

n. 2, anno 2020

Codice ISSN 0394-7947 - ISSNe 2421-5724

盱

BOARD INTERLOCKS IN SMES AND THE FORMATION OF INTERNATIONAL JOINT VENTURES

Francesco Debellis Free University of Bozen-Bolzano, francesco.debellis@unibz.it

Michele Pinelli Free University of Bozen-Bolzano michele.pinelli@unibz.it

Article info

Abstract

Date of receipt: 2019/07/31 Acceptance date: 2020/04/18

Keywords: SMEs; International joint ventures; Board interlocks

doi: 10.14596/pisb.356

Small and medium sized enterprises (SMEs) are known for being less prone to international expansion due to the many hazards and challenges that are difficult to face with limited financial and managerial resources. Joint Ventures (JVs) with foreign partners may thus represent strategic weapons for growing internationally, reducing the risks of investments in uncertain environments and allowing access to critical resources not available otherwise. However, due to the high uncertainty of the future behaviour of partners with different national cultures and the complexities related to the entrance in new foreign markets, SMEs usually engage in IVs only at domestic level and are reluctant to engage in such ventures internationally. Drawing on resource dependence and agency theory, we hypothesize and test that the board of directors has an important effect on the willingness to engage in international JVs. Specifically, we found that board interlock ties to other firms increase the likelihood of SMEs to engage in international rather than domestic JVs. Moreover, we found that the positive effect of board interlocks on the formation of international JVs is amplified when there is high ownership concentration. Our study aims to contribute at both theoretical and practitioner level to the literature at bridge between governance and internationalization of SMEs.

1. Introduction

Joint ventures (JVs) – i.e. "organizational arrangements where two or more independent organizations establish and maintain a separate legal organizational entity to collaborate for mutual strategic interests under an incomplete contract" (Nippa and Reuer, 2019: 566) – represent important strategic vehicles for gaining access to new technologies, to combine partner strengths and to diversify risks (Volberda, 1996). Moreover, in the current global scenario, where firms are put under an enormous pressure to quickly adapt and change, the formation of JVs is drastically increasing not only domestically, but also at the international level (Beamish and Lupton, 2016). International JVs (IJVs), which are formed when "at least one parent is headquartered outside the JV's country of operation" (Geringer and-Hebert, 1989: 235), act as boundary spanners in the international transfer of knowledge (Debellis, De Massis, Petruzzelli, Frattini, and Del Giudice, 2020), allowing to share the risk of investing in uncertain environments and to tap into the skills and technology of foreign firms (Westman and Thorgren, 2016, Nippa and Reuer, 2019). Especially for small and medium enterprises (SMEs) - that are often prevented from independently doing business abroad due to financial and managerial constraints (Carney, 2005) - IJVs represent thus a strategic opportunity to cross national boundaries at reduced risk.

However, JVs are also prone to conflicts of interests, drawbacks, inefficiencies, and enduring losses (Reuer and Leiblein, 2000, Nemeth and Nippa, 2013, Perkins, Morck, and Yeung, 2014). Indeed, JVs rely on contracts that are incomplete by nature (Reuer, Klijn, van den Bosch, and Volberda, 2011) where input suppliers are paid ex post from the profits of the venture (Hennart, 1988). These ventures are thus complex to manage as they involve a "double-layered" acculturation, i.e. bridging differences in corporate culture and the necessity to cope with a foreign culture (Barkema, Bell, and Pennings, 1996, Brouthers and Hennart, 2007). In addition to the hazards and uncertainty that any JV implies, IJVs are thus exposed to the challenge of managing these relations across cultural, institutional and geographic boundaries, which increases the costs of monitoring due to higher information asymmetries (Boone, Field, Karpoff, and Raheja, 2007, Reuer, Klijn, and Lioukas, 2014). These issues are especially threatening for SMEs due to emotional and cultural barriers as well as a fear of losing control (Sestu & Majocchi, 2018). Therefore, it is important for both researchers and practitioners to better understand what factors enhance SMEs' propensity to engage in IJVs. On this regard, recent research (e.g., Debellis et al., 2020) has argued that the board of directors plays a key role in overcoming motivational gaps, thus increasing their propensity to form IJVs. We contribute to this debate by shedding light on how board of directors may facilitate SMEs' recourse to IJVs.

To overcome the above mentioned limits and face the hazards, the board of directors, which is the "apex of firms' decision control system" (Fama and Jensen, 1983: 311), assumes indeed a critical role. Specifically, as suggested by resource dependence theory, directors have access to knowledge and control of valuable external resources or influential groups (Bettinelli, 2011) thus providing human, relational and information capital (Hillman and Dalziel, 2003, Zahra, Filatotchev, and Wright, 2009). Therefore, board interlocks, which are formed when "a person is on the board of directors of two or more corporations, providing a link or interlock between them" (Fich and White, 2005: 175), have a strong influence on firms' critical strategic decisions, such as those related to internationalization strategies (Gulati and Westphal, 1999, Kor and Sundaramurthy, 2009) and thus cover a critical role in leading an SME to take the choice to engage in a domestic or an international JV. For instance, the information resources made available through multiple board memberships is likely to be relevant and of high quality, so increasing firm overall social capital (Kor and Sundaramurthy, 2009). Moreover, their embeddedness in critical networks enable these directors to assist managers in better identify the potential and risks of new international opportunities. Therefore, interlocking directors may bring tether multiple perspectives increasing the pool of knowledge and connections at disposal of the firm (Sundaramurthy, Pukthuanthong, and Kor, 2014), letting the firm be more able to cope with the complexities of an IJV. Studies on board composition, however, have neglected to analyse how interlocking directorates affect SMEs' entry mode choices (Zona and Zattoni, 2007, Zona, Gomez-Mejia, and Withers, 2018)

This paper aims to investigate the effect of board interlocks on SMEs likelihood to undertake IJVs. Specifically, we aim to respond to the following research question: *how do board interlocks affect the firm's choice to engage in a domestic or in an international joint venture?* Drawing on both agency and resource dependence theory arguments, we hypothesize that board interlocks, due to their superior social capital, knowledge and experience gained through membership on other boards (Stevenson and Radin, 2009), may positively affect SMEs' willingness to engage in IJVs. Moreover, as the parents' JVs' ownership affects also the JV's board composition and influence its strategies (Reuer et al., 2011), we explore the moderating effect of concentrated JVs' ownership. Our results, based on a sample of 841 Italian SMEs that engaged in domestic and/or international JVs, show that board interlocks facilitate the formation of IJVs. Moreover, the positive effect of board interlocks on opting for IJVs is amplified when the ownership of the JV is more concentrated.

