# Joint ventures in family and non-family firms

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**Abstract:** This paper aims to investigate how the nature of a company's ownership and board characteristics influence the investment choices in joint ventures from the dimensional point of view. In doing so, it analyzes an international sample of companies belonging to the major economies of continental Europe, controlling for the effect of the other intellectual capital components and for the fixed effects of industry, company and year. The results indicate that the type of joint venture, link vs scale, has a significant effect and, in particular, the choice of a link joint venture significantly reduces the size of the investment for family companies, whilst human capital efficiency increases JVs investment size for all firms. On the other hand, in relation to the nature of ownership, the presence of CEO duality has an opposite effect on the size of the investment in joint ventures, as it has a lowering effect in family businesses, while it exerts an amplifier influence in non-family businesses.

**Keywords:** joint venture, family firms, link, scale, board characteristics

**JEL:** G24

## Introduction

Family companies are a leading organizational form in economies across the world. According to the Family Firms' Institute, two-thirds of all companies around the world are family-managed and more than 70% of global GDP annually is produced by family businesses that provide 50%-80% of the world's employment[20].

Engaging in new ventures is a priority for family companies trying to survive, achieve profitability and growth; a connection with other companies would allow them to gain the knowledge necessary to stimulate entrepreneurship and avoid the effect of conservatism that can threaten family firms' financial sustainability (Zahra, 2010). The relevance of family businesses' relational capital in leveraging the firm's absorptive capacity to transform and use external knowledge has been highlighted in the literature (Andersén, 2015). Moreover, there

[20] http://www.ffi.org/?page=GlobalDataPoints. Last accessed 18th April 2018

is evidence that alliances and partnerships, such as joint ventures, play a relevant role in forming company legitimacy and their sustainable technologies (Kishna *et al.*, 2017).

JV literature has addressed several topics such as JV performance, innovation and internationalization. A stream of this literature has taken into account the effect of the characteristic of a firm's ownership and management on JV investment choices, mostly focusing on the internationalization perspective and entry mode choices (Sestu and Majocchi, 2020; Debellis *et al.*, 2020; Scholes *et al.*, 2016; Kuo *et al.*, 2012; Claver *et al.*, 2007), and innovation (Feranita *et al.*, 2017). Literature has pointed out the influence of the unique bundle of resources generated by the interaction of family and business (Habbershon and Williams, 1999) on a firm's intellectual capital (Cabrera-Suárez *et al.*, 2001). As a matter of fact, family firms rely on specific human capital intangibles provided by the family's involvement in the firm and related to the founder's personality, the values shared by family members or the knowledge acquired from previous generations (Claver-Cortés *et al.*, 2015). The family's moderating role on the relationship between IC and innovation (Diéguez-Soto *et al.*, 2016), its effect on relational capability development (McGrath and O'Toole, 2018), as well as family firms' unique characteristics in creating and governing joint ventures (Debellis *et al.*, 2020), have been highlighted by the literature.

Joint ventures (JV) are the expression of a peculiar component of a company's intellectual capital (IC), i.e. its relational capital that represents the part of knowledge embedded in relationships with external stakeholders (Sharabati *et al.*, 2010; Zambon, 2002). According to the type of alliance - link or scale - partners contribute different, or similar, capabilities producing different outcomes.

Recent research has also highlighted the importance of pointing out the possible interactions and synergies between the different components of IC (Crupi *et al.*, 2020): they influence each other and certain components of IC can benefit from the improvement of other components (Johnson, 1999; Reed *et al.,* 2006).

To the best of our knowledge, the literature has not yet investigated how family involvement in the firm affects its investment size in JVs by taking into account the effect of the type of the JV as well as of other components of a firm's IC. Therefore, it is of interest to analyze how a firm's ownership and management nature (family or non-family) affects the investment in joint ventures, controlling for the effect of the type of JV and of other IC components.

This paper addresses the following research question*: Does family control and influence affect investment size in JVs? If so, does JV type and the interplay of other IC components moderate this effect?*

We address this research question by basing it on the socioemotional wealth (SEW) concept. This refers to the stock of affect-related value that a family derives from its controlling position in a firm (Gomez-Mejia *et al.*, 2007; Berrone *et al.*, 2012). It shapes firms' decisions (Gomez-Mejia *et al.*, 2011) and may affect the investment in JVs in different ways.

We analyze a sample of Italian, Spanish, German and French non-financial listed firms over the period 2010-2018. The sample is of particular interest as these economies are widely characterized by the presence of family businesses that have long-lasting family control (Franks *et al.*, 2012).

