



Article Trust, Control, and Value Creation in Strategic Networks of SMEs

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Abstract: This paper investigates the role of trust and control in networks of small and medium-sized enterprises (SMEs), with a focus on both their direct and interaction effects on value creation. To delve into the interplay between trust and control, we unpack control mechanisms into three different forms: output, process, and social control. Our hypotheses are tested on a sample of 58 Italian SME networks based on formal agreements. Results show that the competitiveness and sustainability of inter-firm networks require trust-based relationships among entrepreneurs. Additionally, the adoption of output control mechanisms reinforces the positive link between trust and value creation, whereas a substitution effect exists between trust and process control and, with limited significance, between trust and social control.

Keywords: trust; control; value creation; strategic networks; small and medium-sized enterprises; sustainable cooperation

1. Introduction

Over time, a vast body of literature has been produced on strategic networks and on the importance of inter-organizational cooperation for firm competitiveness, particularly in the context of small and medium-sized enterprises (SMEs) [1–4]. Indeed, strategic networks are typically considered an effective way to overcome the constraints often associated with the small size. Leveraging on collaboration, SMEs expand their set of resources, capabilities, and knowledge bases, which in turn can lead to the achievement of sustainable competitive advantages [5,6]. Research has highlighted a variety of benefits deriving from network relationships in terms of lowering transaction costs, increasing social capital, achieving economies of scale, and fostering internationalization [7–10]. In addition, more recent research has widened the concept of value creation in network contexts and underscored that networks may contribute from multiple aspects to a firm's sustainable competitiveness. For example, some studies demonstrate that networks may encourage SMEs to adopt sustainability practices and play a crucial role in stimulating firms to address issues related to supply chain sustainability [11,12].

While networks can play a crucial role for firm competitiveness, making cooperation sustainable over time is not an easy task because of the relevant challenges posed by diversity among partners. An increasing number of studies highlights the importance of governance mechanisms for successful cooperation [13–15]. In particular, the relational governance and contractual governance perspectives highlight that trust among entrepreneurs [16] and control mechanisms [17] respectively are two key factors that contribute to enhancing the competitiveness and sustainability of inter-firm networks.

However, the nature of the relationship between trust and control for value creation in strategic networks is not yet completely clear, since extant research offers different perspectives and mixed empirical findings. In particular, whether there is a complementarity [18–20] or a substitutive relationship [21–24] between trust and control is still debatable. Such divergent views suggest that

to advance extant research, more nuanced perspectives and further empirical analyses are needed. In their conceptual framework, Das and Teng [25] suggest that the relationship between trust and control can be either complementary or substitutive, depending on the type of control. Consistent with this perspective, in a very recent analysis on a sample of international dyadic relationships, Balboni et al. [15] find that the interaction effect of trust and formal control is contingent upon the type of control, namely process versus output control.

We hence extend this line of inquiry by analyzing the role played by trust and control in inter-organizational multiparty relationships and, in particular, by exploring the interaction effect of trust and control on value creation in strategic networks of SMEs. The objective of this paper is to address the following questions: Do the level of trust among entrepreneurs and the presence of control mechanisms foster network value creation? How do trust and control mechanisms interact in making the collaboration sustainable and thus enhance member firms' competitiveness? To delve deeper into the relationship between trust and control in terms of complementarity or substitutability, we unpack the mechanisms of control into three different forms: output control, process control, and social control [26]. We test our hypotheses on a sample of 58 Italian SME formally structured networks. Our results contribute to the literature on the role of governance mechanisms do differ in the way they alter the trust–performance link. By offering new unique insights on how trust and different control mechanisms influence value creation in networks, the study also provides implications for the management and governance of inter-firm collaborative arrangements.

2. Literature Review

2.1. SME Networks and Sustainable Competitiveness

The literature has largely demonstrated the role of networks in enhancing a firm's competitiveness, especially in the case of SME networks. Being long-term agreements between different, yet linked organizations [27], networks are considered as an alternative organizing mechanism to both markets and firms that allow member firms to obtain a variety of benefits, such as lowering transaction costs, increasing social capital, and gaining access to resources and knowledge [1,8,9]. On the one hand, network members are not completely dependent on each other, as is the case with vertically integrated firms. Consequently, firms can achieve economies of scale and scope and simultaneously avoid the disadvantages of vertical integration, such as the coordination costs and limited strategic flexibility. On the other hand, the inter-organizational ties established within the network endure and have strategic importance for member firms [13], enabling them to go beyond the win–lose logic of arm's length relationships and to gain competitive advantage over competitors outside the network.

The entrepreneurship literature has emphasized the importance of networks for small firms, particularly as a means of obtaining resources that would otherwise be unavailable to them [27]. Indeed, by working more closely with other firms, SMEs can access and share expertise, resources, and knowledge. The literature has also shown that, particularly in the context of SMEs, networks play a crucial role in fostering innovation and enhancing innovation capability, since innovations are increasingly produced in networks that combine different knowledge and asset bases [28,29]. Moreover, international business research has also shown that firms may leverage on networks to capture business opportunities in foreign markets and to overcome the barriers to the achievement of higher levels of internationalization [30,31].

Taken together, these studies demonstrate that networks contribute to value creation from multiple respects. More recent studies underscore that, rather than being associated with merely financial benefits or learning outcomes, the value creation processes that take place in networks involve a broader variety of aspects of firm sustainable competitiveness. Research has thus widened the concept of value creation in the network context to better highlight the multiple benefits that engaging in a network may involve. In this context, the notion of value encompasses a broader scope than just the more

traditionally adopted lenses of financial performance [29,32]. Following this view, in our framework, we purposely refer to the concept of network value creation rather than network performance to emphasize that the value created through networks should be intended as a broad concept that goes beyond a merely financial value.

A primary contribution to a broader view of value creation came from Porter and Kramer [33], who outline the risks, in terms of loss of legitimacy for business and thus of long-term success, for companies that remain trapped into an outdated, narrow view of value creation that is entirely focused on short-term financial performance. This expanded view of value is rooted in the evidence that an important link exists between business and society, which leads to the notion of "shared value". From such a perspective, the connection between societal issues and economic concerns lies at the core of the firm process of value creation in modern capitalism [33]. Based on the recognition of the strong linkage and mutual dependence between firms and society, the shared value perspective suggests that firms should incorporate societal pressures and issues into the business models and frameworks used to define their strategies. Performing an economic activity also involves the creation of value for society, which, in turn, implies that sustainability issues are not peripheral relative to what companies do on an ordinary basis.

Thus, the network can serve as an avenue for societal change and for the enhancement of SME sustainability. While the role of networks for SMEs' competitive advantages and economic performance has been largely acknowledged, the exploration of the link between networking and sustainability is more recent [34]. Some studies have provided evidence of a positive linkage between networking and the adoption of sustainability practices, thus indicating that not only do networks positively affect the identification and exploitation of market opportunities, but they also encourage greater engagement in sustainability. Indeed, the literature suggests that SMEs leverage networking to acquire and develop resources, including those required for the successful implementation of sustainability practices. For example, based on a sample of more than 800 firms in New Zealand, Collins et al. [11] suggest that being part of a network positively influences SMEs' achievement of sustainability goals. Specifically, several barriers are considered to hinder SMEs' adoption of sustainability practices, including the perception that they have little or no environmental impact, the lack of environmental competences, and the concern about the costs associated with a sustainable behavior [11,35,36]. Networks may enable SMEs to overcome these barriers, thus encouraging SMEs to participate in sustainability programs. These arguments suggest that networks can enable SMEs to embrace the threefold perspective of economic, social, and environmental sustainability by contributing to the achievement of greater levels of sustainability along all the three dimensions [12]. Given the role of networks for a firm's sustainable competitiveness, understanding the governance mechanisms that enhance network effectiveness has primary importance.