Our study contributes to the literature that examines how corporate governance mechanisms influence the internationalization of SMEs in two main ways. First, we contribute to the debate on how governance mechanisms affect the strategic change of SMEs (Brunninge, Nordqvist, and Wiklund, 2007) by shedding light on the link between board interlocks and the formation of IJVs. Second, whereas prior international management literature on SMEs has mainly focused on exports, we examine a high-commitment entry mode, i.e. JVs, that requires a larger endowment of specific knowledge (Stoian, Dimitratos, and Plakoyiannaki, 2018). In so doing, we identify board interlocks as facilitators of SMEs' internationalization through IJVs.

2. Theoretical background and hypotheses

2.1 Domestic and international joint ventures

This paper examines the effect if governance mechanisms on SMEs' propensity to undertake international JVs. Several definitions of JVs exist in literature, but the prevailing opinion is to define them as subset of strategic alliances (Nippa and Reuer, 2019). JVs, in fact, allow partnering firms to combine their strategic assets (Volberda, 1996) without losing independence and without suffering the acquisition costs of integrating two different organizational structures (Reuer and Koza, 2000). JVs are especially convenient when high information asymmetries make costly and uncertain to obtain an accurate evaluation of another firm's assets (Balakrishnan and Koza, 1993). JVs are thus very useful to expand not only at the domestic level, but also to grow beyond national borders. In fact, recent research shows that the occurrence of international JVs has increased dramatically over the last years (Perkins et al., 2014, Debellis et al., 2020). The growing importance of global competition has indeed increased the importance of international JVs as a means to gain access to foreign markets, to share the risks of investments in uncertain environments and to tap into to the skills and technology of firms in other countries (Beamish and Lupton, 2016). As information asymmetries are particularly high across national contexts, JVs are especially valuable for reducing the risk of entering unfamiliar business environments (Westman and Thorgren, 2016) and helping bridge the gap between the firm's present resources and the expected future requirements (Eisenhardt and Schoonhoven, 1996, Hoffmann and Schlosser, 2001). This is particularly important for SMEs that often struggle with the development of independent internationalization strategies due to financial and managerial constraints (Narula, 2004, Carney, 2005).

Indeed, while the expected benefits of JVs are well known, it is also the case that these ventures are often unstable and prone to failure, due to the many hazards and drawbacks that they imply (Reuer et al., 2011) as well as the impossibility to forecast all future contingencies in a contract that is

incomplete by nature (Reuer et al., 2014, Nippa and Reuer, 2019). In a JV both partners are thus in a mutual hostage situation (Kogut, 1988), where parent firms are exposed to the risk of opportunism by the other parent firms while at the same time they still need to adapt reciprocally (Williamson, 1991). JVs are thus more complex than unitary organizations due to the multiple relationships among parent firms, the JV's management's relationships with the parent organizations, and the relationships between the managers of the JV (Reuer and Koza, 2000). In addition, IJVs have also to deal with the challenge of managing these relations across cultural, institutional and geographic boundaries, forcing the firm to engage in difficult evaluations regarding transaction-specific assets and potential free-riding behavior of the other firms (Anderson and Gatignon, 1986). National diversity is generally seen as an obstacle to effective cooperation in IJVs as it is a source of differences in managerial practices, goals and policies and gives rise to '*us versus them*' perceptions (Hofstede, 2001).

To reduce the exposure to the abovementioned risks, international business literature shows that board of directors can play a paramount role (Debellis et al., 2020). Indeed, directors are deeply involved in the making of complex strategic decisions, such as that of engaging in an IJV (Finkelstein and Mooney, 2003). However, how board characteristics affect firm internationalization remains still an open question (Kano and Verbeke, 2018). Resource dependency theory argues that firms need to hire directors that bring unique resources to the firm, such as social capital (Hillman and Dalziel, 2003) in terms of external connections developed via multiple board appointments. On this perspective, board interlocks, which are formed when "a person is on the board of directors of two or more corporations, providing a link or interlock between them" (Fich and White, 2005): 175) may help parent firms accumulate a variety of information, knowledge and experience (Tian, Haleblian, and Rajagopalan, 2011), thus undermining significant barriers to JVs[´] formation.

2.2. Board interlocks and IJVs.

Resource dependence theory (RDT) (Aldrich and Pfeffer, 1976, Salancik and Pfeffer, 1978) describes firms as open systems that depend on the external environment (Katz and Kahn, 1978, Hillman, Cannella, and Paetzold, 2000). To survive, organizations must be able to exert control over environmental conditions (such as competition, social forces and regulation) and procure critical external resources through exchanges with other firms (Salancik and Pfeffer, 1978, Hillman, Withers, and Collins, 2009). Under a RDT perspective, the board of directors adds value to the firm by tapping into external resources, thus acting as organizational "boundary spanners" (Carpenter and Westphal, 2001). The primary role of the board is thus to provide organizations with human (i.e. skill, experience and expertise) and relational (i.e. network of ties to other firms) capital (Salancik and Pfeffer, 1978, Dalton, Daily, Ellstrand, and Johnson, 1998, Reuer and Koza, 2000). In so doing, directors both affect the company's decision making process (Oh, Labianca, and Chung, 2006) through advice and counsel (Westphal, 1999, Carpenter and Westphal, 2001) and provide access to important resources such as capital (Mizruchi and Stearns, 1988), customers (Pennings, 1980) and power (Salancik and Pfeffer, 1978).

Outside directors with multiple directorships – i.e. directors who sit on the boards of several organizations - thus act as ties that link different organizations together, facilitating inflows and outflows of both information and tangible resources. Such ties among boards of different organizations enable directors to accumulate a variety of information, knowledge and experience (Tian et al., 2011), which is especially valuable for identifying business opportunities and threats in foreign markets (Sciascia, Mazzola, and Chirico, 2013). Board interlocks are thus especially valuable as a mean to control environmental conditions because they provide access to larger portfolios of external resources, more extensive industry and market knowledge (Zahra and Pearce, 1989) and broader social capital (Pennings, 1980, Mizruchi and Stearns, 1988). In addition, since directors' strategic perspective and base of expertise (Carpenter and Westphal, 2001) as well as their ability to manage uncertainty and to develop quick adaptive responses (Zona et al., 2018) grow with their presence in other boards, interlocks provide substantial value to an organization. In fact, empirical evidence has shown that board interlocks are positively associated to firm growth (Kor and Sundaramurthy, 2009) and value (Bøhren and Strøm, 2010). More importantly for the context of this paper, board interlocks have been found to facilitate successful internationalization (Connelly, Johnson, Tihanyi, and Ellstrand, 2011). Indeed, while directors that have earned experience in only one organization may be entrenched with specific strategies, directors with multiple board interlocks are likely to have those general skills and knowledge that can produce value and cope with complexities in different international settings (Kor and Misangyi, 2008).