Our results point to the fact that family control and influence negatively affect JV investment size; the type of joint venture has a significant effect only for family businesses, whilst human capital efficiency is significant only at the level of all firms.

This study contributes to the existing research on joint ventures and it adds to intellectual capital literature by also investigating the efficiency by which IC components affect the size of investments in joint ventures.

Our research contributes to family firm literature, in particular to the stream of research on the determinants of family firm investments.

The paper is organized as follows: chapter 2 provides the theoretical framework, the literature review and the consequent hypotheses; chapter 3 describes the data and methodology; chapter 4 presents and discusses the results and chapter 5 concludes by pointing out the limitations and implications of the study as well as including suggestions for future research.

## Theoretical framework, literature review and hypotheses

## Socioemotional Wealth and its dimensions

We address our research question through the lens of the socioemotional wealth (SEW) concept. This refers to the stock of affect-related value that a family derives from its controlling position in a firm (Gomez-Mejia *et al.*, 2007; Gomez-Mejia *et al.*, 2011; Berrone

*et al.*, 2012). Different non-financial aspects of the business that satisfy the affective needs of the controlling family members converge in the concept of socioemotional wealth. Five different dimensions have been categorized as the main non-financial utilities: family control and influence on the business, identification of family members with the firm, binding social ties, emotional attachment of family members and the renewal of family bonds to the firm through dynastic succession (Berrone *et al.*, 2012). These dimensions may exert different and contrasting effects on a firm's propension to invest in joint-controlled ventures.

Owning family members derive a strong emotional return from family influence and control over the business, as they are deeply attached to it (Gomez-Mejia *et al.*, 2007). The level of proprietary control over the company is itself a source of a strong emotional return for the family and provides it with power and legitimacy in supporting decisions aimed at increasing the non-financial returns it derives from the company (Zellweger *et al.*, 2012). The firm is perceived by the owning family as an extension of the family itself because of the tight links and strong sense of identification with the firm (Berrone *et al.*, 2012). As a matter of fact, there is evidence that the desire to maintain company control firmly in the hands of the family implies that family businesses tend to be more levered than non-family firms (Gottardo and Moisello, 2018; Bacci *et al.*, 2018) and, consistently, the desire to preserve the sense of identification leads family businesses to avoid opening up their equity to non-family investors (Romano *et al.*, 2001). Therefore, the relevance of control and sense of identification for family firms might negatively affect their desire to participate in joint control ventures in which they would have to share control of the business with non-family members.

Family companies are particularly prone to developing social bonds, which provide family members with a strong sense of legacy and relevant emotional returns (Berrone *et al.*, 2012; Gomez-Mejia *et al.*, 2011; Astrachan and Jaskiewicz, 2008). Family firms develop strong ties with employees, who become part of a sort of extended family, as well as with suppliers, with the community in which the company operates and with its stakeholders at large (Berrone *et al.*, 2010). Owing to the ability to create social bonds, strictly related to the pursuit of non-financial objectives, family companies enjoy a higher reputation than non-family firms (Beck and Prügl, 2018; Gavana *et al.*, 2018; Binz *et al.*, 2013). The relational ability and reputation may help the selection process of the co-venturers and facilitate family firms' joint venture investments.

The SEW dimension related to the *emotional* attachment of family members highlights the role of emotions in family business management owing to the mix of shared experiences and events that affect current activities and relationships within a family company (Berrone *et al.*, 2012). Emotions can lead to the choosing of family members with limited skills and experience to act as managers and, therefore, if the company wants to explore new markets, the JV may limit the risks. So, the facilitation of the internationalization processes might be a stimulus for investment in JVs.

Families perceive the firm they own as a long-term investment to be passed on to their heirs in order to renew the family bonds to the business and to meet an emotional need to perpetuate the family dynasty (Berrone *et al.*, 2010 and 2012). For this reason, they receive emotional returns in the present as well as future benefits of control (Zellweger *et al.*, 2012). The preservation of socioemotional wealth affects family companies' risk-taking decision-making in different ways and this is why family businesses are risk-averse and risk-willing at the same time (Gomez-Mejia *et al.*, 2007). There is evidence that family firms are prone to facing the risk of financial performance (Gomez-Mejia *et al.*, 2007) and the risks related to debt financing in order to preserve family control over the business (Gottardo and Moisello, 2018). On the other hand, they avoid entrepreneurial risk and high outcome variance ventures in order to protect the business' survival and this evidence is stronger when the family exerts its influence directly through having a family CEO (Huybrechts *et al.*, 2013). Consequently, the desire to renew the family bonds to the firm through dynastic succession produces a long-term time horizon and risk aversion that may affect investments in joint ventures.