2.2. The Role of Trust in Inter-Firm Strategic Networks

The analysis of the role of trust-based relationships in economic systems has received increasing attention over time [37,38]. Trust is considered to be a distinctive and valuable strategic resource that plays a key role as a major success factor in inter-firm networks [39]. Indeed, trust provides a useful mechanism that enables firms to work together more effectively and enhances the sustainability of the cooperation, since it facilitates cohesion and collaboration between people and institutions [40].

In general, trust can be defined as the expectation that an actor carries out its obligations to others and behaves predictably well and honestly even when the possibility of opportunistic behavior exists [5]. Trust is therefore an attitude that results from a positive assessment of facts, circumstances, and relationships, and that leads to reliance on others with a feeling of safety even in potentially ambiguous situations [20,22].

In business cooperation, a partner can be trusted when it is worthy of the trust of others, i.e., when it does not try to take advantage of the vulnerabilities and weaknesses of other partners [41]. By applying

this concept to strategic networks, it is possible to consider trust within a network as the degree of trust that each individual member gives to the network itself and to each partner [16].

Managing alliances is not a simple task, especially because of the conflicts that can arise from the potentially opportunistic behavior of entrepreneurs [42]. Drawing on the theoretical perspective of relational governance [43,44], alliance scholars have underlined the crucial role of trust in mitigating the risks of opportunistic behaviors in inter-organizational relationships. Trust between enterprises involved in a network is a key component of cooperation since it ensures that each party acts responsibly, reliably, and honestly, respecting the commitments made on the basis of its competences [16,23,45].

For these reasons, trust often comes as a prerequisite to building a network. However, several studies have argued that trust is not simply a pre-existing element in cooperative relationships between two or more actors, but also the outcome of those relationships. Indeed, the daily interactions between partners associated with sharing experiences and showing their attitudes in different situations collectively increase the degree of mutual knowledge and thus foster the development of a trust-based relationship.

2.3. The Role of Control in Inter-Firm Strategic Networks

Control is another key dimension of cooperation, since enterprises are more likely to collaborate when an adequate level of control over each partner's work is guaranteed [46]. Building on the perspective of contractual governance, scholars have analyzed how control mechanisms can ensure the correct behavior of partners in inter-firm collaborations [14,15,47–50]. Within inter-firm strategic networks, because partnering companies are required to jointly achieve common benefits without renouncing to their own interests, there is a need to balance cooperation and competition [48–50]; while cooperation allows the achievement of common benefits and ensures the stability of the relationship, competition helps protect and maximize individual interests. However, the trade-off between cooperation and competition is not easily achievable, as partners' defense of individual interests can originate conflicts [25]. For successful cooperation, it is therefore essential that the strategies of the partners involved are shared and coordinated and control mechanisms play a vital role in such coordination task.

Any action that influences the behavior of another subject is a form of control [25]. Specifically, in inter-firm networks, the purpose of control is to ensure that partners do not act opportunistically but pursue the collaborative strategy. Control can be considered as a process of regulation by which the behavior of the actors in a system is made more predictable, thanks to the definition of standards [17]. Control is a fundamental governance mechanism in any organizational context, regardless of whether it is a single enterprise or a network of enterprises; by driving individual behavior towards the effective accomplishment of organizational goals, control guarantees greater chances of achieving the objectives identified by the organization. However, to prevent possible cost increases arising from the need for subsequent corrective actions, ex-ante control on objectives should be combined with ex-post control on results. In other words, to reduce future uncertainty, an effective control system not only involves the measurement and analysis of the activities already carried out but should necessarily also be forward-looking and guided by prospective objectives [51].

In inter-firm strategic networks, control can be defined as a system of mechanisms and norms by which one partner influences the behavior of the others in order to make their actions predictable [52,53] and to bind them to the interest of cooperation. Control fulfils multiple functions; primarily, it reduces the risk of opportunism [54] and ensures that the network activities are correctly performed and that the assets and resources conferred are used appropriately [20,22,55]. Control also reduces uncertainty arising from potential opportunistic behavior by increasing partner commitment and involvement in the pursuit of common goals.

Based on the object of control, three different control forms have been identified [26], namely (a) output control; (b) process control; and (c) social control. The first two forms refer to formal control mechanisms, while the third one involves informal control mechanisms.

Outcome control is the mechanism through which results achieved by the network are monitored by means of a comparison with the objectives set by the partners during the negotiation process. The assessment of goal achievement may produce either incentives when the expected outcomes are met or penalties when they are not [25]. Process control defines formal behavioral rules and procedures and specifies the actions and behaviors expected by the parties in order to achieve the stated goals and, therefore, to monitor the implementation of planned activities [26]. Social control contributes to make the behavior of the network partners more predictable by means of non-contractual solutions based on non-written rules, such as social norms and organizational culture [21,25,56,57]. Specifically, social control encourages the development of social interactions that induce partners to share values. This type of control has therefore the purpose of guiding the behavior of partner firms and of reducing potential goal misalignments through the creation of shared culture and values based on socialization mechanisms.

3. Theoretical Framework and Hypotheses

3.1. The Effects of Trust on Network Value Creation

A vast and consolidated literature has been developed over the decades on the effects of trust among partners on the success of inter-firm networks, particularly in the context of international alliances [15,40,45,55,57–65]. Although empirical research has provided mixed findings on the relationship between trust and performance, much of this research agrees on the existence of a positive effect of trust on alliance performance. This effect is primarily explained by the argument that trust reduces the perception of risk about possible opportunistic behavior of partners, thus enforcing the governance of the alliance [52]. By reducing the threat of opportunistic behavior, trust promotes the sharing of information among partners and leads them to behave in the interests of the network.

A variety of theoretical perspectives has been adopted to motivate the positive impact of trust on the success and sustainability of inter-firm cooperation [39]. From a transaction cost perspective, trust lowers transaction costs and reduces the risk of conflicts between partners. The relational governance perspective shows that trust acts as a socially-embedded governance mechanism that reduces the exchange hazards and contributes to greater commitment [15]. Additionally, higher levels of trust encourage partner firms to share knowledge and competences, which resource-based view scholars identify as a key source of sustained competitive advantage [5].

Several reasons could therefore explain the positive effect of trust on successful cooperation, based on the arguments that trust: (a) encourages the expected cooperative conduct; (b) mitigates opportunistic behavior in favor of a shared interest; (c) improves the capabilities brought by each partner, boosting their level of commitment to the cooperation; (d) facilitates the exchange of information and knowledge between partners, thus fostering the functioning of the alliance; (e) makes the relationship less formal from a contractual standpoint, increasing its flexibility; and (f) makes the resolution of conflicts easier and reduces the uncertainty of partners' conduct, particularly when they come from different cultural, economic, and political contexts [15,16,20,66].

Finally, by reducing the need to adopt complex control mechanisms aimed at mutual monitoring, trust allows partners to save time in negotiating a common solution for unexpected problems and thus to have more time to fulfil the agreement and to implement network activities. All these factors can make the alliance more efficient and effective and, hence, positively affect value creation in strategic networks [67].

In general, due to the greater flexibility and lower operating costs of an alliance based on a trustworthy relationship, trust exerts a positive impact on partners' levels of satisfaction with network performance [22]. In contrast, the lack of trust can lead partners to believe that their efforts to cooperate are unproductive. This can generate a negative spiral, characterized by declining efficiency and increasing dissatisfaction with the network, thus undermining the preservation of the cooperation strategy [61]. These arguments lead to the following hypothesis:

Hypothesis 1 (H1). *In a strategic network, there is a positive relationship between the level of trust among member firms and network value creation.*

3.2. The Effect of Control on Network Value Creation

The adoption of control mechanisms aims at fostering the implementation of network activities and the correct use of the network resources in order to achieve the expected outcomes of cooperation [15].

