

Inter-Firm Relationships and the Creation of Social Capital

Cameron Gordon
University of Canberra, Australia

Shaun Cheah
University of Canberra, Australia

The article explores inter-firm joint actions, both short and long term, using a social capital framework. The study reviews the literature on social capital generally and its application to inter-firm (or B2B) relationships specifically, finding these applications quite limited at present. The paper then conceptualizes a typology of joint actions firms typically engage in, their outcomes, and how they could contribute to the building of jointly owned social capital across firms. A more formal conceptual model of the creation, accumulation and use of inter-firm social capital is then constructed to be used in future empirical testing and managerial application.

INTRODUCTION

Understanding the development of social capital has become an area of significant interest among economists and social scientists (Leana and Van Buren 1999; Adler and Kwon 2002). Cutting across diverse disciplines (Coleman 1988; Putnam 1995; Burt 1997), social capital is a model of the creation of a valuable asset stemming from access to resources through an actor's social relationships (Granovetter 1985). The closer the pre-existing relationship, the greater the value of social capital and the likelihood that the relationship in question will be maintained (Wathne, Biong et al. 2001). Essentially, the premise behind the notion of social capital is that it is 'investment in social relations with expected returns'. There has been several definitions established but an overriding consensus is that *relationships* play a central role in social capital formation, accumulation and generation of returns.

Most social capital literature, and the notion of social capital itself, focuses on public externalities and public goods. In other words, economic transactions require a certain amount of trust and relationship ties. These fundamentals cannot be completely captured and priced through a market mechanism and in many ways have to be built prior to a market transaction. Thus, the biggest issues around this process arise in areas which are quasi-market at best, e.g. social cohesion and civic responsibility. Private markets function better where prerequisite social harmony and respect for 'rules of the game' are high and here social capital building is seen as essential.

This article, however, maintains that social capital is equally critical for, what seems to the outside observer, purely market transactions as well. The focus here will be in the realm of the social network of inter-firm or business-to-business (B2B) relations. It will be argued that adopting a social capital approach is implicitly critical to gaining commercial success over the long term, where businesses must

rely on each other with transactions based on a core sharing of trust, not directly mediated through the market or the price system or, in many cases, even the formal legal system. Commercial success generates long term profits, and long-term profits are essentially based upon resources which are deeply embedded in the social capital built between collaborators (and in some cases competitors) in the B2B context. In essence, firms invest in social capital shared between them so as to be able to focus on activating a relational function (as opposed to a transactional function) which allows them to synergistically exploit existing external resources and skills, and creation of shared productive inputs.

A dearth of research exists regarding social capital within the inter-firm or B2B context. (Kelley and Davis 1994; Lee, Sandler et al. 1997; McDonald and Milne 1997; Cousens, Babiak et al. 2001; Farrelly and Quester 2003; Cousens, Babiak et al. 2006). Yet understanding the different types of social capital is important, given social capital's influence on a firm's ability to enhance inter-firm value delivery (Griffith and Harvey 2004). To fill that research gap, this paper reviews pertinent literature to arrive at new insights into the joint actions/drivers of inter-firm social capital.

In the first part of the article, the conceptual advantages and constructs of social capital will be identified. This will be followed by the identification of inter-firm (B2B) relationship types and a review of the reasons for building these relationships. Thereafter, the link between social capital to inter-firm (B2B) relationships is established. Finally, a framework will be constructed and this will be used to conceptually model the joint actions/drivers of social capital accumulation in an inter-firm or B2B context. This model represents a novel insight into the social capital formation process in the inter-firm relationship and as such provides an understanding of the joint actions/drivers necessary for social capital building. Application of this framework also fills in the gap in managerial knowledge for use in practice, thus improving processes and planning.

Theories of Social Capital: Why Does It Exist?