Based on the above, parent firms with more board interlocks are likely to be better able to control and manage the higher risks stemming from establishing an international JV thanks to a broader social capital, more expertise and more industry- and market-knowledge. Consequently, we predict that:

HP1: parent firms with more board interlocks are more likely to form international joint ventures.

The moderating role of ownership concentration

So far, we argued that the resource endowments provided by directors may foster parent firms' propensity to undertake IJVs. Following a similar logic, also IJVs should benefit from the contribution provided by their directors. Past research, in fact, has shown that more diverse boards can benefit the effectiveness of an IJV through a broader endowment of resources, perspectives and social capital (Cox & Blake, 1991, Robinson and Dechant, 1997, Pinelli, Cappa, Franco, and Peruffo, 2018). More specifically, board interlocks may benefit firms by acting as a channel for communicating information between external organizations and the firm, creating a competitive advantage especially in uncertain and complex foreign environments (Connelly et al., 2011)

Yet, a more structured, diverse and effective board requires a certain equilibrium of the rights that allow parent firms to nominate the IJV's directors. For example, the board of an IJV where four parents can nominate an equal number of directors will be more heterogeneous than the board of an IJV where one parent can nominate 80 percent of the directors and the other parent only the remaining 20 percent. However, since equity ownership and parent firms' ability to be represented on the board of directors are linked, IJVs with more diverse boards imply a certain dispersion of the IJV ownership across its parents. Such ownership dispersion may expose IJVs' parents to serious agency risks, thus affecting their propensity to engage in this form of internationalization.

In fact, management research has shown that JVs' failure and success are profoundly affected by governance and agency issues that stem from shared ownership and control (e.g., Franko, 1971). When ownership is fragmented, owners both struggle to effectively monitor the firm's activities and have less incentive to do so, which increases the risk of opportunistic behavior (Dalton, Hitt, Certo, and Dalton, 2007) and negatively affects the firm's performance (Devers, Wiseman, and Holmes Jr, 2007). In the presence of fundamental differences in ownership and agency incentives, partnerships between parent firms thus become unstable (Reuer and Miller, 1997) and the exposure to expropriation risks increases. Additionally, comparative corporate governance research has shown that agency conflicts among JVs parents are particularly severe in international contexts (Perkins et al., 2014). Instead, such agency-related problems can be mitigated if corporate owners are able to effectively monitor both the management and other co-owners. This, however, requires that ownership is concentrated (Tosi and Gomez-Mejia, 1989, Hambrick and Finkelstein, 1995, Werner, Tosi, and Gomez-Mejia, 2005) because ownership of larger portions of a company's equity allows exerting stronger influence on corporate actions, strategy and operations (Bergh and Sharp, 2015).

In other words, while a more fragmented ownership of the IJV implies high agency risks, a concentrated IJV ownership implies lower exposure to agency risks and more influence on the IJV strategic decisions. Based on this premise, we argue that this variable influences the strength of the parent firm's board interlocks on the propensity to undertake an IJV. More specifically, we argue that such an effect will be stronger when ownership is concentrated because the benefit of board interlocks are even more crucial when the IJVs' board is less balanced due to highly concentrated ownership. In so doing, the parent firm's board interlocks act as a substitute for the inferior resources provided by IJVs board that do not adequately represent the IJV's minority owners. The contribution of the parent firm's board interlocks on its propensity to engage in IJVs should thus be higher when the parent firm can have a significant portion of its equity.

HP2: the effect of board interlocks on the likelihood of forming an international JV is stronger if they can have a majority ownership of the JV.

3. Methodology

3.1 Sample and data

All data were obtained from the Italian Digital Database of Companies (AIDA), the Italian branch of Bureau Van Dijk group. In order to improve the accuracy of this dataset, we double-checked and hand-collected ownership and governance data from official public filings obtained from the Italian Chamber of Commerce, which represents a reliable source of information for Italian companies (Miller et al. 2017). In order to identify SMEs, we selected only those with less than 250 employees and a turnover below 50 million euros, following the definition given by European Commission. Among these firms, we selected only those that possess at least one JV in the year 2007, 2008, and 2009. In order to identify JVs, we used AIDA dataset and we considered only those subsidiaries controlled by at least two partners each with a control percentage between 10 and 90%. This is in line with the definition provided by both Organization for Economic Cooperation and Development (OECD) and International Monetary Fund (IMF), which considers FDIs only those subsidiaries held abroad with a stake of at least 10% (i.e. excluding purely financial investments), which is regarded as an ownership threshold that leaves a minimum grey area of "ultimate control" (Buckley, 2014: 237). Our final dataset comprises 604 domestic and 247 international JVs, for a total of 841.

The dependent variable *internationaljv* is a dummy that equals 1 if the JV was international and 0 if the JV was domestic.

The independent variable *board interlocks* is an ordinal variable that reflects the total number of the parent firms' board interlocks, i.e. the number of other companies' boards on which sit the directors of the parent firms (Kor & Sundaramurthy, 2009).

The moderating variable *ownership concentration* reflects the degree of dispersion of a JV's ownership. It was computed as the Herfindahl– Hirschman Index of the percentage of ownership held by the JV shareholders, i.e. the sum of the squares of the ownership stakes. Larger values of this measure reflect more concentrated ownership.