Transaction cost theory contributes to explaining the role of control as a governance mechanism oriented to reduce the risk of opportunistic behavior [54]. According to this theory, bounded rationality and information asymmetry are the two main causes of opportunistic behavior within relationships involving independent firms [37]. By performing the function usually exerted by power in hierarchical relationships, control mechanisms enable each firm within a network to mitigate the risk of opportunistic behavior by its partners [21].

Although the results of empirical analyses on the role of control in governance and the outcomes of alliances are mixed, the majority of studies tend to predict a positive relationship between control and performance [26]. Indeed, through its formal and informal mechanisms, control pushes partners to respect the obligations undertaken and to fulfil the tasks assigned using network resources properly. Control mechanisms promote the alignment of individual behaviors towards the shared interest of the collaboration, thus positively affecting the process of value creation in the strategic network [68] and increasing the chance to achieve the expected results [69]. However, in order to delve deeper into the impact of control systems on network performance, control mechanisms should be regarded as a heterogeneous rather than a homogeneous set. Research has underscored the multidimensionality of control [14,24,26,59]. As discussed above, output control, process control, and social control differ in the dynamics through which they affect the behaviors of partners and thus network performance. Output control is based on defining the expected outcome and on monitoring the results achieved by the network; process control focuses on the definition and monitoring of the procedures and actions of the partners involved in implementing the collaborative strategy [21]; social control indicates the informal mechanisms that encourage the development of social interactions, making the behavior of the firms more predictable and aligned to the interests of the network as a whole [57].

Therefore, although we argue that the adoption of control mechanisms has a positive effect on value creation in a strategic network, it is appropriate to analyze their effects on networks separately.

In terms of formal control mechanisms, output control and process control are assumed to have a positive effect on network performance via two different types of guidance on the parties' behaviors, i.e., control and coordination, respectively [15,25,26]. Specifically, output control performs a controlling function by reducing the hazards associated with measurement difficulty and the risk of an unbalanced value appropriation by one partner. Thus, such a control mechanism enhances the accomplishment of the desired outcomes of cooperation. Focusing on the definition of formal procedures and the monitoring of partners' behaviors, process control clarifies the expectations about tasks and responsibilities of each partner, thus leading to a more effective coordination of partners' activities towards the desired outcomes.

Social control relies on personal relationships between managers of firms, which help to build shared values and organizational culture and thus a mutual understanding among partners [21,55,59]. These repeated interactions enable the firms to better adjust their behavior to varying environmental conditions in a way that is consistent with the strategic objectives of the collaboration. Social interactions also facilitate inter-firm knowledge flows [26]. The network performance is thus enhanced through social control.

We therefore formulate the following hypotheses on the effects of the three different forms of control:

Hypothesis 2a (H2a). In a strategic network, there will be a positive relationship between the adoption of output control mechanisms and value creation.

Hypothesis 2b (H2b). *In a strategic network, there will be a positive relationship between the adoption of social control mechanisms and value creation.*

Hypothesis 2c (H2c). *In a strategic network, there will be a positive relationship between the adoption of process control mechanisms and value creation.*

3.3. The Interaction Effect of Trust and Control on Network Value Creation

Trust and control denote two different structures of governance that are likely to impact the process of value creation in strategic networks not only individually but also jointly, through mutual influence. The link between trust and control is complex, and research has suggested different interpretations of how trust and control relate [70]. Using a coevolutionary approach, Inpken and Currall [55] argue that "trust and control coevolve over time, with trust influencing control and being influenced by the type of controls that the partners implement" (p. 589). Trust is considered to create the initial climate that shapes partner interactions. In turn, these interactions affect the subsequent decisions about the nature of controls.

Many scholars have considered trust and control as mutually substitutive governance mechanisms in preserving the relationship between firms and making it sustainable over time [57,59,71]; the more a firm trusts its partners, the lower the need for the adoption of control mechanisms. Researchers argue that trust and control can be seen as alternative modes for making partners' activities predictable [20] and thus foster the pursuit of the network objectives. Research has also explained the substitution effect between trust and control based on purely economic considerations. Since both governance mechanisms may be costly in terms of time and resources required from partners for their implementation, their simultaneous presence may be redundant and inefficient, if not counter-productive and expensive [21].

Other scholars have seen trust and control as complementary [22,25], suggesting that they are mutually reinforcing mechanisms. On the one hand, control can foster the development of trust-based relationships because it reduces the risk of opportunistic behaviors; on the other hand, trust helps to reduce partners' resistance to accept control mechanisms.

In this paper we do not specifically address the question of whether the adoption of control mechanisms enhances or undermines trust. Instead, drawing on a contingency perspective, we focus on the interaction effects of trust and control on network value creation. The literature has offered varying predictions on how trust and control should affect the outcome of cooperation (see Balboni et al. [15] for a recent overview of empirical studies on the effect of trust- and control-based governance mechanisms and alliance performance).

We start with recognizing that the effect of trust on performance may be contingent on other factors [45], including control mechanisms. We posit that the relationship between trust and control in terms of their joint contribution to network performance is contingent upon the type of control mechanism.

Specifically, a complementarity between output control and trust may exist because clear performance objectives established at the time of the formation of the network will support the development of inter-firm trust [55]. The use of unambiguous objectives as control mechanism allows the partners to simultaneously preserve their autonomy and interact in a transparent manner, with reduced uncertainty associated with the measurement of the collaboration results. Having clear measures for assessing network performance and evaluating partners' behavior may complement the existence of trust-based relationships. Output control and trust thus may reinforce each other in fostering the achievement of the strategic goals of the collaboration.

Social control involves informal monitoring of network operations and is primarily based on personal interactions and on values, norms, and cultures to drive partners' behaviors. Trust-based relationships are the ideal setting for the adoption of this kind of control. In situations of high trust, partners are encouraged to work closely with one another to ensure that shared values and goals still exist [55]. Both trust building and social control tend to adopt a long-term orientation toward a relationship [21]. The achievement of the network performance and the long-term sustainability of collaboration is thus enhanced through these mutually reinforcing mechanisms between social control and trust.

The above arguments suggest that output control and social control may both complement the effects of trust on the sustainability of cooperation within a network. Although these two mechanisms substantially differ in the way they drive partners' behavior, they both assume that partners can ultimately decide what do to [21]; partners trust each other because their actions are perceived as freely made as trustworthy, rather than as the result of rigid rules and procedures that constrain their behaviors [55]. We thus hypothesize the following

Hypothesis 3a (H3a). *In a strategic network, the effect of trust on value creation increases as output control increases.*

Hypothesis 3b (H3b). *In a strategic network, the effect of trust on value creation increases as social control increases.*

Different dynamics are associated with process control mechanisms. We posit that the argument that formal control and trust work as substitutes applies to the case of process control mechanisms. According to transaction cost theory [22], in cooperative relationships characterized by uncertainty and mutual dependency between partners, control enables each firm to mitigate the risk of partners' opportunistic behavior, thus performing the function normally exercised by trust-based relationships [21, 59]. Therefore, in the presence of high levels of control, it may not be necessary to build trust-based relationships between the members of a strategic network [21,23,72]. Specifically, process control involves codified rules, procedures, and guidelines that specify partners' expected behaviors and constrain their autonomy towards the desired actions. The adoption of process control mechanisms limits the discretion of the partners in a network. The more extensive the use of process control mechanisms, the more firms will consider partners' actions as a function of the network procedures and rules and thus discount the apparent trustworthiness of those actions. The use of process control mechanisms therefore tends to weaken the effect of trust on network value creation.