A primary question arising with the social capital construct is: why does it exist at all? With physical and human capital the economic productivity payoffs are inherently obvious. But the need for some kind of embodiment of social relationships in the form of a persistent capital stock is not immediately clear. Thus most social capital begins with this existential question.

Social network researchers have taken the lead in formalizing and empirically testing theories related to social capital. They regard relationships, or ties, as the basic data for analysis. A network is defined as the pattern of ties linking a defined set of persons or social actors. Each person is described in terms of their ties with people in the network. The focal person in such an analysis is referred to as 'ego', and those they are associated with are 'alters' (Knoke and Kuklinski 1982).

There are three main theories. The first is Burt's (1997) 'structural holes approach'. This approach focuses not on the characteristics of ego's direct ties, but on the pattern of relations among the 'alters' in ego's social network. A 'structural hole' exists between two alters who are not connected to each other. According to this theory, it is advantageous for the ego to be associated to many alters who are themselves unconnected to the other alters in ego's network. Networks rich in 'structural holes' provide an individual with three primary benefits: (1) more unique and timely access to information; (2) greater bargaining power and thus control over resources and outcomes, and (3) greater visibility and career opportunities throughout the social system. Initial empirical evidence supports this theory but it has also provided a number of boundary conditions limiting the range of the theory's application (Burt 1997; Sparrowe, Liden et al. 2001). To date, the role of the proposed explanatory processes-access to information, bargaining control, and referral have not been empirically examined.

The second theory is 'weak tie theory'. Here, Granovetter (1985), focuses on the strength of the social tie and argues that ties among members of a social clique are likely to be strong. Thus, the information attained by any one member of the clique is likely to be either shared (or redundant) with the information attained by other members. However, ties that reach outside of one's social clique are likely to be weak. The weak ties are often a bridge between densely interconnected social cliques, eventually providing a source of unique information and resources (Granovetter 1973).

The third theoretical approach is ‘social resources theory’ (Lin, Ensel et al. 1981a), which focuses on the nature of the resources within an embedded network. Here, the authors argued that it is not the weakness of an association that conveys advantage, but rather the fact that such associations are more likely to reach someone with the type of resource required for ‘ego’ to fulfill their objectives. Concurrently, an ‘alter’ who possesses characteristics, or controls resources useful for the attainment of the ego's goals, can be considered a social resource.

Theories of Social Capital: How Does It Generate Returns?

As the above discussion reveals, a certain amount of controversy exists regarding the proper conceptualization of social capital causes. ‘Weak tie theory’ focuses on the nature of underlying social ties; ‘structural holes theory’ focuses on the pattern of social ties; whilst the focal point of ‘social resource theory’ is on the characteristics of the specific ties chosen. All three concepts no doubt apply and thus a fruitful integration of the differing conceptualizations of social capital is possible. The key elements of this integration are the structural properties of networks and the nature of the social resources embedded in networks (Lin 1999).

‘Weak tie theory’ and ‘structural hole theory’ each centre on the structure of a network, whilst ‘social resources theory’ focuses on the content of a network. These theories are not mutually exclusive but can function together because the focal point is on different areas in the process of accumulating social capital. Thus, the overarching social capital construct is best thought of as both the different network structures that facilitate (or impede) access to social resources and the nature of the social resources embedded in the network.

With these fundamentals in place, one can now closely consider how social capital develops and what its impacts might be. To date, leveraging and understanding the development of social capital has become an area of significant interest among economists and social scientists (Williamson 1979; Burt 1997; Leana and Van Buren 1999; Adler and Kwon 2002; Moran 2005). Researchers have defined social capital in diverse ways (Coleman 1988; Nahapiet and Ghoshal 1998; Knoke 1999; Burt 2000; Adler and Kwon 2002; Hitt, Lee et al. 2002; Moran 2005).