## Ownership, board characteristics and Joint Ventures

The nature of a firm, notably family business or non-family business, influences the propension to engage in joint ventures, when the company chooses to internationalize, or when it achieves innovation goals.

Family firms are characterized by an ability to develop a relevant organizational social capital; this results from the firm's interaction and relationships with a wide variety of external stakeholders (Zhara, 2010).

Regarding internationalization processes, family firms face a paradox as they are less prone to form international joint ventures (IJVs), but they show a greater ability to govern

them (Debellis *et al.*, 2020). In family businesses, the strong emotional attachment of family members to the firm causes a lack of strategic sensitivity. Family firms tend to undervalue the opportunity to acquire new knowledge through strategic alliances and remain focused on the existing knowledge that has determined their success thus far. Moreover, participating in an IJV implies sharing part of the firm's knowledge, with the risk of misappropriation if the partners behave in an opportunistic way that leads to a loss of SEW. The presence of external members on the board is a solution to overcome this lack of strategic sensitivity. When outside directors are highly skilled and their values are sufficiently aligned with those of family members, they may help the family to understand that engaging in an IJV is not in contrast with the preservation of SEW as it may be an opportunity to survive and pass the firm on to future generations.

Research has demonstrated that the means of entering foreign markets is affected by the ownership characteristics of the local firm (Sestu and Majocchi, 2020). In fact, family firms have a specific asset which is not tradable on the market: "familiness". When the investing firm is a family firm and the local firm is a non-family one, a wholly owned subsidiary (WOS), i.e. a full acquisition of the local firm, is more likely. In this case, a WOS allows the investing firm to maintain the family's control and transfer its family-specific assets abroad, combining them with the assets of the local firm. On the other hand, when the investing firm and the local firm are both family firms, both their family-specific assets cannot be separated from the firm. In this case, a joint venture is more likely as this entry mode allows both parties to maintain their respective family status and the profits of the joint venture will remunerate the co-venturers for the assets transferred.

Furthermore, the governance quality of the host country plays a role in a firm's entry mode decisions. Chang *et al.* (2014) provide evidence that firms tend to prefer wholly-owned subsidiaries rather than joint ventures when the governance quality of the host country is high. Such a context diminishes the need to rely on local partners and, in turn, allows them to maintain control over the business. This fact is particularly important to family firms where this tendency is strengthened as the degree of family control increases. The need to rely on the support of a local partner is particularly relevant for firms with little experience on international markets. Thus, inexperienced firms tend to prefer joint ventures rather than wholly-owned subsidiaries when they internationalize. In family firms, managers are often hired not for their capabilities but because they are members of the family. Therefore,

inexperienced family firms, compared to inexperienced non-family firms, are more likely to choose joint ventures than WOS. On the contrary, experienced family firms are more likely than experienced non-family firms to choose WOS, given the stronger desire to maintain control over the foreign business and preserve their SEW (Kuo *et al.*, 2012).

Prior studies have highlighted the heterogeneity of family firms, demonstrating how different types of family ownership structure differently influence foreign market entry mode decisions. This is due to the greater, or lesser, importance placed on two main SEW priorities: the long-term survival of the firm and the maintenance of family control (Pongelli *et al.*, 2016). When the level of founder ownership is high, non-cooperative entry modes are preferred due to the founder being reluctant to share control and business decisions with external parties. On the contrary, findings reveal a positive association between cooperative entry modes (joint ventures or contractual agreements) and the level of multiple family members' ownership. In multiple family ownership cases, that is when the ownership structure includes families other than the nuclear family, family firms are more prone to engage in joint ventures rather than rely on wholly owned subsidiaries when they choose equity entry modes.

Based on the theoretical framework and the literary review, we posit the following hypotheses:

*H1a. Family ownership control negatively affects JV investment size*

*H1b. Family involvement on the board amplifies the effect of family control on JV investment*

## Link and scale JVs

Finally, family firms may present a different propensity to engage in scale joint ventures rather than in link joint ventures. A scale joint venture is created to achieve economies of scale. The co-venturers enter together a contiguous stage of their production or distribution cycle or a new market, bringing similar skills and resources to the joint project. In a link joint venture, the co-venturers pursue different objectives and contribute distinctive and complementary skills and resources to the joint project (Hennart, 1988). Since co-venturers are also competitors, a link joint venture gives them the opportunity to acquire partner capabilities and use them for private benefit. Therefore, asymmetric outcomes are more likely to occur in link joint ventures than in scale joint ventures (Dussage *et al.*, 2004). Confirming this risk, the takeover of the joint venture by a partner occurs earlier and more

often for link joint ventures than for scale joint ventures (Dussage *et al.*, 2000). As a consequence, given family firms' risk aversion and the differences between link and scale joint ventures and the implications in terms of risk, family businesses might be less prone to invest in link joint ventures than their non-family counterparts. H2 is formulated as follows:
*H2. The type of JV investment moderates the effect of family control on JV investment*