These arguments on the substitutive relationship between trust and process control suggest that, as process controls are adopted to a greater extent, the role of trust between members of a strategic network becomes less relevant. We thus hypothesize that the adoption of process control mechanisms negatively moderates the relationship between trust and the value creation in strategic networks. Stated formally,

Hypothesis 3c (H3c). *In a strategic network, the effect of trust on value creation decreases as process control increases.*

Figure 1 shows our conceptual model.



Figure 1. Trust, control, and network value creation: research model.

4. Methodology

4.1. Sample and Data Collection

The research setting for this study was the "Contratti di Rete" (network contract) of SMEs operating in Italy. The network contract is an original, innovative model of inter-firm cooperation, introduced into the Italian legislative system with the aim of enhancing firm competitiveness and innovation through collaboration. The network contract helps small businesses overcome the constraints deriving from their limited size by enabling them to collaborate with other small or even larger firms within a clear legal framework but without causing them to lose their legal independence. The network contract is therefore particularly suited to SMEs. Specifically, it allows two or more enterprises to jointly perform one or more economic activity to increase their potential for innovation and competitiveness. Through this kind of contract, firms formally undertake to follow a "network program," as defined in the contract, which specifies the rights and duties of each participant as well as the ways to achieve the shared goal. Being a multilateral agreement by nature, the network contract does not create a new organization (as happens in the case of joint ventures or consortia), but it does provide a much greater guarantee than a simple alliance between partners. Since its introduction at the end of 2009, the number of such networks in Italy has grown steadily, reaching 3697 network contracts with a total of 18,556 enterprises involved, the majority of which are located in Lombardy, Emilia Romagna, and Tuscany (figures as of May 2017).

Our hypotheses were tested on a sample of 58 Italian network contracts involving 544 firms. The sample was selected from a national public list of 1884 network contracts, published by the Italian business register (Registro Imprese) in December 2014. A first selection was carried out to verify the simultaneous presence of certain operating conditions (e.g., the existence of an up-to-date network website, the presence of contact details on the website, public evidence on the web about recent activities carried out under the network contract). This first step reduced the sample to 340 networks, each of which was personally contacted by the researchers to suggest participation in this research. To increase the rigor in the data collection, we followed Dillman's procedure [73]. Fifty-eight networks accepted and fully answered the questionnaire (corresponding to a response rate of 17.1%), which was submitted to the network manager, if present, or to the principal entrepreneur of the network.

The questionnaire, which was administered between February and May 2017, was structured in two sections. The first section captured information on the history, composition, and strategy of the network, including data on the industry, location, geographic scope, number, and size of member firms, network type (vertical, horizontal, mixed), the network's goal and strategic objectives, the year of foundation and origins of the collaboration, and the governance system. The networks in our

analysis consisted of firms operating in a variety of industries, including food, textile, and clothing, the mechanical sector, construction, tourism, commerce, and technological services. Forty-one percent of the networks is active in the service industry.

The second section was designed to measure the key constructs of the study, namely network value creation, and trust and control mechanisms, unbundled into output control, process control, and social control. For all these constructs, we relied on perceptual measures, based on five-point Likert scales (as explained in the next section).

4.2. Variables and Measures

Network value creation was the dependent variable in our analysis. Consistent with prior studies, this variable was measured through respondents' perceptions, dictated by the difficulty of objectively assessing the multiple results expected by partners. In particular, we identified six different items aimed at capturing the satisfaction of network members; the intensity of interactions between them; the sales growth of each; any improvement in firms' profitability; the competitiveness gain of each; and knowledge transfer (alpha = 0.89). The concept of network value creation therefore includes both economic and relational aspects, where the latter reflects the development of interactions between partners [74]. The measures adopted in this study represented adaptations from the scales proposed by Geringer and Hebert [58], Human and Provan [75], Zollo et al. [64], Das and Teng [21], and Moeller [76].

Independent variables included trust and control mechanisms. Trust was measured through six items [16,65,77], capturing the ease with which partners understand each other; the absence of fear of being cheated; the absence of conflicts of interest; the importance of informal agreements; the absence of opportunistic behavior; and the predictability of behavior (alpha = 0.85). Even in this case, to provide greater consistency with the objectives of this research, the measurements used came out of several modifications to those proposed in the previously mentioned studies, in which the focus was on different contexts if compared to SME networks.

The three independent variables relating to output control, process control, and social control were operationalized by adapting the scales proposed by Chen et al. [26]. Output control was measured based on three items, i.e., the degree of formalization of expected results, the planned monitoring, and the mechanisms and rules upon which the agreement rested (alpha = 0.81). Process control was measured on the basis of five items mainly relating to the contractual rules intended to serve as warranty for the agreement, to task distribution, and to the definition of specific contractual obligations of the parties involved (alpha = 0.80). Finally, six items were used to measure social control, collectively capturing the extent to which employees of network member firms took part in seminars, educational activities, inter-organizational working teams, and/or other socialization events (alpha = 0.72).

Appendix A provides detailed information on the items used to build our variables and on the scales for their operationalization. As mentioned above, such scales were grounded in measures developed by previous research. However, some questions and some indicators were either modified or built on purpose, in order to account for the specific research setting of this study. Each item was measured through a five-point Likert scale (1 = strongly disagree; 5 = strongly agree).

Our model also included five control variables that might play a role in shaping the sustainability of cooperation, namely network size, network age, geographic scope, vertical network, and network governance. Network size was operationalized as the number of partner firms. The mean number of firms in each network was 9.5, with a range from 2 up to 48. Network age was measured as the number of years since the network contract was started. The age of the network ranged from 1 to 6 years, with a mean age of 3.2 years. Network geographical scope was operationalized as the distance in

kilometers between the member firms of the network and was measured by a four-level scale in which 1 represented strong local firm distribution while 4 corresponded to a broad distribution. Forty-eight percent of the networks (28 out of 58) operated on a strongly local basis. Vertical network captured the difference between vertical networks and other types of networks, such as horizontal or mixed. This variable was measured as a dichotomous variable, taking value 1 in the case of a vertical network and value 0 otherwise. Network governance was a dichotomous variable taking value 1 if the network had a formal governing body and value 0 if it did not.

5. Results

Table 1 shows the descriptive statistics and the correlation matrix, while Table 2 displays regression results. Specifically, the first column (1) of Table 2 shows the model with trust and control variables (network size, network age, network geographic scope, vertical network, and network governance). In column (2) the variables capturing the different forms of control are included, namely output control, process control, and social control. The inclusion of these variables substantially increased the overall explanatory power of the model (adjusted-R2 went from 0.29 to 0.69). Finally, in column (3) the three interactions "trust * output control", "trust * social control", and "trust * process control" were added, thus leading to a further increase in the variance of network value creation explained by the model (the adjusted-R2 increased to 0.74). To avoid the problem of multicollinearity, the variables used to develop interaction terms were mean centered, both as stand-alone variables and as components of the interactions [78].

Table 1. Descriptive statistics and correlations.

		Mean	St. Dev.	1	2	3	4	5	6	7	8	9
1	Network value creation	21.24	5.43	1								
2	Trust	24.71	4.76	0.54 *	1							
3	Output control	11.88	2.28	0.42 *	-0.00	1						
4	Process control	19.83	3.84	0.62 *	0.24	0.72 *	1					
5	Social control	20.41	5.37	0.68 *	0.15	0.37 *	0.50 *	1				
6	Network size	9.55	8.21	-0.02	-0.21	0.11	0.07	0.19	1			
7	Network age	3.26	1.39	-0.02	-0.04	0.03	-0.06	0.15	-0.08	1		
8	Network geographical scope	1.98	1.16	0.06	-0.07	-0.01	0.13	0.08	0.11	-0.04	1	
9	Vertical network	0.33	0.47	0.02	0.07	0.07	0.09	-0.10	0.03	-0.03	-0.12	1
1() Network governance	0.76	0.42	0.09	-0.19	0.30 *	0.28 *	0.18	0.11	0.11	-0.12	0.20

Notes: N = 58; * *p* < 0.05.

