Battling opportunism in supply chains: An empirical assessment of governance mechanisms and performance implications

Erin Loneragan; Stefan U. Hoejmose*; Jens Roehrich
University of Bath, School of Management, United Kingdom

*Author for correspondence: Stefan U. Hoejmose: Tel.: +44 (0) 1225 384763; email: S.U.Hoejmose@bath.ac.uk; University of Bath, School of Management, Claverton Down, Bath BA2 7AY, UK

ABSTRACT

This study examines how governance mechanisms are used by firms to reduce supplier opportunism and improve buyer performance. Using a research context of medium-to-large manufacturing, the author investigates how opportunism can be reduced by formal and informal governance mechanism. Eight in-depth interviews with procurement managers were carried out to provide a unique, rich understanding of the phenomena. Through an agency theory perspective, we find that formal and informal governance approaches needs to be considered as compliments rather than mutually exclusive approaches, in order to reduce opportunistic behaviour.

Keywords: Opportunism, governance, principal-agency, asymmetric information.

Introduction

Opportunistic behaviour remains one of the main challenges for supply chain management. It can significantly harm the buyer-supplier relationship, by creating uncertainty and raising transaction costs (Williamson, 2008), but despite the obvious implications for performance, empirical research on opportunism in supply chains is limited. The fundamental problem of opportunism is one of asymmetric information, where suppliers have better knowledge of their own processes and costs than the buyer. This creates an opportunity for suppliers to shirk and poach, which in involves deceiving buyers by artificial increase unit costs, use cheaper materials, withhold resources, deliberately under perform, and violate buyers’ confidentiality (Handley and Benton Jr., 2012). The seminal work of Williamson (1985), and later Nooteboom (1996), Carson et al. (2006), and Wathne and Heide (2000), however, suggest that opportunism behaviour can be overcome, or at least significantly reduced, by the use of appropriate contracts and governance mechanisms. In this respect, governance mechanism refers to the formal and informal rules of exchange between partners (North, 1990; Vandaele et al., 2007). Existing studies have highlighted at least three types of governance mechanism. At one end of the spectrum are formal contracts, which pre-specify the rules and duties of each partner (Liu et al., 2009). At the other end of the spectrum is relational capital.

In this study we explore (i) the extent to which governance mechanisms can reduce opportunistic behaviour and improve performance; and (ii) evaluate the effectiveness of different types of governance mechanism. We do so, by using a primary data set consisting of eight semi-structured interviews with purchasing managers from eight companies in the manufacturing sector.
Background and conceptualisation

The concept of opportunism has played a significant role in the supply chain literature, and the seminal work of Williamson (1979, 1985) describes opportunism through the theoretical lense of Transaction Cost Economics (TCE). Here, opportunism is a result of information asymmetry, where one or both parties to a relationship may try to act opportunistically when a chance arise and if it is deemed to be profitable for the party to do so. Typical opportunistic behaviour may include lying, cheating, stealing, shirking, withholding or distorting information and violations of relational contracts (Brown et al., 2000; Cai et al., 2009; Wathne and Heide, 2000). As such, opportunism is the “self-seeking interest with guile” (Liu et al., 2009, p. 294), and can be detrimental to the operational and financial performance of the firm (buyer).

One way of minimising chances of opportunistic behaviour is by using appropriate governance mechanism. These are “mode[s] of organizing transactions” (Williamson and Ouchi 1981, cited in Heide, 1994: 71) and is “a multidimensional phenomenon, encompassing the initiation, termination and on-going relationship maintenance between a set of parties” (Heide, 1994: 72). They have particularly gained considerable attention in recent years, partly because of globalisation and the growing number of inter-firm exchanges (Kale et al., 2002; Vlaar et al., 2007), and partly because of a desire to reduce uncertainty and conflicts in buyer-supplier relationships, in order to promote stability (Cai et al., 2009; Liu et al., 2009). Existing studies have emphasised two common form of governance: (i) formal contracting, which is based on legally binding obligations and supplier evolutions; and (ii) relational capital, which is a ‘softer’ governance mechanism which emphasis trust and communication between the two parties.