We also controlled for a number of factors that may affect the formation of international over domestic IVs: *family shareholder* is a dummy variable that equals 1 if the largest owner is a family firm; number of shareholders*managers* is an ordinal variable that reflects the number of managers that work in the JV that previously worked for any of the parent companies; independence is an indicator computed by Bureau Van Dijk that reflects the extent to which a company is independent of its owners; assets (ln) is a continuous variable that reflects the JV's size and it has been computed as the natural logarithm of the JV's assets; number of parents is an ordinal variable reflecting the total number of owners of the IV; *parent1 assets (ln)* and *parent2 assets (ln)* are two variables reflecting the size of the two owners having the larger number of shares and they have been computed as the natural logarithm of their assets plus 1 (non-corporate owners have zero assets); finally, *parents in same industry* is a dummy variable that equals 1 if the two largest owners operate in the same industry (same NACE code) and 0 otherwise. In Table 1 we report descriptive statistics and correlations among the variables. More specifically, Table 1 indicates that 28% of the JVs are international. On average, JVs in our sample are owned by about 4 parents and the parents with the majority stakes tend to be bigger in size than the others. Interestingly, only about 11% of these parent firms operate in the same industry and about 40% of these parents are family firms. It is also interesting that a relatively small number of the JV's managers previously worked for the parent firm (0.63 on average). Finally, the average number of board interlocks for the parent firms is 11.43 and the standard deviation of 12.24 indicates that the distribution is skewed to the right.

Tab. 1: Descriptive statistics and correlation matrix

		Obs	Mean	SD	Min	Max	1	2	3	4	5	6	7	8	9	10	11	12	13
1	internationaljv	841	0.28	0.45	0.00	1.00	1.00												
2	board interlocks	831	11.43	12.24	1.00	87.00	0.12	1.00											
3	ownership concentration	841	0.38	0.16	0.02	0.80	0.13	0.07	1.00										
4	family shareholder	831	0.40	0.49	0.00	1.00	-0.05	-0.02	-0.01	1.00									
5	number of shareholders-manag	841	0.63	0.97	0.00	9.00	-0.17	-0.07	-0.22	0.02	1.00								
6	independence	841	2.64	0.86	0.00	5.00	-0.04	0.01	-0.26	0.03	0.11	1.00							
7	assets (In)	841	7.86	1.63	0.28	13.92	-0.03	0.08	0.04	0.10	-0.02	0.02	1.00						
8	number of parents	841	3.86	5.23	2.00	93.00	-0.06	0.00	-0.30	0.02	0.31	0.15	0.01	1.00					
9	parent1 assets (In)	841	2.79	2.21	0.00	10.79	0.05	0.13	0.11	0.17	-0.09	-0.10	0.24	0.04	1.00				
10	parent2 assets (In)	841	2.02	2.62	0.00	13.29	0.24	0.30	0.22	0.08	-0.29	-0.06	0.16	0.02	0.39	1.00			
11	parents in same industry	841	0.11	0.31	0.00	1.00	-0.01	-0.03	-0.07	-0.03	0.05	0.07	0.00	0.05	-0.08	0.03	1.00		
12	y2008	831	0.36	0.48	0.00	1.00	-0.10	-0.01	-0.08	0.14	0.07	0.02	0.00	0.08	0.02	-0.02	0.00	1.00	
13	y2009	831	0.21	0.41	0.00	1.00	0.08	-0.09	0.06	-0.16	-0.03	0.02	-0.04	-0.08	-0.04	-0.06	0.00	-0.39	1.00

4. Results

Before testing our hypotheses, for each model we make sure that our results are not dependent on unusual and influential data. For every model, we thus computed the Cook's D to derive its influence score on the dependent variable (Sharma & Yetton, 2003, Gong, Louis, & Sun, 2008, Dikova, Sahib, & Van Witteloostuijn, 2010). Cooks' D combines information on outliers (i.e. observations with high residual) and leverage (observations that strongly deviate from the mean). Based on the predicted Cook's D value, we excluded excessively influential observations (i.e. those that scored higher than 4/n, where *n* is the number of observations is our sample). As the number of observations that exceed the Cook's D threshold varies in every model, there is a slight variation in the number of observations from model to model. We then proceeded to test our hypotheses through Probit regressions with heteroskedasticity-robust standard errors; for each model, we also checked the absence of potential multi-collinearity issues through a VIF (Table 3).

Tab. 2: Results of the Probit regressions

		Model 1			Model 2			Model 3			
number of observations		808			807			807			
Prob > F		0			0			0			
R-squared		0.124			0.122			0.212			
	Coef.	Rob. Std.	P> t	Coef.	Rob. Std.	P> t	Coef.	Rob. Std.	P> t		
		Err.	1214	cocn	Err.	1214	00011	Err.	1214		
board interlocks				0.003	0.001	0.027	-0.006	0.003	0.068		
ownership concentration	0.117	0.094	0.212	0.143	0.094	0.127	-0.031	0.121	0.798		
board interlocks X							0.015	0.005	0.003		
ownership concentration							0.015	0.005	0.005		
family shareholder	-0.035	0.031	0.262	-0.024	0.031	0.444	-0.021	0.031	0.503		
number of shareholders-managers	-0.048	0.014	0.001	-0.053	0.014	0.000	-0.050	0.014	0.000		
independence	-0.012	0.017	0.480	-0.016	0.017	0.335	-0.011	0.017	0.524		
assets (In)	-0.020	0.009	0.032	-0.020	0.009	0.030	-0.018	0.009	0.043		
number of parents	-0.008	0.003	0.029	-0.002	0.003	0.452	-0.002	0.003	0.394		
parent1 assets (In)	-0.004	0.008	0.640	-0.007	0.007	0.331	-0.005	0.008	0.505		
parent2 assets (In)	0.043	0.007	0.000	0.037	0.008	0.000	0.037	0.007	0.000		
parents in same industry	-0.103	0.045	0.022	-0.104	0.045	0.020	-0.110	0.044	0.013		
y2008	-0.075	0.033	0.022	-0.073	0.033	0.024	-0.067	0.032	0.039		
y2009	0.056	0.043	0.190	0.069	0.043	0.107	0.069	0.043	0.106		
_cons	0.421	0.103	0.000	0.389	0.103	0.000	0.455	0.110	0.000		
Probit Regression		Model 1			Model 2			Model 3			
Number of obs		808			807			808			
Wald chi2		99.95			100.92			109.48			
Prob > chi2		0			0			0			
Pseudo R2		0.116			0.115			0.118			
Log pseudolikelihood		-419.126			-417.609			-417.101			
	Coef.	Rob. Std.	P> z	Coef.	Rob. Std.	P> z	Coef.	Rob. Std.	P> z		
	coen	Err.	1 - 1 - 1	coen	Err.	1 - 1 - 1	coen	Err.	1 / 1-1		
board interlocks				0.007	0.004	0.082	-0.032	0.016	0.045		
ownership concentration	0.281	0.283	0.321	0.301	0.288	0.296	-0.480	0.442	0.278		
board interlocks X							0.069	0.027	0.012		
ownership concentration							0.005	0.027	0.012		
family shareholder	-0.148	0.105	0.158	-0.116	0.105	0.268	-0.112	0.105	0.287		
number of shareholders-managers	-0.239	0.074	0.001	-0.245	0.075	0.001	-0.232	0.073	0.002		
independence	-0.043	0.058	0.455	-0.049	0.059	0.402	-0.028	0.060	0.643		
assets (In)	-0.071	0.031	0.022	-0.071	0.031	0.021	-0.067	0.031	0.028		
number of parents	-0.066	0.030	0.031	-0.060	0.030	0.045	-0.063	0.030	0.034		
parent1 assets (In)	-0.011	0.025	0.651	-0.023	0.025	0.359	-0.017	0.025	0.487		
parent2 assets (In)	0.126	0.022	0.000	0.111	0.023	0.000	0.113	0.023	0.000		
parents in same industry	-0.421	0.186	0.024	-0.413	0.185	0.026	-0.432	0.183	0.018		
y2008	-0.249	0.116	0.032	-0.244	0.116	0.036	-0.222	0.116	0.056		
y2009	0.175	0.129	0.175	0.209	0.130	0.107	0.201	0.129	0.118		
_cons	0.139	0.341	0.684	0.093	0.344	0.788	0.418	0.386	0.279		