The fundamental definition of social capital is that it is *investment in social relations with expected returns*. This general definition is consistent with various renditions by Bourdieu (1985), Burt (1997), Coleman (1988), Putnam (1995), Lin (1999) and Portes (1988). Lin (1999) identified two perspectives at which return or profit is conceived – one at the individual level and the other at the group level. The individual's perspective focuses on how individuals invest in social relations and how embedded resources are captured in relations to generate return. The group perspective revolves around how certain groups develop and maintain social capital as a collective asset and how such a collective asset enhances group members' prospects and returns. Whether social capital is seen from the societal-group level or the relational level, scholars remain committed to the view that it is the *interacting members* who make the maintenance and reproduction of this social asset possible.

An overriding agreement is that *relationships* play a central role in social capital (Adler and Kwon 2002; Moran 2005). The relevant definitions which illustrate this are outlined by (Hunt 2000; Bolino, Turnley et al. 2002; Kostova and Roth 2003) which characterizes social capital as ‘*an asset that is engendered via social relations and that can be employed to facilitate action*’. Moreover, a summary of the definitions outlined by Putnam (1995), Durlauf (2002), Adler & Kwon (2002) defines social capital as the ‘*relationships between individuals and organizations that facilitate action and yields opportunities to the members of the social network or structure. It is characterized by a sense of trust and mutual interconnectedness, enhanced over time through positive interaction*’. Other authors (Coleman 1988; Putnam 1995; Burt 1997) posit that social capital results in benefits, such as re-patronage behaviour resulting in loyalty over time. The closer the pre-existing relationship, the greater the prior investment in social capital and the likelihood that the relationship in question will be maintained (Wathne, Biong et al. 2001).

Additionally, the literature posits that social capital facilitates informal contract enforcement (Kostova and Roth 2003). Returning to the basic notion of social capital as *investment in social relations*

with expected returns, one can see that this general definition is consistent with various renditions by scholars who have contributed to the discussion (Bourdieu 1985; Coleman 1988; Putnam 1995; Burt 1997). These returns are potentially far-ranging and diverse. This also leads Putnam (1995) to reiterate the common idea that *social capital is enhanced over time through positive interaction and collaboration in shared interests* which can take place in a range of informal and formal meeting places.

Is social capital ‘public’ or ‘private’ then? One group of social network researchers upholds the notion of social capital as being a private good that primarily benefits the actors who possess such capital (Granovetter 1985; Burt 1997). Private social capital varies and mainly facilitates the pursuit of individual goals. While other actors might also benefit from such a private good, access is controlled by those who create social capital (Leana and Van Buren 1999).

Other researchers view social capital as a collective good and thus underscore its collective benefits. The bulk of the literature lies here, and in this view, trust, reciprocity, and strong social norms facilitate integration (and co-operation), and effectively regulate cooperative social behavior (Fukuyama 1995; Putnam 1995). Collective social capital also has spillover benefits and this relates both to actors that create this capital and their respective network members (Coleman 1988). Here, social capital assists in the pursuit of collective goals by allowing network actors to tap into resources without necessarily having participated in their creation (Kostova and Roth 2003).

These views are, of course, not inconsistent. They all focus on the need for cooperation across otherwise unaligned or possibly competing agents to take some sort of joint effort based on mutual trust and connection. This also can be seen in Griffith and Harvey’s (2004) view that *‘the advantage in building social capital in the firm and between firms accrues from both the context and relationship-relevant consequences of interpersonal interaction’*. Context’ refers to the manager’s ability to have relevant behaviour or knowledge in interactions, generally referred to as social interaction (Kelly 1984). Thus, managers should possess intimate social insights into how to effectively interact, communicate, and relate to individuals, both internally and externally to develop social capital. ‘Relationship-relevant’ consequences of interpersonal interaction are also required for the development of social capital. Thus, managers have to elicit a high level of associability with individuals via consistent and continued mutual interaction (Kelly 1984). These two dimensions of context-specific orientation facilitates interpersonal trust, which may grow over time due to repeated interaction between individuals in firms (Griffith and Harvey 2004). While business transactions are the frame for this analysis, it can be viewed that these dynamics apply in wider arenas as well.