## Intellectual capital in family firms

Literature has considered how the nature of the ultimate controlling owner can influence the quality and the development of IC. In this vein, research has highlighted that family firms can rely on peculiar intangible assets that are not accessible to their non-family counterparts. Trevinyo-Rodríguez and Bontis (2007) have analysed merger and acquisition (M&A) deals involving family firms in Mexico and have coined the term *intellectual capital in family businesses* (ICFB), defined as the set of quantitative and qualitative intangible assets that influence a company's performance. In particular, qualitative intangible assets comprise: the soul of the firm, namely the founder and/or family's vision, values, energy, social networks, cohesiveness and commitment transmitted to the employees; the brain of the firm, that is the processes, procedures and policies of the organisation and, finally, the heart of the firm, which consists of the network of the firms that allows the relationship between the different parts of the firm to be maintained and developed. Being aware of IC-related intangibles owned by family firms may help managers to focus and effectively manage the resources that can create and maintain the competitive advantage of family firms relative to their non-family counterparts (Sirmon and Hitt, 2003). The identification of intangibles inherent to family firms has been addressed by Claver-Cortés *et al.* (2013). The mentioned study is based on the literature on family firms and on the notion of IC in building an intellectual capital model which lists the main IC elements specific to family firms, grouped into the three IC categories: human capital, structural capital and relational capital. Using a case-study approach, the authors also provide some examples of the intangibles included in their model. The literature highlights that human capital represents the most important intangible of family firms (Sirmon and Hitt, 2003). Family firms are characterized by long-term relationships with employees that foster its organizational social capital (Leana and Van Buren,

1999). Claver-Cortés *et. al.* (2015) identify ten human capital intangibles that characterize family firms and find sixty indicators useful to managers in order to measure such intangibles.

Given the peculiarities of family firms, research has also analyzed how the degree of 'familiness' affects IC efficiency. 'Familiness' is defined as the unique bundle of resources created by the interaction of family and business (Habbershon and Williams, 1999). By using family ownership and the proportion of family directors on the board to approximate the degree of familiness, Greco *et al.* (2014) find that, compared to their non-family counterparts, family firms are characterized by higher average VAIC$^{TM}$.

With reference to an Italian sample, Bresciani *et al.* (2013) investigate how human, relational and marketing capital affect the innovation capacity of family firms relative to their non-family counterparts. The findings suggest a high innovation capacity of family firms because this type of company, compared to non-family businesses, shows higher average values for qualified employees and employees engaged in R&D activity. They also outperform non-family businesses regarding cooperation agreements.

Based on the above discussion we posit the following hypothesis:

*H3. Human capital efficiency moderates the effect of family control on JV investment*

## Data and methodology

## Data

The study uses data from Italian, Spanish, German and French stock markets for the years 2010-2018 to investigate how family involvement in the firm affects its investment size in joint ventures as well as how other components of a firm's intellectual capital (IC) are related to investments in joint ventures (JVs). Italy, Spain, Germany and France are civil-law countries with similar legal settings, financial markets level of development, they are characterized by the prevalence of closely held companies (La Porta *et al.*, 1999) and by the presence of family businesses that have long-lasting family control (Franks *et al.*, 2012). From the accounting point of view, the listed companies adopt the same set of standards for the preparation of their financial statements.

A search was made on the whole population of listed firms to identify those with interests in joint ventures in each year from 2010 to 2018, as reported in the consolidated financial statements. The final sample is composed of all non-financial firms with JVs detected

in the population of these countries' listed firms. Once companies with missing financial data and missing information on JV type were removed, we have, on average, 132 firms for each year, and we have 855 firm-year observations. We hand-collected the data on joint venture assets from the notes to the co-venturers' consolidated financial statements. All financial statement information and market data for the co-venturers was collected from Orbis, the global Bureau van Dijk database.