Tab. 3: Variance Inflation Factor (VIF)

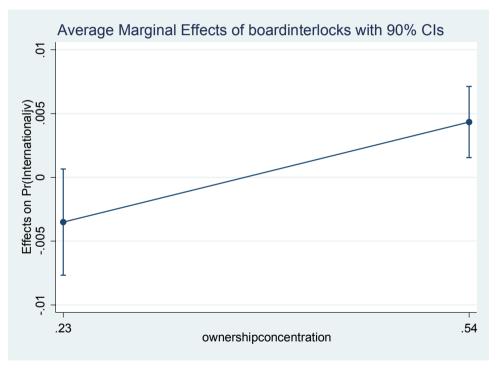
Variable	VIF	1/VIF	VIF	1/VIF
board interlocks X			10.49	0.005
ownership concentration			10.49	0.095
parent2 assets (In)	1.43	0.699	1.42	0.706
number of shareholders-managers	1.29	0.774	1.30	0.769
number of parents	1.26	0.795	1.26	0.794
ownership concentration	1.25	0.802	2.29	0.437
parent1 assets (In)	1.23	0.810	1.25	0.801
y2009	1.21	0.827	1.21	0.826
y2008	1.19	0.837	1.20	0.836
board interlocks	1.13	0.882	8.71	0.115
independence	1.09	0.922	1.09	0.921
family shareholder	1.08	0.927	1.08	0.925
assets (In)	1.07	0.932	1.07	0.931
parents in same industry	1.02	0.980	1.02	0.981
Mean VIF	1.19		2.47	

Our first hypothesis was that a larger number of board interlocks at the parent firm would facilitate the formation of IJVs based on the argument that board interlocks act as a mean to reduce information asymmetries in a foreign country and decrease exposure to the liability of foreignness. As shown, in Model 2 of Table 2, the coefficient of our independent variable *board interlocks* is positive and statistically significant. This result is consistent with our arguments, which provides empirical support for our first hypothesis.

Our second hypothesis was that such positive effect of the parent firms board interlocks on the formation of an IJV would vary depending on the JV's ownership concentration. More precisely, we argued that the more concentrated is a JV's ownership and the more board interlocks mattered for establishing a JV in a foreign country. Model 3 of Table 2 shows that the interaction term board interlocks X ownership concentration is positive and strongly statistically significant. In Figure 1 we present a graphical representation of the conditional effects of board interlocks at various level of the moderating variable ownership concentration (one standard deviation above and one below the sample mean). As the figure shows, the effect of board interlocks is negative but not statistically significant at one standard deviation below the moderator's mean. At one standard deviation above the mean, however, the effect becomes positive and statistically significant, indicating that the positive main effect of *board interlocks* is amplified when the majority owner holds a significant portion of the IV's shares. Based on the marginal effects of the Probit model, each board interlock increases the likelihood of undertaking an international rather than a domestic JV of about 0.2%, which implies that such probability increases by 2.29% with 11.43 board interlocks (our sample mean) and by 4.75% with 23.67 board

interlocks (one standard deviation above the mean). The analysis of the conditional effects represented in Table 1 indicates that, when our measure of ownership concentration is 0.54 (one standard deviation above the mean), each board interlock increases the likelihood of undertaking an IJV of about 0.42%. At this level of the moderator, 11.43 board interlocks thus increase the likelihood of establishing an IJV by 4.84% and by 10.01% with 23.67 board interlocks, which is twice as strong of an effect than the one we obtain without considering the moderating effect of ownership concentration. These results are aligned with our arguments, thus providing support also for our second prediction.

Fig. 1: marginal effects of the independent variable (board interlocks) at 1 standard deviation above and below the sample mean of the moderator (ownership concentration).



To further comment on the results reported in Table 2, we can see that some of our control variables have a statistically significant effect on the formation of IJVs. First, the negative coefficient of *assets* (*ln*) indicates that JVs of larger size are more likely to be domestic than international. This may be due to an attempt to control the size of the investment exposed to risks deriving from doing business in a foreign market. Second, the negative coefficient of *number of shareholders-managers* indicates that JV mangers previously working for the parent companies is negatively associated to the formation of IJVs. An interpretation of this finding is that IJVs probably require foreign managers who have knowledge of the local market. Finally, the positive coefficient of *parents in same industry* indicate that two companies that operate in the same industry tend to form domestic rather than international JVs, possibly because firms that form JVs to leverage synergies deriving from economies of scope prefer domestic environments whereas in international contexts they rather tap into synergies that are not industry-related.