The extent to which the two approaches are compliments or substitutes are still under considerable debate. For example, Poppa and Zenger (2002) note that a large body of the existing literature believe that relational capital eliminates the need for formal contracts, and vice versa. In addition, they note that existing studies have argued that formal contracts hinder the development of relational capital altogether. However, Cai et al. (2009) argue that relational mechanism are not adequate for effective conflict management, even if the buyer-supplier relationship is a very cooperative one. They further stress that formal contracts can be necessary for firms, as they specify the exact rights and duties of each partner and resort to third parties to provide punishment to those engaging in opportunistic behaviour (Cai et al., 2009).

Further, some scholars argue that relational mechanisms are not adequate for effective conflict management in all cases, even if the relationship is a very cooperative one (Cai et al., 2009). It is stressed that formal contracts are essential for firms if they are unable to agree on a solution. They specify the exact rights and duties of each partner and resort to third parties to provide punishment to those engaging in opportunistic behaviour (Cai et al., 2009).

Formal governance

Formal contracting (governance) is particular useful from a transaction cost (Williamson, 1985) agency theory (Lafontaine, 1992) perspective, as they allow buyers to obtain some control over exchange partners (Vlaar et al., 2007) and protect transaction specific assets (Liu et al., 2009). Existing studies have suggested that formal agreement and contracting can reduce opportunism in buyer-supplier relationships (e.g. Handley and Benton Jr., 2012; Wathne and Heide, 2000). These are legally binding contracts, which specify rights, responsibilities and expectations of both parties in the relationship (Lee and Cavusgil, 2006; Liu et al., 2009; Roath et al., 2002). In so doing, they restrict discretionary activities of supplier and hence reduce opportunities to cheat, deceive or shirk. In addition, formal
contracts explicitly stipulate the promises or obligations of the exchange, monitor on-going behaviour, determine how foreseeable future situations with be handled, and define the course of action in the event of unforeseeable circumstances or conflict (Liu et al., 2009; Poppo and Zenger, 2002). In turn, this decreases uncertainty and stabilises relationships, particularly in turbulent environments (Lee and Cavusgil, 2006).

The role of formal contracts is twofold. First, to emphasise the legal and economic consequences of self-seeking interest activities. Second, to increase transparency within relationships (e.g. Cai et al., 2009; Lee and Cavusgil, 2006; Mellevigt et al., 2007; Vlaar et al., 2007). Moreover, formal contracts are often in place in order to limit any gains from opportunistic behaviour, as they contain more clearly articulated clauses and specified sanctions for as many unforeseen circumstances and contingencies as possible (Poppo and Zenger, 2002; Roath et al., 2002). As such, formal contracts reduce incentives to cheat, deceive or shirk. Nonetheless, the effectiveness of formal contracts rests on their content. For example, Poppa and Zenger (2002, p. 712) note that if contracts are vague and ambiguous it “heightens the incentives for short-run cheating and lowers expectations of cooperation”. This may also explain why existing studies have found mixed results on the effectiveness of formal contractual on reducing opportunism (Cavusgil et al., 2004; Zhang et al., 2003), because it is impossible to anticipate all potential outcomes no matter how detailed and complex the terms of the contract (Macneil, 1978).

**Informal governance**

Alternatively, or simultaneously, firms can also use informal governance mechanisms as a method of reducing opportunistic behaviour in the supply chain (Kim et al., 2010). Often, such informal mechanisms has been categorised as ‘relational based’ and they emphasise shared values, norms and standards of expected behaviour between organisations that are developed through social interaction (Liu et al., 2009: 295). These governance mechanisms are closely related to the notion of social capital, which generates “goodwill between buyer and sellers” (Cousins, 2006; 852), and has been associated with greater trust, respect, more open communication (i.e. relational capital), and reduces uncertainty, conflict and the likelihood of opportunistic behaviour (Cousins et al., 2008). In turn, this can lead to significant performance benefits for both buyers as it can reduce overall and greater flexibility, whereas for the supplier they are incentivised to work more efficiently due to increases in information sharing and joint training improvements (Cousins et al., 2006; Zajac and Olsen, 1993).