Social capital can also either be a substitute for, or complement to, other resources. As a substitute, actors can compensate for a lack of financial or human capital by superior ‘connections’. More often, though, social capital complements other forms of capital. For example, social capital can improve the efficiency of human and physical capital by reducing transaction costs (Lazerson 1995). Social capital, similar to physical and human capital, also requires maintenance as social bonds have to be periodically renewed or they lose efficacy. Also, like human capital, social capital does not have a predictable rate of depreciation, as it does not depreciate with use. For example, trust demonstrated today is typically reciprocated and augmented tomorrow. While social capital is sometimes rendered obsolete by contextual changes, the rate at which this happens is difficult to predict as even conservative accounting principles cannot estimate a meaningful depreciation rate.

Social Capital and Inter-Firm (B2B) Relationships

Theoretically, social capital has been conceptualized at multiple levels; a national level (Fukuyama 1995), an individual level (Belliveau, O’Reilly et al. 1996; Ahuja 2000; Seibert, Kraimer et al. 2001; Kostova and Roth 2003; Perry-Smith and Shalley 2003), the industry level (Baker 1990; Gulati 1995; Walker, Kogut et al. 1997), the group level (Krackhardt 1990; Sparrowe, Liden et al. 2001; Reagans, Zuckerman et al. 2004), the organization/firm level (Leana and Van Buren 1999; Burt 2000; Florin, Lubatkin et al. 2003) and the inter-organizational/firm level (Hunt 2000).

Various reasons have been examined for the establishment of inter-firm or business-to-business B2B relationships. Buttle (2008) points out five reasons for creating and sustaining the relationship. They are product complexity, product strategic significance, service requirements, financial risk and reciprocity.

Heeda and Ritter (2005) also delineate that the development of B2B relationships has had different objectives. They are product/competence, product/offering, marketing orientation/solution, customer orientation/problem and networks. Biggemann and Buttle (2004) also outlines that a leading reason for firms to build relationships is the business value that relationships create.

In addition, Eisingerich and Bell (2008) point toward three reasons which compel B2B service providers to make relationships with other firms, even competing ones. Firstly, long-term exchanges between firms are central in a services marketing context. Here, business customers may find it difficult to evaluate service quality as services are intangible. As relational exchanges become apparent over time, exchange partners may benefit from reduced uncertainty, exchange efficiency and effective collaboration.

Secondly, most service providers face intense competition and incur substantial costs in their development of new services. The relationships with other actors that offer specialised activities can facilitate profitable de-integration of value chains and improve innovation by facilitating greater specialisation of both inputs and outputs. In other words, this 'flexible specialisation' may lead to improved efficiency, reduced input prices and greater speed to market.

Third, in a B2B service context, networks can be noteworthy as strong business linkages between firms can result in complementarities with respect to resources, which assist in the provision of integrated solutions. Moreover, openness to new and diverse exchange partners facilitates access to new technologies and service know-how.

A growing literature deals with the dynamics of inter-firm co-operation and relationship. Here, inter-firm cooperation is defined as the 'presence of deliberate relations between otherwise autonomous firms for the joint accomplishment of individual operating goals'. The parent literature on inter-firm analysis though, has been criticized for theoretical insufficiency and a lack of empirical research (Litwak and Hylton 1962). Melcher & Adamek (1971) further asserts a lack of contribution and lamented that there was "little attempt to relate the approaches of the different contributors as scholars (and researchers alike) failed to expand or build upon each other's concepts".

In particular several questions persist. Firstly, the variables which lead to successful B2B relationships (i.e. buyer-seller, manufacturer-dealer, distributor-supplier) are still unclear. Secondly, there are limited studies examining these variables and its correlation with economic results. Thirdly, relationships evolve, and thus it would be prudent to understand the variables that lead to relationship success during the beginning or ending stages of the relationship. Answers to these questions would facilitate the management of B2B relationships in a manner which would be mutually beneficial to all B2B participants.