## Methods

In order to achieve this objective, we estimated the following regression model:

$$Size\ JV_{it} = \alpha_0 + \beta_1 \text{Ceo-D} + \beta_2 \text{W-Board} + \beta_3 \text{F-Ceo} + \beta_4 \text{F-Board} + \beta_5 \text{HCE} + \beta_6 \text{SCE} + \beta_7 \text{CEE} + \beta_8 \text{Link JV} + \beta_9 \text{Size} + \beta_{10} \text{Roa} + \beta_{11} \text{Extra} - \text{EU Op} + \sum_{j=1}^{J} \gamma_j I_{j,it} + \sum_{t=1}^{T} \delta_t D_t \quad (1)$$

The dependent variable is the size of investment in JV in log terms, measured as the sum of the assets of a firm's JVs (based on the firm's share). The explanatory and control variables are CEO-D, W-Board, F-CEO, F-Board, HCE , SCE , CEE , Link JV, size, Roa, Extra-EU Op, year and industry dummies (Table I).

CEO duality is a dummy variable that takes the value of 1 if the CEO is also the chairperson of the board of directors. Woman on Board is the weight (per cent) of women that sit on the board of directors.

Family, CEO is a dummy that takes the value of 1 if the CEO is a member of a family that owns at least 20% of the firm's common shares. Family on board is the weight (per cent) of family members who sit on the board. Ownership data was reconstructed based on the information available on the Orbis database. We defined a family firm as one where a family owns at least 20% of common shares (Villalonga and Amit, 2010).

HCE is a proxy for the efficiency of human capital. It is calculated as VA/HC i.e. value added scaled by total salary and wage duties for the company. Value added is given by VA= OUT-IN OUT=total sales where IN=cost of bought in materials, components and services.

Structural capital SC is measured as SC=VA-HC, and structural capital efficiency SCE is given by SCE=SC/VA. ICE is then given by ICE=HCE+SCE.

Pulic (2004) proposes that the efficiency of capital employed be taken into account as IC cannot create value added on its own: CEE=VA/CE where CE is the book value of net

assets, so that VAIC=ICE+CEE is a measure of a firm's overall efficiency. VAIC components are calculated using data retrieved from firms' financial statements, which are publicly available and include quantitative data. Since data are obtained from audited financial statements rather than being subjective evaluations, such as questionnaires, VAIC methodology provides a standardized and consistent measure (Shiu, 2006). Iazzolino and Laise (2013) argue that the VAIC approach does not contravene any fundamental accounting principles. In Pulic's work human capital is defined not as the actual skills, capabilities, etc., of the employees but the amount of investment in employees as a return of the set of employee characteristics and SC is defined not as a set of intangible assets but as the part of VA created by a set of intangible asset characteristics. So, once the concepts are properly comprehended, the VAIC approach "has its own logical coherence" (Iazzolino and Laise, 2013: p. 552).

In order to classify a JV as 'link', we followed Laurenco and Curto's methodology. We identified the JVs for each venturer from the notes in the consolidated financial statements. We then collected information about each JV's business, as well as the venturers' business, in order to analyze and draw conclusions about the role of each venturer in the JV. We looked for information about JV's business and venturers' business on the JV's website as well as in the venturers' websites. When the venturers undertake complementary businesses in different industries, we classified the JV as a link venture, and when the venturers operate in a similar business, the JV was classified as a scale venture. As a co-venturer may participate in more than one JV, in line with Laurenço and Curto (2010), we coded the co-venturer as 'link' when the majority (in number) of joint ventures are link. Link JV is a dummy that takes the value of 1 when the majority (in number) of joint ventures of a firm are link, otherwise the dummy takes the value of 0.

Firm size is measured as the logarithm of assets. Firms' profitability is proxied by Roa, the ratio of operating income to total assets. Extra-EU Op is a dummy variable that takes the value of 1 when a firm operates in extra European Union countries, otherwise it takes the value of 0.

We estimated model (1) using a GLS panel-data approach with standard errors adjusted for correlation within a cluster, assuming that standard errors are clustered by firm. A panel-data approach uses efficiently the cross-section and time-series data, increasing the parameter's reliability and also reducing the likelihood of multicollinearity problems. To control for industry and year fixed-effects, we included dummy variables in the

model. $I_{j,i,t}$ is a dummy variable that takes the value of 1 if the co-venturer *i* is from industry *j* and 0 otherwise, to control for differences across industries; $D_t$ is a dummy variable that takes the value of 1 in year *t* and 0 otherwise, to allow for differences in the intercept term over time.

## Descriptive statistics

We report in Table 2 the breakdown of our data for family and non-family firms for the period 2010-2018, showing the mean and standard deviations of the dependent and independent variables. We also present the t-statistics and their p-values to verify the differences between family and non-family firms. There were 540 firm-year observations for non-family firms and 315 firm-year observations for family firms. The t-statistics indicate that joint venture size, human capital efficiency and CEO duality are significantly different at the 1% significance level between the two samples while there is evidence of differences at the 5% level for the proportion of link-type joint ventures.