5. Discussion and conclusion

Global competition and the need to access to resources that are not available in domestic markets force firms to expand beyond national borders, and international IVs can represent for SMEs a great strategic means to grow despite resource constrains. However, information asymmetries and the lack of knowledge about foreign markets often discourage SMEs to engage in IJVs. Board of directors have a key role in overcoming this "motivational gap" and in leading the firms to the formation of these ventures (Debellis et al., 2020). In this article, we have contributed to the emerging debate about boards in SMEs by investigating how board interlocks affect firms' likelihood to engage in IJVs. Prior research in SMEs has rarely investigated on the involvement of board in determining firms' strategies (Machold, Huse, Minichilli, and Nordqvist, 2011) and this study aims to advance research on this regard. Moreover, research on the effects of director interlocks has produced mixed and sometimes contradictory results (Zona et al. 2018). Some authors, adopting an agency perspective, argued that board interlocks negatively affect performance, as they represent an additional way for directors to pursue their own interests at the expense of shareholders (Fich and White, 2005, Conyon and Read, 2006). However, this perspective mostly applies to large and resource-rich firms where the potential for executive opportunism is heightened (Jensen, 1986). In this study we refer to SMEs, so we combine agency theory with a resource dependence theory perspective, paying also attention on the reduction of external dependencies due to board interlocks. In particular, board interlocks appear very important especially for resource-constrained firms and their efforts to manage their dependencies, such as the majority of SMEs (Zona et al., 2018).

In HP1, we argue that interlocking directorates may help to overcome the motivational gap to engage in IJVs, which is usually ascribed to SMEs (Hoffman and Schlosser, 2001). Our empirical tests support our hypothesis. The verified HP 1 thus shows that in SMEs, which are usually characterized by financial and managerial constrains, board interlocks may cover a crucial role in leading firms' expansion at international level. These findings also corroborate recent claims of Arzubiaga, Kotlar, De Massis, Maseda, and Iturralde (2018) who argued that many family-owned SMEs do not internationalize much because they use their board as mere "rubber stamping" body. The limited use of board potential, intended as low level of board interlocks, can be an explanation of why many SMEs do not overcome the motivational gap to engage in IJVs, although these constitute a strategic weapon for their growth.

In the HP 2, we measure the moderating role of ownership concentration. In a JV, ownership concentration affects the way a firm may influence JV activities (Kumar and Seth, 1998). On this regard, concentrated ownership allows to align the owners' interests and facilitates effective monitoring of parents' behaviour, whereas a lack of predominant control of the JV may represent constraining factors to the willingness to form IJVs. Moreover, if ownership is dispersed, it is likely that the firm, and consequently their directors, will not be able to exercise much influence in the JV and they will be less prone to engage in such ventures. Therefore, in HP2, we hypothesize and demonstrate that the positive effect of board interlocks is amplified in case of high ownership concentration.

Our study brings two main contributes to the literature at bridge between governance and internationalization of SMEs. First, we enhance the debate on how governance mechanisms affect the strategic change of SMEs (Brunninge et al., 2007) and we shed light on the link between board interlocks and firms' strategic decisions, which have reached quite diverse and sometimes contradictory results (Zona et al., 2018). Although SMEs are usually associated with low propensity to expand internationally, our study shows that if they make full use of their boards, especially relying on the skills and knowledge of directors that cover positions in different firms, they can overcome the willingness gap and expand internationally.

Second, we advance research on SMEs internationalization beyond exports. On this regard, Stoian et al. (2018) highlight that when operating with equity entry modes such as IJVs, SMEs need to acquire three types of knowledge: in-depth worldwide network knowledge, i.e. industry knowledge which allows to have a visionary outlook toward the future; hands-on foreign market knowledge, i.e. the ability to conduct daily business operations abroad; and international set-up knowledge, i.e. the ability to set up abroad via modes beyond exports. Considering that these types of knowledge are the result of the complex interplay among individuals and organizations, board interlocks become a crucial factor for internationalization as they enhance the exchange and the transfer of tacit experiential knowledge (Athanassiou and Nigh, 2000, Stoian et al., 2018). Our study thus puts in evidence the role high board interlocks as critical differentiator to gain the knowledge required to internationalize through JVs.

On a managerial perspective, we highlight the crucial role of the board

of directors in leading SMEs' internationalization. Many SMEs use the board as mere rubber-stamping mechanism (Arzubiaga et al., 2018) and this may explain why SMEs, which are often family-owned (Pukall and Calabrò, 2014), are less willing to engage in IJVs. Directors that sit in multiple boards can be really important for overcoming information limits and gaining legitimacy needed for engaging in IJVs. On this perspective, our study may help SME entrepreneurs to better evaluate the positive effects of those directors that have multiple board interlocks.

Our study is not exempted by limitations, which may however open new doors for future research. First, we did not measure all the features of our Italian focal firm's parent (e.g. age, ownership characteristics). We call future studies to advance this stream of research investigating on the aspects that may enhance SMEs propensity to engage in IJVs, also analysing the choice of partners. Second, our study focuses only on the *ex-ante* stage of IJV formation, while it would be interesting to investigate how SMEs structure IJV boards and if they are more or less successful than large MNEs in managing IJVs *ex-post*. For instance, it would be interesting to investigate if the IJV board established by SMEs is structured differently and what combination of governance mechanisms (e.g. contractual, relational) they would adopt compared to large MNEs. Investigating this phenomenon in detail would be important in order to shed new light on governance design by SMEs and how they anticipate and control for behaviour uncertainty and how they resolve conflicts when they occur. Finally, we do not take into account the partner firm characteristics. Recent research (e.g., Sestu and Majocchi, 2018) has shown that it is very important to investigate the nature of both partners. Future research should pay more attention to how host market institutional variables as well as partner firm organizational characteristics affect the entry mode choice.

References

Aldrich, H. E. & Pfeffer, J. (1976). Environments of organizations. *Annual Review of Sociology*, 2(1): 79-105.

Anderson, E. & Gatignon, H. (1986). Modes of foreign entry: A transaction cost analysis and propositions. *Journal of International Business Studies*, 17(3): 1-26.

Arzubiaga, U., Kotlar, J., De Massis, A., Maseda, A., & Iturralde, T. (2018). Entrepreneurial orientation and innovation in family SMEs: unveiling the (actual) impact of the Board of Directors. *Journal of Business Venturing*.

Athanassiou, N. & Nigh, D. (2000). Internationalization, tacit knowledge and the top management teams of MNCs. *Journal of International Business Studies*, 31(3): 471-87.

Balakrishnan, S. & Koza, M. P. (1993). Information asymmetry, adverse selection and jointventures: Theory and evidence. *Journal of Economic Behavior & Organization*, 20(1): 99-117.