Table 2. Trust, control, and network value creation: regression results.

	Dependent Variable: Network Value Creation			
	(1)	(2)	(3)	
Network size	0.04 (0.08)	-0.05 (0.05)	-0.06 (0.05)	
Network age	-0.06 (0.44)	-0.33 (0.30)	-0.46 (0.29)	
Network geographical scope	0.58 (0.56)	0.18 (0.38)	-0.08 (0.37)	
Vertical network	-0.65 (1.33)	0.28 (0.89)	-0.11 (0.83)	
Network governance	2.98 * (1.53)	0.16 (1.08)	1.16 (1.03)	
Trust	0.70 *** (0.13)	0.46 *** (0.10)	0.36 *** (0.10)	
Output control		0.23 (0.27)	0.34 (0.25)	
Process control		0.26 (0.18)	0.21 (0.19)	
Social control		0.52 *** (0.09)	0.49 *** (0.10)	
Trust * Output control			0.12 *** (0.04)	
Trust * Process control			-0.07 ** (0.03)	
Trust * Social control			-0.03 * (0.01)	
Constant	17.78 *** (2.37)	22.19 *** (1.65)	23.03 *** (1.57)	
Number of observations (network contracts)	58	58	58	
F	4.80 ***	15.23 ***	14.87 ***	
Adj-R ²	0.29	0.69	0.74	

Notes: standard errors in brackets; * *p* < 0.1; ** *p* < 0.05; *** *p* < 0.01.

Our findings strongly supported H1: the level of trust among entrepreneurs has a positive effect on network value creation (column 2, $\beta = 0.46$, p < 0.01). Our hypotheses on the role of the three control mechanisms received partial support. In particular, the effect of output control and process control on network value creation was not statistically significant. Thus, H2a and H2c were not supported. Only social control had a positive influence on value creation, supporting H2b (column 2, $\beta = 0.52$, p < 0.01).

Our results supported H3a: the coefficient for the interaction term trust * output control was positive and statistically significant (column 3, $\beta = 0.12$, p < 0.01). Hence, the positive effect of trust on network value creation was reinforced by the adoption of output control mechanisms; the effect of trust increased as output control increased. We graphed the interaction effect to better interpret our findings. Figure 2 visually confirms the complementarity between trust and output control in fostering value creation in strategic networks.

The coefficient for the interaction term trust * social control was negative and marginally significant (column 3, $\beta = -0.03$, p < 0.10), contradicting H3b; the positive effect of trust on network value creation was limitedly mitigated, rather than reinforced, by social control mechanisms, as shown in Figure 3.

The negative moderating effect of process control on the relationship between trust and value creation was supported for process control, as hypothesized in H3c. The coefficient of the interaction term trust * process control was negative and statistically significant (column 3, $\beta = -0.07$, p < 0.05). Thus, H3c received support. These findings confirm the substitutive relationship between trust and control; the positive effect of trust on network value creation decreased as the adoption of process control mechanisms increased. Figure 4 visually confirms the prediction of H3c.

Figure 5 shows the beta coefficients and significance levels of the full model in column 3 of Table 2, thus providing an overview of supported and not supported hypotheses. As further tests, we explored differences among sub-groups of networks, in terms of industry and geographical scope, but no significant differences emerged. It is worth noting that the lack of significantly different results across groups might be also ascribed to the small sample size, which prevents capturing enough variance within each group of networks.



Figure 2. The moderating effect of output control on the relationship between trust and network value creation.



Figure 3. The moderating effect of social control on the relationship between trust and network value creation.



Figure 4. The moderating effect of process control on the relationship between trust and network value creation.



Figure 5. Overview of supported (black line) and not supported (grey line) hypotheses.

6. Discussion

Our research on value creation in inter-firm networks focused on three different objectives: analyzing the performance effects of trust-based relationships among partners within strategic networks; studying the distinct effects of output, process, and social control mechanisms on value creation; and exploring the complementarity vs. substitutability relationship between trust and control in influencing value creation.

The research findings confirm that trust among entrepreneurs positively influences network value creation. This evidence is in line with prior research suggesting the crucial role of trust for the success of inter-firm collaborations (e.g., [15,79]). Additionally, while social control has a positive effect on network performance, our findings show no significant direct performance effect associated with both output control and process control. Different control mechanisms therefore do vary in their effects on the perceived success of cooperation.

Moreover, our study sheds light on the joint effect of control and trust. Specifically, consistent with our prediction, trust strengthens the effect of output control on network value creation. Clear measures of the expected results of the network activities foster transparency of relationships among partners and help to create a collaborative atmosphere. Our findings on the joint impact of trust and output control therefore suggest that contractual governance and relational governance complement each other in explaining variations of network performance [14,22].

Conversely, our analysis reveals that trust essentially acts as a substitute of process control; as the adoption of process control increases, the positive trust–value creation relationship becomes weaker. In other words, the intense use of process control represents an alternative to trust-based relations among partners. Therefore, the traditional conceptualization of trust and control as alternative mechanisms for network governance is supported by our findings on process control.

In addition, contrary to our prediction on the mutually reinforcing performance effect between trust and social control, we find marginally significant evidence that social control mitigates, instead of magnifies, the effect of social control on network value creation. In the light of the small effect size of the interaction term and the significance of both the direct effects, this finding suggests that a substantial overlap exists between trust and social control [21]; both mechanisms positively impact network performance, but marginally influence one another.

We contribute to the literature on inter-firm networks in multiple ways. First, as far as the role of trust is concerned, our study supports the view that the effect of trust on successful cooperation may be contingent on other factors [45]. In particular, we highlight the contingency role of control mechanisms as conditions that may magnify or mitigate the effect of trust. Second, our findings on both direct and interaction effects of control mechanisms are consistent with the research suggesting the need for a multidimensional analysis of control mechanisms [14,15,26]. In particular, our results show that control mechanisms do differ in their direct effect on value creation in networks and on the moderating effect on the trust-performance link, thus highlighting distinct dynamics associated with different forms of control. Our analysis suggests the need to take the distinct forms of control into consideration separately, because of their different potential impacts on network performance. By unbundling control into output, process, and social control, we provide a more fine-grained analysis of the interplay between trust and control in the context of strategic networks. We thus highlight the need to go beyond the pure dichotomy complementarity vs. substitutability, since the nature of the relationship between trust and control and their interaction effect on value creation is contingent upon the kind of control adopted. Globally considered, our findings suggest that a key source of variation in the interaction effect of formal control mechanisms and trust lies in the extent of partners' discretion. Specifically, process control strongly constrains the autonomy of the partners, whose actions may hence be perceived as primarily driven by strict rules and procedures, rather than as voluntarily made as trustworthy [55]. Such perception may undermine the role of trust in affecting network performance. Instead, output control implies the definition of transparent collaborative objectives that are likely to

complement and reinforce trust as they increase mutual understanding, but do not directly impact partners' autonomy to decide how to pursue those shared objectives.

Our research complements studies showing that networks may encourage SMEs to adopt sustainability practices [11,12]. These studies underline that networks enable firms to improve their performance from a triple-bottom-line (TBL) perspective [80], while our research helps to understand the conditions under which networks may be more effective. We demonstrate that trust-based relationships among partners, coupled with appropriate types of control, are crucial for making networks endure and work effectively. Specifically, governance mechanisms strengthen and stabilize the relationship among partners, thus aligning their expectations. These conditions act as a prerequisite for enabling collective action, which becomes particularly relevant when environmental and social concerns are addressed. Thus, we contribute to further our understanding of how networks may encourage SMEs to embrace a new perspective on performance, where financial, social, and environmental values are integrated in a TBL framework [81].