The social capital construct appears to be particularly useful in this regard. Although many studies have been carried out in order to understand social capital from various perspectives limited research has focused on understanding how social capital influences relationships from the inter-firm or business-to-business (B2B) level. Griffith & Harvey (2004) asserts that business partner social capital (or B2B social capital) is the area which warrants further empirical investigation. Business partner social capital is defined as 'an asset that an organization has developed within its infrastructure of global business relations (i.e., buyers and suppliers) that can be mobilized to facilitate action and enhance value delivery' (Peng and Luo 2000). In essence, B2B social capital facilitates the functioning of the relationship and the enhancement of a firm's ability to deliver customer value in the global marketplace.

This sort of 'business partner capital', where the 'partnership' is between firms, is inherently based on the individual social capital developed via marketing managers. But this is, in a sense, the building block. Peng and Luo (2000) posit business networks as a being a set of interconnected organizations or alternatively a set of connected relationships. This perspective view firms as dependent upon their network partners for inputs necessary for effective operation. As firms can be seen as purposive social actors, it is inevitable that researchers have extended the logic of social capital to the inter-firm level (Burt 1997; Tsai and Ghoshal 1998)

Inter-firm or B2B relationships, as conduits and control of key information, create entrepreneurial opportunities (Burt 1997). The interactions between firms also establish a pattern of expectations based on norms of reciprocity and equity. If these two patterns persist, then the sum of resources that accrue to a firm (by virtue of possessing a durable network of inter-firm relationships) transpires and a social capital base is built. Thus, social capital is greater than inter-firm relationships in isolation (Bourdieu 1985). Social capital thus provides a way to characterize a firm's complete set of relationships but with a focus on ongoing access to a flow of resources (i.e. knowledge, information, and other capital) to the firm through its alliances. Here, understanding the nature of social capital is necessary because it is a key element of a firm's competitive advantage.

What does this advantage consist of? Social capital, based on inter-firm (B2B) relationships, provides access to capabilities and resources that may otherwise be unavailable (Koka and Prescottt 2002). The premise of this argument lies in the view that firms are heterogeneous entities enriched with capabilities and resources (Wernerfelt 1984). These firms normally resort to alliances to access the means necessary for competitive advantage as interactions between firms establish a pattern of expectations that are based on norms of reciprocity and equity. Furthermore, Ford et al (1998) highlight that management of relationships among all business stakeholders has become critical to a firm's very existence. As such, the literature has seen a shift of emphasis from firms engaging in discrete transactions toward longer-term mutually beneficial exchange relationships (Claycomb and Martin 2001).

In the course of their business activities, firms establish a variety of business-to-business (B2B) ties which are well documented (Burt 1997; Tsai and Ghoshal 1998). Such ties include buyer-supplier relationships, strategic alliances, and joint memberships in industry associations. These ties enable firms to exchange a variety of information, knowledge, and other forms of capital. This results in increased productivity and as such, firms have been focusing on long-term engagements with their business partners.

A critical dimension is the buyer and seller relationship between firms (Wilson 1995). The fact that a relationship exist between buyers and sellers is nothing new. Over time, relationships are naturally developed as buyers and sellers develop trust and friendships. These relationships become "strategic" when the process of relationship development is accelerated and concretised to achieve mutually beneficial goals (Wilson 1995). Godson (2009) asserts that any business relationship ultimately comes down to individuals and reiterates that a successful outcome for the buyer-supplier relationship relies on the strength and nature of this relationship. The literature also posits that some desired outcomes in inter-firm networks are individual in nature (i.e. the manager of one firm networking with manager of another firm) as alliance partners are connected by interplay of cooperation and competition (Oliver 1990; Grandori and Giuseppe 1995).