Barkema, H. G., Bell, J. H., & Pennings, J. M. (1996). Foreign entry, cultural barriers, and learning. *Strategic Management Journal*, 17(2): 151-66.

Beamish, P. W. & Lupton, N. C. (2016). Cooperative strategies in international business and management: Reflections on the past 50 years and future directions. *Journal of World Business*, 51(1): 163-75.

Bergh, D. D. & Sharp, B. M. (2015). How far do owners reach into the divestiture process? Blockholders and the choice between spin-off and sell-off. *Journal of Management*, 41(4): 1155-83.

Bettinelli, C. (2011). Boards of directors in family firms: An exploratory study of structure and group process. *Family Business Review*, 24(2): 151-69.

Bøhren, Ø. & Strøm, R. Ø. (2010). Governance and politics: Regulating independence and diversity in the board room. *Journal of Business Finance & Accounting*, 37(9-10): 1281-308.

Boone, A. L., Field, L. C., Karpoff, J. M., & Raheja, C. G. (2007). The determinants of corporate board size and composition: An empirical analysis. *Journal of Financial Economics*, 85(1): 66-101.

Brouthers, K. D. & Hennart, J.-F. (2007). Boundaries of the firm: Insights from international entry mode research. *Journal of management*, 33(3): 395-425.

Brunninge, O., Nordqvist, M., & Wiklund, J. (2007). Corporate governance and strategic change in SMEs: The effects of ownership, board composition and top management teams. *Small Business Economics*, 29(3): 295-308.

Buckley, P. J. 2014. Forty years of internalisation theory and the multinational enterprise. *Multinational Business Review*, 22(3): 227-45.

Carney, M. (2005). Corporate governance and competitive advantage in family-controlled firms. *Entrepreneurship Theory and Practice*, 29(3): 249-65.

Carpenter, M. A. & Westphal, J. D. (2001). The strategic context of external network ties: Examining the impact of director appointments on board involvement in strategic decision making. *Academy of Management Journal*, 44(4): 639-60.

Connelly, B. L., Johnson, J. L., Tihanyi, L., & Ellstrand, A. E. (2011). More than adopters: Competing influences in the interlocking directorate. *Organization Science*, 22(3): 688-703.

Conyon, M. J. & Read, L. E. (2006). A model of the supply of executives for outside directorships. *Journal of Corporate Finance*, 12(3): 645-59.

Cox, T. H. & Blake, S. (1991). Managing cultural diversity: Implications for organizational competitiveness. *Academy of Management Perspectives*, 5(3): 45-56.

Dalton, D. R., Daily, C. M., Ellstrand, A. E., & Johnson, J. L. (1998). Meta-analytic reviews of board composition, leadership structure, and financial performance. *Strategic management journal*, 19(3): 269-90.

Dalton, D. R., Hitt, M. A., Certo, S. T., & Dalton, C. M. (2007). The fundamental agency problem and its mitigation: Independence, equity, and the market for corporate control. *Academy of Management Annals*, 1(1): 1-64.

Debellis, F., De Massis, A., Petruzzelli, A. M., Frattini, F., & Del Giudice, M. (2020).

Strategic agility and international joint ventures: The willingness-ability paradox of family firms. *Journal of International Management*: In press.

Devers, C. E., Wiseman, R. M., & Holmes Jr, R. M. (2007). The effects of endowment and loss aversion in managerial stock option valuation. *Academy of Management Journal*, 50(1): 191-208.

Dikova, D., Sahib, P. R., & Van Witteloostuijn, A. (2010). Cross-border acquisition abandonment and completion: The effect of institutional differences and organizational learning in the international business service industry, 1981–2001. *Journal of International Business Studies*, 41(2): 223-45.

Eisenhardt, K. M. & Schoonhoven, C. B. (1996). Resource-based view of strategic alliance formation: Strategic and social effects in entrepreneurial firms. *Organization Science*, 7(2): 136-50.

Fama, E. F. & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law and Economics*, 26(2): 301-25.

Fich, E. M. & White, L. J. (2005). Why do CEOs reciprocally sit on each other's boards? *Journal of Corporate Finance*, 11(1-2): 175-95.

Finkelstein, S. & Mooney, A. C. (2003). Not the usual suspects: How to use board process to make boards better. *Academy of Management Perspectives*, 17(2): 101-13.

Franko, L. G. (1971). Joint venture divorce in the multinational company. *The International Executive*, 13(4): 8-10.

Geringer, J. M. & Hebert, L. (1989). Control and performance of international joint ventures. *Journal of International Business Studies*, 20(2): 235-54.

Gong, G., Louis, H., & Sun, A. X. (2008). Earnings management, lawsuits, and stock-forstock acquirers' market performance. *Journal of Accounting and Economics*, 46(1): 62-77.

Gulati, R. & Westphal, J. D. (1999). Cooperative or controlling? The effects of CEO-board relations and the content of interlocks on the formation of joint ventures. *Administrative Science Quarterly*, 44(3): 473-506.

Hambrick, D. C. & Finkelstein, S. (1995). The effects of ownership structure on conditions at the top: The case of CEO pay raises. *Strategic Management Journal*, 16(3): 175-93.

Hennart, J. F. (1988). A transaction costs theory of equity joint ventures. *Strategic Management Journal*, 9(4): 361-74.

Hillman, A. J., Cannella, A. A., & Paetzold, R. L. (2000). The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change. *Journal of Management Studies*, 37(2): 235-56.

Hillman, A. J. & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review*, 28(3): 383-96.

Hillman, A. J., Withers, M. C., & Collins, B. J. (2009). Resource dependence theory: A review. *Journal of Management*, 35(6): 1404-27.

Hoffmann, W. H. & Schlosser, R. (2001). Success factors of strategic alliances in small and medium-sized enterprises—An empirical survey. *Long Range Planning*, 34(3): 357-81.

Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*: Sage publications.

Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2): 323-29.

Kano, L. & Verbeke, A. (2018). Family firm internationalization: Heritage assets and the impact of bifurcation bias. *Global Strategy Journal*, 8(1): 158-83.

Katz, D. & Kahn, R. L. (1978). *The social psychology of organizations*: Wiley New York.

Kogut, B. (1988). Joint ventures: Theoretical and empirical perspectives. *Strategic Management Journal*, 9(4): 319-32.