A further contribution is more empirical in nature, since it relies on the novelty of our research setting. While trust and control have been largely analyzed in the literature, studies have mainly focused on dyadic inter-firm alliances, such as joint ventures. Much less attention has been focused on multiparty networks and, in particular, on networks of SMEs. We have therefore extended this line of inquiry to the specific context of strategic SME networks, focusing on multiparty inter-firm cooperation.

Our research also offers implications for managers regarding how to manage inter-firm networks, and how to make collaboration strategies among SMEs more effective and sustainable over time. Indeed, our results show that successful cooperation requires trust-based relationships between entrepreneurs, which can be only limitedly substituted by control mechanisms. Such evidence offers two primary insights for practice. First, network managers (as well as the entrepreneurs of the partner firms) should commit time and resources to the development of trust-based relationships. This kind of "investment" appears to be crucial and non-substitutable for making cooperation work effectively and achieve higher network performance along the TBL business pillars, i.e., environmental, social, and economic. Second, given the varying effects of different control mechanisms, managers should pay attention to the distinct characteristics of output, process, and social controls when designing the governance structure of the network. In particular, output controls may complement trust in positively affecting the success of cooperation, while process and social control may, at least partially, act as substitutes of trust. Network managers therefore need to continuously focus on identifying the right mix of control mechanisms to enhance network performance. Specifically, managers should adjust the extent to which formal control mechanisms, such as process- and output-based ones, are adopted on the basis of the level of trust and social control among partners.

7. Conclusions, Limitations, and Directions for Future Research

This research extends our understanding of how control- and trust-based governance mechanisms affect value creation in inter-firm networks and make cooperation sustainable over time, both individually and jointly. Our results support our framework by demonstrating the crucial role of trust and underscoring the varying effects associated with different types of control. Output, process, and social control mechanisms do differ in terms of complementarity vs. substitutability with trust as drivers of network performance. Our focus on network value creation emphasizes the need to move beyond the traditional drivers of financial value to encompass a broader assessment of organizational performance. Thus, our approach is consistent with recent research [81,82] that underscores the importance of including the social and environmental dimensions of value associated with long-term sustainable development.

This research is not without limitations, which offer interesting avenues for future research, however. First, the relatively limited number of networks considered would suggest the need to replicate the analysis on a larger sample. Second, the networks in our analysis originate from formal agreements among the members. However, formally structured networks are not the only kind of

multiparty collaboration [9]. Indeed, networks of SME may also emerge as spontaneous interactions and act on a more informal basis. Future research might hence explore whether the formal vs. informal setting of the network may alter the roles of trust and control and their effect on network performance. Furthermore, the results should be interpreted with caution, especially in terms of generalizability, because of the peculiarities of the Italian context. Future research should therefore extend the empirical analysis to other countries, in order to take into account the differences linked to their industrial and institutional contexts.

Our measure of network value creation includes items capturing financial and market performance, learning outcomes of cooperation, and the partners' satisfaction on the quality of their relationship. While network relational quality is certainly a building block of value creation and a prerequisite for the establishment of effective relationships with stakeholders, such as local community, suppliers, and employees, a more comprehensive view of value creation and sustainable cooperation would require the adoption of items capturing the quality and intensity of relationships with a variety of stakeholders, thus including the social and environmental dimensions of cooperation. These additional items may enable a better appraisal of the potential value creation in SME networks in light of their implications for financial, social, and environmental sustainability. Future research could hence further explore the role of SME networks within a TBL framework to deepen our understanding of the impact of networks on SME performance from a sustainability perspective.

It is also worth noting that trust and control are not static phenomena [70]. Rather, as network relationships change over time, the level of trust and need for control may evolve too. The link between trust and control is thus likely to change over time, showing varying patterns that deserve to be investigated from a dynamic perspective. Finally, qualitative research, based on an in-depth study of business cases, would allow a deeper investigation of the dynamics associated with the creation and development of trust-based relationships as well as the action of control mechanisms within networks. Our study can therefore be considered as a starting point for future developments, in terms of both research contexts and methods.

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Appendix A

Table A1. Measurement instruments (Likert scale 1–5; scale response anchors: 1 = strongly disagree; 3 = neither agree nor disagree; 5 = strongly agree).

Measures and Items	Source (Adapted From)				
Network performance (alpha = 0.89)					
In our network, all partners are satisfied with the relationships they have with other network members.	Das and Teng [60].				
In our network, all partners work prolifically.	Geringer and Hebert [58].				
Our network has enabled partners to increase their revenues.	Human and Provan [75].				
Our network has improved each partner's profit.	Moeller [76].				
Our network has enabled partners to increase their competitiveness on the markets.	Zollo et al. [64].				
Our network has enabled partners to develop and broaden their skills and knowledge, thus starting a continuous learning process.					

Measures and Items	Source (Adapted From)
Trust among firms (alpha = 0.85)	
In our network, when a decision has to be made, all partners understand each other well and quickly.	Dhanaraj et al. [65].
In our network, all partners are certain that the other partners would not cheat on them, even if the opportunity arose and there was no chance that they would get caught	Rempel et al. [83].
In the partners' relationship, everyone is certain that the other partners will never do anything they are afraid of or anything that will damage them. In our network, formal agreements are as significant as informal ones. I can rely on my partners to react in a positive way even when I expose my weaknesses to them. In our network, all partners are very predictable. They can always be counted on to act as we expect.	Rempel and Holmes [77]. Zaheer et al. [16].
Output control (alpha = 0.81)	
Our network has adopted formal strategic planning that clearly defines the goals to be achieved. Our network has strictly defined with what indicators and how often the achievement of the strategic goals must be checked. Our network has strictly defined the potential causes of partner expulsion if they adopt opportunistic or non-coherent behavior with respect to the objectives of the common strategy.	Chen et al. [26].
Process control (alpha = 0.80)	
Our network has strictly defined what resources and skills individual partners must bring to it. Our network has defined its organizational structure (organization chart and responsibilities). Our network has strictly defined the operational tasks that each partner must carry out to ensure the best functioning of the alliance. In our network, there is a sufficient level of mutual exchange of information among the partners regarding the activities and performance carried out by each enterprise. In our network, we issue periodic detailed reports to tell the partners about the activities carried out, the resources used, and the results achieved.	Chen et al. [26].
Social control (alpha = 0.72)	
In our network, we regularly organize formal, strategic or operational meetings among our partners. In our network, we also periodically organize informal social occasions among our partners. In our network the entrepreneurs themselves are usually involved in these meetings. In our network, partners' staff are often involved in teamwork with colleagues of the other partner firms. In our network, we often organize training courses and seminars for the partner entrepreneurs. In our network, we often organize joint training courses and seminars for the employees of all partners.	Chen et al. [26].

Table A1. Cont.