Inter-firm relationships, however, have been explored with a focus on different relationship characteristics that go beyond links between individuals (Oliver 1990; Ring and Van de Ven 1992; Grandori and Giuseppe 1995). For researchers, the formal mechanisms of contractual and procedural coordination have become a key focus for the governance of such relationships. Contractual coordination refers to "the mutual exchange of rights between parties involved in a relationship in order to govern the combination of agents or functions towards the production of results" (Portes 1988). These rights define the establishment of operating procedures to govern the exchange and thus, the distribution of the rights is a key determinant of how coordination occurs. When entering a relationship, each partner gives up some of their rights whilst gaining others, through either explicit or implicit contracts.

Other causes of successful B2B relationships that directly link to social capital formation and accumulation have been comprehensively investigated by Anderson and Hakansson (1994), Ganesan (1994), Morgan & Hunt (1994), Mohr et (1996), Wright (2004), Cheng (2006) and Power & Reagan (2007). Power and Reagan (2007) point out the importance of B2B relationship success for a firms' reputation, performance satisfaction, possibilities of alternatives, mutual goals, technology, non-retrievable investments, adaptation and structural bonds.

Lehtonen (2004) also asserts that successful B2B relationships require the establishment and execution of clearly defined goals. In addition, Cheng (2006) reaffirms that longevity, frequency of

contact, efficient service and skills, and personalities of firm representatives as success of relationships. These various relationships may be characterized by motives that could involve mutually compatible and incompatible goals. The key element though, of successful relationship and social capital building, is the shared recognition and joint commitment to work towards a mutually beneficial relationship.

One other critical element to B2B social capital is governance structure. Governance structure to minimize the sum of production costs for a given transaction is the core issue investigated by transaction costs economics (Williamson 1979). Although governance structure is used to organise and guide economic behaviour, the theoretical definitions (Williamson 1979) and empirical operationalisations (Sparrowe, Liden et al. 2001; Bowler and Brass 2006) focus on the informal and formal contractual dimensions. In establishing governance structures, partners have to 'choose between either prescribing and enforcing specific actions or using means to create a general commitment between the partners from which desirable actions evolve' (Williamson 1979). This process is associated to procedural coordination and is in accordance to the mutual exchange of information or functions towards the production of results. These exchange opportunities may be structurally identified by the form of contractual mechanisms chosen and may also be governed by 'internal' or 'psychological' contracts.

Contractual coordination mechanisms also allow institutions to achieve alignment of partner incentives. However, it is unfeasible to ascertain how they are employed to coordinate the activities of the partners in the relationship. Doz, Hamel and Prahalad (2002) argue that the actual coordination is not achieved through contractual mechanisms but is realised by the day-to-day communication of the participants involved in the relationship activities. Top management establishes strategic alliances whilst setting legal parameters for exchange. 'What actually gets traded is determined by day-to-day interactions of engineers, marketers, and product developers' (Settoon and Mossholder 2002). These 'day-to-day interactions' are at the core of the construct 'procedural coordination'. Procedural coordination does not refer to institutions that may be in place to govern the relationship but asks how these institutions are used. In this instance, social capital can be seen as a very useful construct for building understanding.

Towards a Model of B2B Social Capital Building and Returns

There are many theoretical perspectives on inter-firm relationship and value creation such as resource dependence theory (Pfeffer and Salancik 1978), marketing channel theory (Frazier 1983); transaction cost economics (Williamson 1979), transactional value analysis (Zajac and Olsen 1993; Dyer and Singh 1998), and resource-based theory (Wernerfelt 1984). Social capital theory in the B2B context is quite limited (Granovetter 1985) and thus will be treated as a variable evoked by certain antecedents, and thus the focus is on the joint drivers/actions of social capital. This is critical to the understanding of the inter-firm relationships as the social context in which the joint drivers/actions are embedded have largely been ignored relative to social capital. This also responds to Palmatier and colleagues' (Palmatier, Dant et al. 2006) call for more research synthesizing different theoretical perspectives for understanding inter-firm joint actions/drivers and exchanges.

