely EQS 6.2 statistics package for windows, with the raw data used as input.²

9.3.3 Measurement of the Model Variables

To select our measures, we reviewed the most relevant literature on innovation, social capital, and family firms and chose the measures that best fit our research. Consistent with our research focus and similar approaches that assessed firm-level

²Data of evidence of non-normal distribution are available from the authors.

phenomena based on individual-level responses (e.g. De Clercq et al. 2010), survey questions were worded to capture attitudes and behaviours occurring at the firm level rather than at the manager level (Whetten et al. 2009).

Innovation: We followed García-Morales et al. (2008), Miller and Friesen work (1983), and Subramaniam and Youndt (2005) in measuring organizational innovation.

The SC construct is a second-order reflective factor (Casanueva-Rocha et al. 2010; Carr et al. 2011) that includes the structural (FEST), relational (FREL), and cognitive dimensions (FCOG), commonly used in the literature (Bolino et al. 2002; Cuevas-Rodriguez et al. 2013; Inkpen and Tsang 2005; Nahapiet and Ghoshal 1998; Pearson et al. 2008; Tsai and Ghoshal 1998).

9.3.4 Results

We re-validated the measurement model before testing the hypothesis even though the scales' validity had been tested in previous studies because our constructs were adapted from earlier work.

9.3.4.1 Validity of the Scales (First- and Second-Order Concepts)

The FSC scale represents second-order reflective construct (Casanueva-Rocha et al. 2010), multidimensional concepts consisting of a number of more concrete (or first-order) sub-dimensions. This study conceptualizes FSC as three-dimensional second-order reflective measure (see Fig. 9.1) because structural, relational, and cognitive dimensions serve as latent indicators of the second-order FSC construct.

We ran a confirmatory factor analysis (CFA) to validate the measurement model. The final measurement model is reliable, as all Cronbach's αs (CA) are above the recommended value of 0.70, and the composite reliability (CR) indexes are also above 0.70. The analysis provides an acceptable fit (BBNFI=0.948; BBNNFI=0.999; CFI=0.999; IFI=0.999; MFI=0.999; RMSEA=0.010, and S-B $\chi^2(23)=27.37$). The results also allow confirmation of the convergent validity of the FSC subdimensions, since the standardized loading parameters relating each observed variable to the latent variable range from 0.67 to 0.93.

No evidence of a lack of discriminant validity was found.⁴ These results reinforce the reflective nature of the FSC dimensions. Therefore, our measurement model, with seven first-order factors and two second-order factors, has a good fit.⁵

³BNNFI=Bentler-Bonett normed fit index; BBNNFI=Bentler-Bonett non-normed fit index; CFI=Comparative fit index; IFI=Bollen's fit index; MFI=McDonald's fit index; RMSEA=root mean-square error of approximation.

⁴Detailed results of average variance extracted (AVE) and squared correlation are available from the authors.

⁵Detailed results of CFA are available from authors.

9.3.4.2 Estimation of the Causal Model

To test our proposed model (see Fig. 9.1), we ran the SEM with the hypothesized path. Figure 9.1 presents the results of the final structural model. As the model shows, the hypothesis was supported. The model shows that FSC has a direct, positive effect on innovation. Given the acceptable levels of the all indicators, the analysis results revealed a reasonable fit between our model and the data.⁶

9.4 Discussion, Conclusions, and Implications

This study has attempted to shed some light on the complex and very important issue of innovation in family firms from the perspective of internal SC (the linkages among family members of a family firm) during recessions. We sought to fill a gap in and extend the literature by developing an empirically grounded theoretical framework that outlines how the main group that compose family firms affects innovation in an atmosphere of crisis. We have thus extended SC, family firm, and innovation research, most of which has studied the influence of external SC rather than the social capital residing within firms.

Our findings reveal that in turbulent environment, and during recessions FSC directly and positively affects organizational innovation (e.g. Arregle et al. 2007; Pearson et al. 2008), and that SC is necessary to innovation (Leana and Van Buren 1999), so organization can adapt more quickly during recessions.

This study makes several contributions to research on innovation and family firm SC in an atmosphere of recession. First, we estimated the FSC construct as a second-order reflective factor. Second, although others have described SC theory as being particularly relevant to research on family firms (e.g. Arregle et al. 2007; Hoffman et al. 2006; Pearson et al. 2008), ours is one of the first studies to empirically test the relationships among family members (FSC) inside family firms.

It is important to address how this study could be applied in practice. First, this research supports the argument that SC facilitates innovation. Second, it provides an intrafirm SC lens with which to explore the relevance of SC. Managers should carefully assess the benefits of having good and collaborative internal relationships among family employees involved in a family firm, and family employees must be encouraged to share their resources and knowledge, because that is more important during recessions than ever before.

Although these findings are significant, our study also has limitations. First, we focused on the internal side of SC. A second limitation is that the study's cross-sectionalization into a series of dynamic concepts (e.g. social capital and innovation) allows us to analyse only specific organizational situations in time rather than overall conduct over time.

 $^{^6}$ BBNFI=0.948; BBNNFI=0.999; CFI=0.999; IFI=0.999; MFI=0.999; RMSEA=0.010, and S-B $_2$ 2(23)=23.38.

In conclusion, SC appears to serve as the bedrock of innovative capabilities in turbulent environments and, as innovation is fundamentally a collaborative effort, SC plays a central role in generating innovations. Thus, communication and the fluid diffusion of information are vital to innovation especially during recessions.

Acknowledgements The authors thank Cátedra de Empresa Familiar de la UPV/EHU for financial support (DFB/BFA and European Social Fund). This research has received financial support from the UPV/EHU (Project UPV/EHU 12/22).