References

- 1. Rosenfeld, S.A. Does cooperation enhance competitiveness? Assessing the impacts of interfirm collaboration. *Res. Policy* **1996**, *25*, 247–263. [CrossRef]
- 2. Mesquita, L.F.; Lazzarini, S.G. Horizontal and vertical relationships in developing economies: Implications for SMEs' access to global markets. *Acad. Manag. J.* **2008**, *51*, 359–380. [CrossRef]

- 3. Antoldi, F.; Cerrato, D.; Depperu, D. *Export Consortia in Developing Countries: Successful Management of Cooperation among SMEs;* Springer: Berlin, Germany, 2011.
- 4. Trapczynski, P.; Puslecki, L.; Staszkow, M. Determinants of Innovation Cooperation Performance: What Do We Know. *Sustainability* **2018**, *10*, 4517. [CrossRef]
- 5. Lavie, D. The Competitive Advantage of Interconnected Firms: An Extension of the Resource-Based View. *Acad. Manag. Rev.* **2006**, *31*, 638–658. [CrossRef]
- 6. Ze, R.; Kun, Z.; Boadu, F.; Yu, L. The Effects of Boundary-Spanning Search, Network Ties, and Absorptive Capacity for Innovation: A Moderated Mediation Examination. *Sustainability* **2018**, *10*, 3980. [CrossRef]
- 7. Jarillo, J.C. On strategic networks. Strateg. Manag. J. 1988, 9, 31-41. [CrossRef]
- 8. Nahapiet, J.; Ghoshal, S. Social capital, intellectual capital and the organizational advantage. *Acad. Manag. Rev.* **1998**, 23, 242–266. [CrossRef]
- 9. Inkpen, A.C.; Tsang, E.W.K. Social capital, networks and knowledge transfer. *Acad. Manag. Rev.* 2005, *30*, 46–165. [CrossRef]
- 10. Antoldi, F.; Cerrato, D.; Depperu, D. SMEs export consortia and the development of intangible resources. *J. Small Bus. Enterp. Dev.* **2013**, *20*, 567–583. [CrossRef]
- 11. Collins, E.; Lawrence, S.; Pavlovich, K.; Ryan, C. Business networks and the uptake of sustainability practices: The case of New Zealand. *J. Clean. Prod.* **2007**, *15*, 729–740. [CrossRef]
- 12. Moore, S.B.; Manring, S.L. Strategy development in small and medium sized enterprises for sustainability and increased value creation. *J. Clean. Prod.* **2009**, *17*, 276–282. [CrossRef]
- 13. Gulati, R. Alliances and Networks. Strateg. Manag. J. 1998, 19, 293-317. [CrossRef]
- 14. Cao, Z.; Lumineau, F. Revisiting the interplay between contractual and relational governance: A qualitative and meta-analytic investigation. *J. Oper. Manag.* **2015**, *33–34*, 15–42. [CrossRef]
- 15. Balboni, B.; Marchi, G.; Vignola, M. The Moderating Effect of Trust on Formal Control Mechanisms in International Alliances. *Eur. Manag. Rev.* **2018**, *15*, 541–558. [CrossRef]
- 16. Zaheer, A.; McEvily, B.; Perrone, V. Does Trust matter? Exploring the Effects of Interorganizational and Interpersonal Trust on Performance. *Organ. Sci.* **1998**, *9*, 141–159. [CrossRef]
- 17. Leifer, R.; Milis, P. An Information Processing Approach for Deciding upon Control Strategies and Reducing Control Loss in Emerging Organizations. *J. Manag.* **1996**, *22*, 113–137. [CrossRef]
- 18. Friedberg, E. Going Beyond the Either/or. J. Manag. Gov. 2000, 4, 35–52. [CrossRef]
- 19. Patzelt, H.; Shepherd, D.A. The Decision to Persist with Underperforming Alliances: The role of Trust and Control. *J. Manag. Stud.* **2008**, *45*, 1217–1243. [CrossRef]
- 20. Yang, Z.; Zhour, C.; Jiang, L. When Do Formal Control and Trust Matter? A Context-based Analysis of the Effects on Marketing Channel Relationship in China. *Ind. Mark. Manag.* **2011**, *40*, 80–96. [CrossRef]
- 21. Das, T.K.; Teng, B. Between Trust and Control: Developing Confidence in Partners Cooperation in Alliances. *Acad. Manag. Rev.* **1998**, *23*, 491–512. [CrossRef]
- 22. Poppo, L.; Zenger, T. Do Formal Contracts and Relational Governance Function as Substitutes or Complements? *Strateg. Manag. J.* 2002, 23, 707–725. [CrossRef]
- 23. Gulati, R.; Nickerson, J.A. Interorganizational Trust, Governance, Choice, and Exchange Performance. *Organ. Sci.* **2008**, *19*, 688–708. [CrossRef]
- 24. Senguün, A.E.; Wasti, S. Revisiting trust and control: Effect on perceived relationship performance. *Int. Small Bus. J.* **2009**, *27*, 39–69.
- 25. Das, T.K.; Teng, B. A risk perception model of alliance structuring. J. Int. Manag. 2001, 71, 1–29. [CrossRef]
- 26. Chen, D.; Park, S.H.; Newburry, W. Parent Contribution and Organizational Control in International Joint Ventures. *Strateg. Manag. J.* **2009**, *30*, 1133–1156. [CrossRef]
- 27. Starr, J.A.; MacMillan, I.C. Resource cooptation via social contracting: Resource acquisition strategies for new ventures. *Strateg. Manag. J.* **1990**, *11*, 79–92.
- 28. Jørgensen, F.; Ulhøi, J.P. Enhancing Innovation Capacity in SMEs through Early Network Relationships. *Creat. Innov. Manag.* **2010**, *19*, 397–404.
- 29. Konsti-Laakso, S.; Pihkala, T.; Kraus, S. Facilitating SME Innovation Capability through Business Networking. *Creat. Innov. Manag.* 2012, 21, 93–105. [CrossRef]
- 30. Johanson, J.; Vahlne, J.E. Business relationship learning and commitment in the internationalization process. *J. Int. Entrep.* **2003**, *1*, 83–101. [CrossRef]