One could conceptualise B2B social capital in the following way. Assume for simplicity there are two firms, 1 and 2. Assuming atomistic and unrelated operations at the start, one could posit the following firm production functions:

$$\text{Firm 1 Output} = f(K_1, L_1)$$

$$\text{Firm 2 Output} = f(K_2, L_2)$$

Where K refers to physical capital owned and used by each firm, L refers to labour owned and used by each firm and the superscripts indicating the specific stocks that each respective firm has under its control. These two firms would be unrelated to each other but perhaps they may individually determine that they could be better off if they engaged in some sort of relationship. The relationship between the firms in the market could be quite varied, ranging from suppliers at different points in the supply chain to direct competitors of the same product in the same market. One way to conceive of this possibility (and there are, of course, many such conceptions), is to imagine a jointly produced and used third input, 'S'

which refers to Social Capital and which is available to both firms. We would then have the following situation:

$$\begin{aligned}\text{Firm 1 Output} &= f(K_1, L_1, S_{1+2}) \\ \text{Firm 2 Output} &= f(K_2, L_2, S_{1+2})\end{aligned}$$

Now both firms now have an extra input with which to produce their output. The natural extension of this model is a production function for production of S_{1+2} . Generically this looks like the following:

$$S_{1+2} = f(\text{inputs} \dots)$$

This generic model tells us nothing, of course, but does suggest a framework for arranging the various strands of literature discussed above and generating testable hypotheses. The two key questions which arise from this are:

- (1) What does 'f' consist of? A production function model posits a 'technology' that transforms inputs into outputs and we might usefully ask what the nature of that transformational process is in a B2B context.
- (2) What are the relevant 'inputs' that go into making the output S? Trust, shared experience, and joint knowledge are three of the numerous possibilities suggested by the literature. These can be made more specific depending upon the specific B2B situation and the nature of those jointly producing S. For example, are the inputs different for, or, if the same, look differently for direct competitors versus interdependent suppliers. If so, how?

We could ask a third question as well which pertains to the 'publicness' of S. As modelled above it is clear that the two firms share the joint input S^{1+2} . But is it possible that there are times when others not directly investing and participating may nonetheless be able to use it in their production functions? In other words might we have a third firm, outside the network, which has a production function looking like this?

$$\text{Firm 3 Output} = f(K_3, L_3, S_{1+2})$$

One can see that this simple framework allows for a variety of other possible 'spillover' scenarios or, on the other side, barriers to sharing of social capital. For example there might be this possibility within the network:

$$\begin{aligned}\text{Firm 1 Output} &= f(K_1, L_1, S_{1+2}) \\ \text{Firm 2 Output} &= f(K_2, L_2) \\ S_{1+2} &= f(\text{inputs from firm 1, inputs from firm 2})\end{aligned}$$

In this case we are modelling an outcome where both firms have determined it to be worthwhile to generate S_{1+2} but only one firm is actually benefitting from it (in this case Firm 1).

Conclusions and Suggestions for Further Research

This paper has reviewed the literature on social capital and the B2B relationship literature. It has argued that social capital can be a very useful concept for modelling B2B relationships but that relatively little conceptual crossover has yet occurred. A generic modelling structure has been suggested for accomplishing such a crossover.

The agenda for future researchers would be for the conceptual model to be empirically tested in specific business or marketing context (e.g. sports sponsorship, retail or finance). The findings from this would then provide a general framework which can be applied to general businesses. It will also facilitate the management of B2B relationships in a manner which would be mutually beneficial to all B2B participants.

Moreover, the significance of the correlation of joint social capital to outcomes also sheds new light on how firms can leverage social capital to achieve desired outcomes. Overall, this will represent a major

advance in expanding knowledge of social capital theory and utility for both researchers and business managers alike.

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