References

- Arosa B, Iturralde T, Maseda A (2010) Outsiders on the board of directors and firm performance: evidence from Spanish non-listed family firms. J Fam Bus Strat 1(4):236–245
- Arregle JL, Hitt MA, Sirmon DG, Very P (2007) The development of organizational social capital: attributes of family firms. J Manage Stud 44(1):73–95
- Bolino MC, Turnley WH, Bloodgood JM (2002) Citizenship behavior and the creation of social capital in organizations. Acad Manage Rev 27(4):505–522
- Carr JC, Cole MS, Kirk-Ring J, Blettner DP (2011) A measure of variations in internal social capital among family firms. Entrep Theory Pract 35(6):1207–1227
- Casanueva-Rocha C, Castro-Abancéns I, Galan-González JL (2010) Capital social e innovación en clusters industriales. Rev Eur Econ Dir Empres 19(4):37–58
- Cassia L, De Massis A, Pizzurno E (2012) Strategic innovation and new product development in family firms: an empirically grounded theoretical framework. Int J Entrepren Behav Res 18(2):198–232
- Chua JH, Chrisman JJ, Sharma P (1999) Defining the family business by behavior. Entrep Theory Pract 23(4):19–39
- Coleman JS (1990) Foundations of social theory. Harvard University Press, Cambridge
- Craig JB, Moores K (2006) A 10-year longitudinal investigation of strategy, systems, and environment on innovation in family firms. Fam Bus Rev 19(1):1–10
- Cuevas-Rodriguez G, Cabello-Medina C, Carmona-Lavado A (2013) Internal and external social capital for radical product innovation: do they always work well together? Br J Manage. doi: 10.1111/1467-8551.12002
- Damanpour F (1991) Organizational innovation: a meta-analysis of effects of determinants and moderators. Acad Manage J 34(3):555–590
- De Clercq D, Dimov D, Thongpapanl N (2010) The moderating impact of internal social exchange processes on the entrepreneurial orientation-performance relationship. J Bus Venturing 25(1):87–103
- De Massis A, Frattini F, Lichtenthaler U (2013a) Research on technological innovation in family firms: present debates and future directions. Fam Bus Rev 26(1):10–31
- De Massis A, Frattini F, Pizzurno E, Cassia L (2013b) Product innovation in family vs. nonfamily firms: An exploratory analysis. J Small Bus Manage. doi:10/1111/jsbm.12068
- Dunn B (1996) Family enterprises in the UK: a special sector? Fam Bus Rev 9(2):139-155
- Floyd SW, Lane PJ (2000) Strategizing throughout the organization: managing role conflict in strategic renewal. Acad Manage Rev 25(1):154–177
- García-Morales VJ, Lloréns-Montes FJ, Verdú-Jover AJ (2008) The effects of transformational leadership on organizational performance through knowledge and innovation. Brit J Manage 19(4):299–319
- Habbershon TG, Williams ML (1999) A resource-based framework for assessing the strategic advantages of family firms. Fam Bus Rev 12(1):1–25

- Hoffman J, Hoelscher M, Sorenson RL (2006) Achieving sustained competitive advantage: a family capital theory. Fam Bus Rev 19(2):135–145
- Hoy F (2006) The complicating factor of life cycles in corporate venturing. Entrep Theory Pract 30(6):831-836
- Inkpen A, Tsang EW (2005) Social capital, networks, and knowledge transfer. Acad Manage Rev 30(1):146–165
- Le Breton-Miller I, Miller D (2006) Why do some family businesses out-compete? Governance, long-term orientations, and sustainable capability. Entrep Theory Pract 30(6):731–746
- Leana CR, Van Buren HJ (1999) Organizational social capital and employment practices. Acad Manage Rev 24(3):538–555
- Miller D, Friesen PH (1983) Strategy-making and environment: the third link. Strategic Manage J 4(3):221–235
- Moran P (2005) Structural vs. relational embeddedness: social capital and managerial performance. Strategic Manage J 26(12):1129–1151
- Nahapiet J, Ghoshal S (1998) Social capital, intellectual capital, and the organizational advantage. Acad Manage Rev 23(2):242–266
- Oh H, Chung MH, Labianca G (2004) Group social capital and group effectiveness: the role of informal socializing ties. Acad Manage J 47(5):860–875
- Pearson AW, Carr JC, Shaw JC (2008) Toward a theory of familiness: a social capital perspective. Entrep Theory Pract 32(6):949–969
- Portes A (1998) Social capital: its origins and applications in modern sociology. Annu Rev Sociol 24:1–24
- Sanchez-Famoso V, Maseda A, Iturralde, T (2013) Relationship between family and non-family social capital: The case of Spanish family firms. Rev Eur Econ Dir Empres 22(4): Forthcoming
- Sorenson RL (2012) Social capital and family business. In: Sorenson RL (ed) Family business and social capital. Edward Elgar, Cheltenham
- Sorenson RL, Goodpaster KE, Hedberg PR, Yu A (2009) The family point of view, family social capital, and firm performance: an exploratory test. Fam Bus Rev 22(3):239–253
- Subramaniam M, Youndt MA (2005) The influence of intellectual capital on the types on innovative capabilities. Acad Manage J 48(3):450-463
- Tsai W, Ghoshal S (1998) Social capital and value creation: the role of intrafirm networks. Acad Manage J 41(4):464–476
- Whetten D, Felin T, King BG (2009) The practice of theory borrowing in organizational studies: current issues and future directions. J Manage 35(3):537–563
- Yli-Renko H, Autio E, Sapienza HJ (2001) Social capital, knowledge acquisition, and knowledge exploitation in young technology-based firms. Strategic Manage J 22(6–7):587–613