- 31. Elango, B.; Pattnaik, C. Building capabilities for international operations through networks: A study of Indian firms. *J. Int. Bus. Stud.* 2007, *38*, 541–555. [CrossRef]
- 32. Allee, V. Reconfiguring the Value Network. J. Bus. Strateg. 2000, 21, 36–39. [CrossRef]
- 33. Porter, M.E.; Kramer, M.R. Creating shared value. Harv. Bus. Rev. 2011, 89, 62-77.
- 34. Jämsä, P.; Tähtinen, J.; Ryan, A.; Pallari, M. Sustainable SMEs network utilization: The case of food enterprises. *J. Small Bus. Enterp. Dev.* **2011**, *18*, 141–156.
- 35. Revell, A.; Rutherfoord, R. UK environmental policy and the small firm: Broadening the focus. *Bus. Strateg. Env.* **2003**, *12*, 26–35. [CrossRef]
- 36. Simpson, M.; Taylor, N.; Barker, K. Environmental responsibility in SMEs: Does it deliver competitive advantage? *Bus. Strateg. Env.* 2004, *13*, 156–171. [CrossRef]
- 37. Williamson, O.E. *The Economic Institutions of Capitalism. Firms, Markets, Relational Contracting*; The Free Press: New York, NY, USA, 1985.
- 38. Gulati, R.; Nohria, N.; Zaheer, A. Strategic Networks. Strategi. Manag. J. 2000, 21, 293–309. [CrossRef]
- McEvily, B.; Zaheer, A. Does trust still matter? Research on the role of trust in interorganizational exchange. In *Handbook of Trust Research*; Bachmann, R., Zaheer., A., Eds.; Edward Elgar: Cheltenham, UK, 2006; pp. 280–300.
- 40. Gambetta, D. Trust. Making and Breaking Cooperative Relations; Basil Blackwell: Oxford, UK, 1989.
- 41. Barney, J.B.; Hansen, M.H. Trustworthiness as a source of competitive advantage. *Strateg. Manag. J.* **1994**, *15*, 175–190. [CrossRef]
- 42. Sroka, W.; Hittmar, S. Management of Alliance Networks. Formation, Functionality and Post Operational Strategies; Springer: Heiderlberg, Germany; New York, NY, USA, 2013.
- 43. Lee, Y.; Cavusgil, S.T. Enhancing alliance performance: The effects of contractual-based versus relational-based governance. *J. Bus. Res.* **2006**, *59*, 896–905. [CrossRef]
- 44. Katsikeas, C.S.; Skarmeas, D.; Bello, D.C. Developing successful trust-based international exchange relationships. *J. Int. Bus. Stud.* **2009**, *40*, 32–155. [CrossRef]
- 45. Krishnan, R.; Martin, X.; Noorderhaven, N.G. When does trust matter to alliance performance? *Acad. Manag. J.* **2006**, *49*, 894–917. [CrossRef]
- 46. Sohn, J.D. Social knowledge as a control system: A proposition and evidence from the Japanese FDI behavior. *J. Int. Bus. Stud.* **1994**, *25*, 295–324. [CrossRef]
- 47. Gençtuürk, E.F.; Aulakh, P.S. Norms- and Control-Based Governance of International Manufacturer-Distributor Relational Exchanges. J. Int. Mark. 2007, 15, 92–126.
- 48. Brandenburger, A.M.; Nalebuff, B.J. Co-opetition; Currency/Doubleday: New York, NY, USA, 1996.
- 49. Dagnino, G.B.; Rocco, E. (Eds.) *Coopetition Strategy: Theory Experiments and Cases;* Routledge: London, UK, 2009.
- 50. Cygler, J.; Sroka, W.; Solesvik, M.; Debkowska, K. Benefits and Drawbacks of Coopetition: The Roles of Scope and Durability in Coopetitive Relationships. *Sustainability* **2018**, *10*, 2688. [CrossRef]
- 51. Chenhall, R. Management Control System Design within Its Organizational Context: Finding from Contingency Based Research and Direction from the Future. *Acc. Organ. Soc.* 2003, *28*, 127–168. [CrossRef]
- 52. Merchant, K. Control in Business Organization; Pitman Publishing: Marshfield, MA, USA, 1984.
- 53. Huemer, L.; Bostrom, G.; Felzensztein, C. Control-trust interplays and the influence paradox: A comparative study of MNC-subsidiary relationship. *Ind. Mark. Manag.* **2009**, *38*, 520–528. [CrossRef]
- 54. Hamel, G. Competition for competence and inter-partner learning within international strategic alliances. *Strateg. Manag. J.* **1991**, *12*, 83–103. [CrossRef]
- 55. Inkpen, A.C.; Curral, S.C. The coevolution of trust, control, and learning in joint ventures. *Organ. Sci.* 2004, *15*, 586–599. [CrossRef]
- 56. Ouchi, W.G. The transmission of control through organizational hierarchy. *Acad. Manag. J.* **1978**, *21*, 173–192. [CrossRef]
- 57. Dyer, J.H.; Singh, H. The relational view: Cooperative strategies and sources of inter-organizational competitive advantage. *Acad. Manag. Rev.* **1998**, *23*, 660–679. [CrossRef]
- 58. Geringer, J.M.; Hebert, L. Measuring Performance of International Joint Ventures. J. Int. Bus. Stud. 1991, 9, 249–263. [CrossRef]
- 59. Aulakh, P.S.; Kotabe, M.; Sahay, A. Trust and performance in cross-border marketing partnerships: A behavioral approach. *J. Int. Bus. Stud.* **1996**, *27*, 1005–1032. [CrossRef]

- 60. Das, T.K.; Teng, B. Partner Analysis and Alliance Performance. Scand. J. Manag. 2003, 19, 279–308. [CrossRef]
- 61. Inkpen, A.C.; Curral, S.C. The nature, antecedents and consequences of joint venture trust. *J. Int. Manag.* **1998**, *4*, 1–20. [CrossRef]
- 62. Fryxell, G.E.; Dooley, R.S.; Vryza, M. After the ink dries: the interaction of trust and control in US-based international joint ventures. *J. Manag. Stud.* **2002**, *39*, 865–886. [CrossRef]
- 63. Luo, Y. Contract, cooperation, and performance in international joint ventures. *Strateg. Manag. J.* **2002**, *23*, 903–919. [CrossRef]
- 64. Zollo, M.; Reuer, J.J.; Singh, H. Interorganizational Routines and Performance in Strategic Alliances. *Organ. Sci.* **2002**, *13*, 701–713. [CrossRef]
- Dhanaraj, C.; Lyles, M.A.; Steensma, H.K.; Tihanyi, L. Managing Tacit and Explicit Knowledge Transfer in IJVs: The Role of Relational Embeddedness and the Impact on Performance. *Acad. Manag. J.* 2004, 44, 1149–1168. [CrossRef]
- 66. Abosag, I.; Lee, J.-W. The formation of trust and commitment in business relationships in the Middle East: Understanding et-Moone relationships. *Int. Bus. Rev.* **2013**, *22*, 602–614. [CrossRef]
- 67. Wuyts, S.; Geyskens, I. The Formation of Buyer-Supplier Relationship: Detailed Contract Drafting and Close Partner Selection. *J. Mark.* **2005**, *69*, 103–117. [CrossRef]
- 68. Yan, A.; Gray, B. Bargaining Power, Management Control, and Performance in United States-China Joint Ventures: A Comparative Case Study. *Acad. Manag. J.* **1994**, *37*, 1478–1517.
- 69. Parkhe, A. Strategic alliance structuring: A game theory and transaction cost examination of inter-firm cooperation. *Acad. Manag. J.* **1993**, *36*, 794–829.
- 70. Costa, A.C.; Bijlsma-Frankema, K. Trust and Control Interrelations: New Perspectives on the Trust–Control Nexus. *Group Organ. Manag.* **2007**, *32*, 392–406. [CrossRef]
- 71. Gulati, R. Does Familiarity Breed Trust? The implication of Repeated Ties for Contractual Choice in Alliances. *Acad. Manag. J.* **1995**, *38*, 85–112.
- 72. Bernheim, B.D.; Whinston, M.D. Incomplete contracts and strategic ambiguity. *Am. Econ. Rev.* **1998**, *88*, 902–932.
- 73. Dillman, D.A. Mail and Telephone Surveys: The Total Design Method; Wiley: New York, NY, USA, 1978.
- 74. Robson, M.J.; Katsikeas, C.S. International strategic alliance relationship within the foreign investment decision process. *Int. Mark. Rev.* 2005, *22*, 399–419. [CrossRef]
- 75. Human, S.E.; Provan, K.G. An Emergent Theory of Structure and Outcomes in Small-firm Strategic Manufacturing Networks. *Acad. Manag. J.* **1997**, *40*, 368–403.
- Moeller, K. Partner Selection, Partner Behavior, and Business Network Performance. J. Acc. Organ. Chang. 2010, 6, 27–51. [CrossRef]
- 77. Rempel, J.K.; Holmes, J.G. How Do I Trust Thee? Psychol. Today 1986, 20, 28-34.
- 78. Aiken, L.S.; West, S.G.; Reno, R.R. *Multiple Regression: Testing and Interpreting Interactions*; Sage Publications: Newbury Park, CA, USA, 1991.
- 79. Costa e Silva, S.; Bradley, F.; Sousa, C.M. Empirical test of the trust–performance link in an international alliances context. *Int. Bus. Rev.* **2012**, *21*, 293–306. [CrossRef]
- 80. Elkington, J. Towards the sustainable corporation: Win-win business strategies for sustainable development. *Calif. Manag. Rev.* **1994**, *36*, 90–100. [CrossRef]
- 81. Soto-Acosta, P.; Cismaru, D.-M.; Vatamanescu, E.-M.; Ciochina, R.S. Sustainable Entrepreneurship in SMEs: A Business Performance Perspective. *Sustainability* **2016**, *8*, 342. [CrossRef]
- 82. Liang, X.; Xianli Zhao, X.; Wang, M.; Zhi Li, Z. Small and Medium-Sized Enterprises Sustainable Supply Chain Financing Decision Based on Triple Bottom Line Theory. *Sustainability* **2018**, *10*, 4242. [CrossRef]
- 83. Rempel, J.K.; Holmes, J.G.; Zanna, M.P. Trust in Close Relationship. *J. Person. Soc. Psychol.* **1985**, *49*, 95–112. [CrossRef]



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