Given this discussion, our starting premise is that opportunism on the part of the supplier will (negatively) influence the buyers performance. However, the risk of opportunism can be mitigated by appropriate governance mechanism – notably formal and informal approaches. These is illustrated in our initial conceptual framework in Figure 1:
Research Methodology

Given the limited empirical research examining the impact of contractual and relational governance on opportunism, the research deploys an abductive research approach through in-depth case studies (Yin, 2003). The logic of abduction is that the research process commutes between theories and practice as an interweaving dialogue between theory and empirical findings. A multiple case study design is particularly useful when addressing the holistic nature of real-world contexts and largely unexplored phenomena (Eisenhardt and Graebner, 2007), providing a source of rich data into the phenomenon under investigation (Suddaby, 2006). These phenomena are investigated in their natural context, generating rich primary and secondary datasets which are particularly important for the measurement of complex and intangible phenomena such as relational capital. We applied theoretical sampling in selecting our cases to highlight theoretical issues and to challenge the theory being tested (Eisenhardt, 1989). Procurement managers were selected due to their pivotal strategic role in managing supply chain partners (Cousin et al., 2006), and it is presumed that their individual opinions will be a function of their firm roles (Paulraj et al., 2008). The Fame database, which lists financial information and contact details of private and public companies in the UK and Ireland, was used to obtain the sample. The UK Standard Industrial Classification (2007) was used to ensure only firms who are engaged in economic activity of ‘manufacturing’ and those with an employee number of over 250 in the previous year were included. The current study included only medium to large firms as they are more likely to practice the phenomenon of interest (Paulraj et al., 2008). The empirical element of this paper stems from eight discrete case studies of companies across manufacturing industries.

Overall, 16 semi-structured interviews with key informants lasting between one to two hours were conducted. The semi-structured interview protocol was operationalized in stages. At the
beginning of each interview the participant was briefly reminded of the purpose and primary interest of the study in order to ensure the initial approach was clear from the outset. Anonymity and confidentiality were assured, and the interviewer asked for their permission to record the discussion. The interview guide consisted of six main sections. Each section corresponded directly with a respective concept in the conceptual framework. The first section was used to establish understanding of governance in the supply chain. This was followed by questions relating to relationship building with suppliers, supplier evaluation, contracts, supplier misbehaviour and finally supplier relationship performance. The interviews concluded by inviting the respondent to provide any further comments or ask questions of the interviewer, before each respondent was thanked for their participation in the study. Interview data reliability was further strengthened through triangulation of data sources including secondary sources such as company documentation and industry reports. In order to address construct validity and to increase case study rigor, this study deployed different remedies: using multiple sources of evidence, establishing a chain of events, and having key informants review individual case reports (Gibbert et al., 2008). Our rich primary and secondary datasets were coded into major thematic categories and concepts (Strauss and Corbin, 1990). The data was open, axial and selective coded, summarized and displayed in an iterative fashion (Miles and Huberman, 1994). Specific coding included contextual variables and the level of significance attached to the use of relational and contractual governance and their impact on opportunism. Our empirical findings were continually compared with the conceptual framework to check pattern matching (Yin, 2003). In order to focus on one category at a time and to investigate the relationships between core concepts we used axial coding (Strauss, 1987). Subsequently, the coding process informed the structure of this study’s findings and discussion sections.