**Table 1.** Descriptive statistics.

| | All Firms | Family | Non-Family | T-test |
|---|---|---|---|---|
| JV Size | 11.06 (3.26) | 10.62 (3.28) | 11.33 (3.23) | 3.46 *** |
| CEO-D | 48.06% | 54.79% | 43.83% | -3.49*** |
| W-Board (%) | 27.11 (13.40) | 28.7 (11.8) | 26.1 (3.07) | -2.95*** |
| F-CEO | 38.51% | 58.48% | | |
| F-BOARD(%) | 7.29 (11.73) | 17.91(12.32) | | |
| CEE | 1.01 (3.49) | 0.89 (0.97) | 1.08 (4.33) | 0.81 |
| HCE | 3.36 (8.36) | 4.32 (13.00) | 2.79 (3.37) | -2.66*** |
| SCE | 0.44 (0.42) | 0.42 (0.54) | 0.46 (0.34) | 1.36 |
| Link JV | 39.93% | 40.97% | 34.47% | -2.10** |
| Size | 14.98 (2.14) | 14.93 (2.03) | 15.02 (2.21) | 0.77 |
| ROA | 3.73% (9.81%) | 3.78% (8.84%) | 3.69% (10.40%) | -0.14 |
| EXTRA UE OP | 29.23% | 28.50% | 29.79% | 0.41 |

*Source: own elaboration*

Table 2 gives the correlation coefficients for the variables used in the regression models for the full sample.

**Table 2.** Correlations

| | JV Size | Size | ROA | CEO D | W-Board | F CEO | FBoard | CEE | HCE | SCE | Link JV |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Size | 0.33*** | | | | | | | | | | |
| ROA | 0.06** | 0.17*** | | | | | | | | | |
| CEO-D | 0.02 | 0.01 | -0.09*** | | | | | | | | |
| W-Board | 0.22*** | 0.20*** | 0.02 | 0.01 | | | | | | | |
| F-CEO | -0.21*** | -0.05 | -0.06* | 0.13*** | -0.09*** | | | | | | |
| F-BOARD | -0.14*** | 0.03 | 0.08*** | 0.19*** | -0.09*** | 0.37*** | | | | | |
| CEE | -0.02 | 0.01 | 0.04 | 0.06* | -0.04 | 0.00 | 0.06* | | | | |
| HCE | 0.04 | 0.04 | 0.08** | -0.13*** | -0.08** | -0.09*** | 0.03 | -0.05 | | | |
| SCE | 0.05 | 0.20*** | 0.30*** | -0.12*** | -0.05 | -0.13*** | 0.06* | -0.05 | 0.27*** | | |
| Link JV | -0.06** | 0.06** | 0.04 | 0.06* | 0.01 | 0.08** | 0.11*** | -0.03 | -0.07** | 0.05 | |
| EXTRA UE OP | 0.13*** | 0.19*** | 0.08*** | 0.26*** | 0.19*** | 0.05* | 0.14*** | 0.05 | -0.05 | -0.01 | 0.06* |

*Source: own elaboration*

## Results and discussion

As we have a panel longitudinal dataset, we estimated Equation (1) by calculating clustered standard errors to account for the firm-fixed effects (Table 3). This procedure gives unbiased standard errors as long as the fixed effects, (time and industry) are negligible. We also lagged the CEE, HCE, SCE and ROA independent variables in order to avoid problems of reverse causality.

**Table 3.** GLS panel regression results with lagged variables.

| | All Firms-1 | Non-Family-1 | Family-1 | Family-2 |
|---|---|---|---|---|
| Intercept | 5.34 (2.74)*** | 3.44 (1.85)* | 5.76 (2.07)** | 5.77 (2.06)** |
| CEO-D | 0.27 (0.60) | 1.50 (3.01)*** | -2.40 (-3.14)*** | -2.13 (-2.20)** |
| W-Board | 0.22 (2.73)*** | 0.17 (2.10)** | 0.16 (0.92) | 0.19 (1.04) |
| F-CEO | - | | | -0.51 (-0.56) |
| F-BOARD | - | | | 0.49 (0.17) |
| CEEt-1 | -0.02 (-1.33) | -0.03 (-2.28)** | 0.06 (1.02) | 0.06 (1.07) |
| HCEt-1 | 0.04 (4.93)*** | 0.04 (0.47) | -0.00 (-0.09) | -0.00 (-0.15) |
| SCEt-1 | -0.23 (-0.70) | -0.03 (-0.05) | -0.41 (-1.30) | -0.38 (-1.13) |
| Link JV | -0.79 (-1.72)* | -0.46 (-0.82) | -3.31 (-2.77)*** | -3.18 (-2.94)*** |
| Firm Size | 0.41 (3.47)*** | 0.47 (3.83)*** | 0.50 (2.49)** | 0.49 (2.40)** |
| ROA t-1 | -1.34 (-0.39) | 2.52 (0.57) | 0.30 (0.07) | -0.48 (-0.11) |
| EXTRA UE OP | 0.56 (1.21) | 0.44 (0.80) | 2.08 (1.86)* | 1.98 (1.92)* |
| Year | Yes | Yes | Yes | Yes |
| Industry | Yes | Yes | Yes | Yes |
| | | | | |
| obs | 758 | 479 | 279 | 279 |
| | | | | |
| | | | | |
| $R^2$ | 0.30 | 0.45 | 0.42 | 0.42 |
| | | | | |