Kor, Y. Y. & Misangyi, V. F. (2008). Outside directors' industry-specific experience and firms' liability of newness. *Strategic Management Journal*, 29(12): 1345-55.

Kor, Y. Y. & Sundaramurthy, C. (2009). Experience-based human capital and social capital of outside directors. *Journal of Management*, 35(4): 981-1006.

Kumar, S. & Seth, A. (1998). The design of coordination and control mechanisms for

managing joint venture-parent relationships. *Strategic Management Journal*, 19(6): 579-99.

Machold, S., Huse, M., Minichilli, A., & Nordqvist, M. (2011). Board leadership and strategy involvement in small firms: A team production approach. *Corporate Governance: An International Review*, 19(4): 368-83.

Mizruchi, M. S. & Stearns, L. B. (1988). A longitudinal study of the formation of interlocking directorates. *Administrative Science Quarterly*: 194-210.

Narula, R. (2004). R&D collaboration by SMEs: new opportunities and limitations in the face of globalisation. *Technovation*, 24(2): 153-61.

Nemeth, A. & Nippa, M. (2013). Rigor and relevance of IJV exit research. *Management International Review*, 53(3): 449-75.

Nippa, M. & Reuer, J. J. (2019). On the future of international joint venture research. *Journal of International Business Studies*: 1-43.

Oh, H., Labianca, G., & Chung, M.-H. (2006). A multilevel model of group social capital. *Academy of Management Review*, 31(3): 569-82.

Pennings, J. M. (1980). Interlocking directorates: Origins and consequences of connections among organizations' Board of Directors: Jossey-Bass.

Perkins, S., Morck, R., & Yeung, B. (2014). Innocents abroad: the hazards of international joint ventures with pyramidal group firms. *Global Strategy Journal*, 4(4): 310-30.

Pinelli, M., Cappa, F., Franco, S., & Peruffo, E. (2018). Competenze dei fondatori e performance delle start-up: Un'analisi empirica. *Piccola Impresa/Small Business*(1): 59-80.

Pukall, T. J. & Calabrò, A. (2014). The internationalization of family firms: A critical review and integrative model. *Family Business Review*, 27(2): 103-25.

Reuer, J. J., Klijn, E., & Lioukas, C. S. (2014). Board involvement in international joint ventures. *Strategic Management Journal*, 35(11): 1626-44.

Reuer, J. J., Klijn, E., van den Bosch, F. A., & Volberda, H. W. (2011). Bringing corporate governance to international joint ventures. *Global Strategy Journal*, 1(1-2): 54-66.

Reuer, J. J. & Koza, M. P. (2000). Asymmetric information and joint venture performance: Theory and evidence for domestic and international joint ventures. *Strategic Management Journal*, 21(1): 81-88.

Reuer, J. J. & Leiblein, M. J. (2000). Downside risk implications of multinationality and international joint ventures. *Academy of Management Journal*, 43(2): 203-14.

Reuer, J. J. & Miller, K. D. (1997). Agency costs and the performance implications of international joint venture internalization. *Strategic Management Journal*, 18(6): 425-38.

Robinson, G. & Dechant, K. (1997). Building a business case for diversity. *Academy of Management Perspectives*, 11(3): 21-31.

Salancik, G. R. & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly*: 224-53.

Sciascia, S., Mazzola, P., & Chirico, F. (2013). Generational involvement in the top management team of family firms: Exploring nonlinear effects on entrepreneurial orientation. *Entrepreneurship Theory and Practice*, 37(1): 69-85.

Sestu, M. C. & Majocchi, A. (2018). Family Firms and the Choice Between Wholly Owned Subsidiaries and Joint Ventures: A Transaction Costs Perspective. *Entrepreneurship Theory and Practice*: 1-22.

Sharma, R. & Yetton, P. (2003). The contingent effects of management support and task interdependence on successful information systems implementation. *MIS Quarterly*, 27(4): 533-56.

Stevenson, W. B. & Radin, R. F. (2009). Social capital and social influence on the board of directors. *Journal of Management Studies*, 46(1): 16-44.

Stoian, M.-C., Dimitratos, P., & Plakoyiannaki, E. (2018). SME internationalization beyond exporting: A knowledge-based perspective across managers and advisers. *Journal of World Business*, 53(5): 768-79.

Sundaramurthy, C., Pukthuanthong, K., & Kor, Y. (2014). Positive and negative synergies between the CEO's and the corporate board's human and social capital: A study

of biotechnology firms. Strategic Management Journal, 35(6): 845-68.

Tian, J., Haleblian, J., & Rajagopalan, N. (2011). The effects of board human and social capital on investor reactions to new CEO selection. *Strategic Management Journal*, 32(7): 731-47.

Tosi, H. L. & Gomez-Mejia, L. R. (1989). The decoupling of CEO pay and performance: An agency theory perspective. *Administrative Science Quarterly*: 169-89.

Volberda, H. W. (1996). Toward the flexible form: How to remain vital in hypercompetitive environments. *Organization Science*, 7(4): 359-74.

Werner, S., Tosi, H. L., & Gomez-Mejia, L. (2005). Organizational governance and employee pay: How ownership structure affects the firm's compensation strategy. *Strategic Management Journal*, 26(4): 377-84.

Westman, C. & Thorgren, S. (2016). Partner conflicts in international joint ventures: a minority owner perspective. *Journal of International Management*, 22(2): 168-85.

Westphal, J. D. (1999). Collaboration in the boardroom: Behavioral and performance consequences of CEO-board social ties. *Academy of Management Journal*, 42(1): 7-24.

Williamson, O. E. (1991). Comparative economic organization: The analysis of discrete structural alternatives. *Administrative Science Quarterly*: 269-96.

Zahra, S. A., Filatotchev, I., & Wright, M. (2009). How do threshold firms sustain corporate entrepreneurship? The role of boards and absorptive capacity. *Journal of Business Venturing*, 24(3): 248-60.

Zahra, S. A. & Pearce, J. A. (1989). Boards of directors and corporate financial performance: A review and integrative model. *Journal of Management*, 15(2): 291-334.

Zona, F., Gomez-Mejia, L. R., & Withers, M. C. (2018). Board interlocks and firm performance: Toward a combined agency–resource dependence perspective. *Journal of Management*, 44(2): 589-618.

Zona, F. & Zattoni, A. (2007). Beyond the black box of demography: Board processes and task effectiveness within Italian firms. *Corporate Governance: An International Review*, 15(5): 852-64.