*All variables were defined in Table I.*** Indicate significance at the 1% level; ** Indicate significance at the 5% level; * Indicate significance at the 10% level.*

Our results show that the overall size of investment in JVs for family businesses is smaller than for non-family businesses. This is in accordance with H1a and the view that family firms attribute a fundamental value to family control in order to preserve socioemotional wealth, that is the system of non-financial returns that the family derives from the business (Berrone *et al.,* 2012; Gomez-Mejia *et al.*, 2011). This result is also consistent with studies reporting that family firms are not prone to expanding through cooperative entry modes (Gomez-Mejia *et al*., 2007; Gomez-Mejia *et al*., 2011), and supports the statement of Debellis *et al*. (2020). This was presented in their theoretical contribution to family firms' international JVs: they argue that family firms, in spite of their higher ability to establish and govern JVs, have a lower willingness to form them.

Consistent with H1b, our results point out that CEO duality increases JV investment size in non-family firms whilst it has the opposite effect in family businesses. According to La Porta *et al.* (1999), in family businesses, family members exert dominant control over the board and may serve as CEO and/or chairperson. As a result, CEO duality is more common in family-controlled firms than non-family firms (Cheung *et al.*, 2005; Chen *et al.*, 2005; Lam and Lee, 2008) and it is the expression of the strong will of the family to maintain business control and to preserve SEW. For this reason, the presence of CEO duality in family firms fosters a long-term investment horizon and risk aversion that, as noted above, tends to lower JV investment size.

Conversely, the percentage of family members on the board does not affect JV investment size. This is probably due to the fact that this percentage might have the opposite effect in different generational stages: in earlier generational stages, family members on the board belong to the same nuclear family, the influence of the founder is stronger, as is the long-term perspective, so a strong family presence on the board leads to a preference for investments that are under the family's complete control. In later generational stages, family members on the board might belong to different family branches and they may prefer to pursue financial objectives compared to SEW and have a different risk propension that might increase investment size in JVs (Le Breton-Miller and Miller, 2013). This interpretation is consistent with the evidence that firms are less prone to engage in international JVs when ownership is concentrated in the hands of the founder and more prone when ownership is held by several members not belonging to the same nuclear family (Pongelli *et al.*, 2016). The former ownership structure characterizes the first generational stage and the later ones.

Our results highlight that, in non-family companies, the presence of women on the board positively affects JV investment size. This evidence is consistent with research on gender diversity reporting that women's representation on the board positively affects a firm's commitment towards its stakeholders (Nadeem *et al.*, 2017) as well as its reputation (Bear *et al.*, 2010) and that this might facilitate the development of its relational capital and the creation of JVs. The relation between gender diversity and JV investment size is not significant for family firms, and this evidence could be the result of mixed effects. As a matter of fact, female directors may be family or non-family affiliated and, in the majority of gender-diverse boards, at least one woman belonged to the first type (Bianco *et al.*, 2015). Family and non-family women on the board may have a different effect on a firm's JVs investment size as the former are strongly led by SEW preservation and the latter by financial goals. Empirical evidence on the effect of family and non-family female directors on family businesses' CSR engagement supports this interpretation (Campopiano *et al.*, 2019)

Our results point out that family firms are more likely to implement link-type JVs than non-family companies. This is probably due to the fact that link JVs are an alternative means of entering foreign markets to a wholly owned subsidiary. This result is in line with recent research pointing out that family firms, compared to non-family businesses, are more likely to choose JVs rather than WOSs when entering a new market, due to their risk aversion, as they would reduce the risks linked to the inexperience of their management in international markets (Kuo *et al.*, 2012) and rely on more strategic flexibility (Hitt *et al.*, 1998; Harrison *et al.*, 2001). This explanation is supported by the evidence that a firm's extra European Union operativity has a significant positive effect on the investment in JV for family firms.

On the other hand, consistent with H2, we can note that, in general, family firms tend to limit the size of their investment in JVs when there is a predominance of the link type. The level of risk is different in the case of scale and link JVs. A scale JV is a homogeneous cooperation and "the venturer's relationship is similar to that with a third party with whom it has an arm's-length contract, but where the venturer is protected by a guarantee, that is the common control over that third-party" (Laurenco and Curto, 2010). A link JV is a heterogeneous cooperation as it is often created when the venturers come from different industries to enter a new business together and each provides a different and specific contribution in order to develop the new business. In this case, the JV substitutes a contract between the venturers. According to Dussage *et al.* (2000), partners are more likely to

reorganize or takeover link JVs than scale partnerships, whilst scale JVs are more stable and tend to go on without material changes. A link JV is riskier than a scale JV, so, in cases of link JVs, family firms might limit their investment size in order to limit the related risk. This effect is significant only for family firms. They are more risk averse than non-family firms as they are concerned for the business' survival over generations, the firm is a long-term investment that must be passed on to heirs and, for this reason, families are more prone to limit the size of the investment in link type JVs.

Our results point out that HCE is higher for family firms and that the difference is statistically significant. This evidence is consistent with literature highlighting that human capital represents the most important intangible of family firms (Sirmon and Hitt, 2003). Human capital efficiency significantly affects the investment in JVs for all firms but we do not find a particular effect for family or non-family firms, so our results confirm H3. Structural capital efficiency does not increase the investment size in JVs, in spite of its possible role in facilitating the management of a joint venture's different aspects - partner selection, negotiation, contract formulation, and relationship termination – by means of well-constructed organizational structures and in storing and spreading through the organization knowledge acquired by alliances (Chang *et al.*, 2008). A company's resource profile is a relevant component of the alliance formation process, (Stuart, 2000), so, according to our results, human capital has a key role in the development of JV investment size.

Capital employed efficiency has an opposite effect in family and non-family firms. It significantly increases family firm investment size in JVs. As a matter of fact, capital employed efficiency increases a firm's performance and cash flows (Clarke *et al.*, 2011), reducing the need to resort to cooperation with other firms by means of a scale JV in order to assemble the resources needed to operate profitably. This effect might be stronger in the case of non-family firms as they are significantly more prone to constitute scale JVs. On the other hand, more profitable firms have resources available to support new ventures and the development of joint ventures is a viable way for family firms to manage uncertainty while supporting new ventures (Pfeffer and Salancik, 1978) by means of link JVs. JVs create opportunities for family firms to gain access to fresh knowledge and combine it with existing intellectual resources and innovation (Dyer and Hatch, 2006; Nahapiet and Ghoshal, 1998), so that, in instances of high financial performance, family firms might be prone to increase the investment in JVs and to accept the related risk.

## Conclusion

This study investigates the effect of the main dimension of socioemotional wealth - family control and influence - on a firm's JV investment size, controlling for the effect of JV type and of the interplay with the other IC components. The results indicate that JV investment size is lower for family-owned businesses than for non-family firms. A strong direct influence of the family on the board, by the means of CEO duality as well as the link type of joint control, reduces investment size in JVs. However, family firms are more prone to investing in link ventures than non-family businesses. Other intellectual capital components do not differently affect family and non-family firms' JV investment size.

The results of this study have implications for family firms and practitioners as they point out how the characteristics of a firm's governance and the choices in terms of board structure may limit their investments in JVs; a viable way for acquiring information, knowledge, and technology and avoiding the effect of conservatism on the management of business.

This explorative study has some limitations. It does not take into consideration a firm's generational stage and its possible moderating effect on family control and influence. Moreover, it focuses on the effect of the first dimension of socioemotional wealth but other dimensions, such as family members' sense of identification with the company and the desire to transfer the business to future generations, might affect JV investments. Future research could go further by studying the effect of the other dimensions of socioemotional wealth in order to develop a multidimensional measurement of family-affective endowment in the firm and analyze the impact of all SEW dimensions on JV investment choices, using different research methods such as surveys and case studies. Furthermore, future research could provide a more detailed analysis by also controlling for the effect of ownership and board characteristics of the other co-venturers that cooperate in a firm's JVs. Finally, our results call for a more detailed analysis on the effect of board diversity in order to better point out the heterogeneity of family firms in JVs investment.

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**moderating effect of JV type and IC components. Journal of Intellectual Capital, 22 (7), pp 68-91, and partially reworked.**



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