4. Case findings
Interviewees across investigated cases frequently referred to various self-interest seeking behaviours common of their suppliers. Most of these were found to be poor service, quality, delivery and communication, in addition to other commonly encountered problems such as hidden charges, not delivering to cost, and price increases. The general consensus amongst the interviewees is that opportunistic behaviour detrimentally affects the performance of the firm. “Ignoring specification can mean having to send the whole truck back and delaying all orders... It can be very damaging to our day-to-day running and if it’s large enough, to our monthly performance.” Similarly, interviewees mentioned that: “Poor communication by them means bad business for us [...]. It absolutely affects our business [...] Everything from not delivering in a timely fashion to the quality being poor, it all then makes us look bad in what happens further down the line to our customers”. Unsurprisingly, the most important elements in contracts according to participants are supplier performance measures, such as response time, right specification and delivery scores. This emphasises the value in contracts in facilitating the co-alignment of goals between buyers and their suppliers. Many of the respondents believe that formal contracts play an essential role in buyer-supplier relationships and highlight their importance in safeguarding against supplier misbehaviour and major violations. For instance, one interviewee mentioned: “You need to know there is recourse, not just soothing words, in the event that one of your suppliers lets you down. They are [contracts] almost a necessary evil in my experience frankly, but you cannot move without them in most instances.” Contracts were seen by some firms as “the last resort” as illustrated in the following quote: “If it is something a bit more extraneous, you have got the contract and you would deal with it that way, but we do not like doing that”.

5
One respondent does not use legally-binding contracts to any extent. The reasoning behind this is because “they are very difficult to manage and maintain” and “are very static”. The interviewee further justified the lack of use by asserting that: “With all our suppliers we have got a good understanding and if people have got a problem or an issue they will talk about it [...] We have always managed to resolve all our issues outside contracts”. The remainder of the respondents do use contracts in buyer-supplier relationships. Opposing views emerged from the interviews in terms of how helpful contracts are in managing supplier behaviour and limiting opportunism. A participant maintained the ineffectiveness of contracts due to their inflexible nature, stating that: “All relationships are signed with a contract [...] however, they constantly change and people rarely stick to the initial plan so they are a difficult tool to use to ensure things will work as in the contract”. Even those who extensively use contracts with suppliers acknowledge the manifold shortcomings. The following comment from another participant reflects this common perception: “You do get bogged down in paperwork with contract agreements. Some of them are very long winded and complicated”. The destructive implications of using contracts to govern buyer-supplier relationships were also frequently derided by the interviewees: “We do not, rightly or wrongly, go looking into the contracts very often. We think it’s kind of damaging;” “In my experience, if you are having to go back to using a contract to govern supplier behaviour something’s not quite right somewhere”. Through these weaknesses, it is evident that purchasing managers feel as though contracts used solely on their own are not very effective in governing relationships. This is not to say that the interviewees believe that contracts do not have a place in managing opportunistic behaviour on part of supply chain partners. Respondents feel as though contracts are only effective to limit opportunism, and therefore improve buyer performance, when used in combination with other governance mechanisms in order to offset their disadvantages.

All the respondents believe that relationship building and the development of relational capital are major factors in effectively governing supplier behaviour. Indeed, several respondents even claimed it is “the most important factor” or “the most effective tool”. Frequent and open communication emerged as a recurrent theme from the interviews in order to gain an understanding of each other and build effective relationships with supply chain partners. It was commonly held that when issues arise with suppliers, open communication is the most effective way in resolving opportunistic behaviour: “It’s all about communication really, and understanding what the issues are with the product... the only way we can get around these things is through open communication”. In terms of preventing opportunistic behaviour, another interviewee expressed their opinion that this was achieved “through clarity in of information and what we expect from suppliers”. Open dialogue between buyer firms and their suppliers allows them to establish shared goals and increase information sharing. The presence of trust surfaced as another factor in relational governance to prevent opportunism in suppliers. One interviewee expressed that “by using people you trust so you prevent the violation rather than let it happen and have to deal with it”. Several respondents point out that mutual trust and respect are evident in more collaborative relationships and with key suppliers. Trust takes time to build between partners and so those suppliers that they invest the effort in building relationships with are more likely to understand one another better and develop relational capital. Aspects of socialisation help a number of firms in fostering goal co-alignment and result in the creation of relational norms. An interviewee explained their use of formal socialisation and the perceived benefits this can bring: “We are very proactive about offering onsite health and safety tuition and workshops to try and bring these characters into line with the way of thinking that we have to think... it develops a bit of bonding as well”.

6
Cooperative relationships with suppliers are found to improve the management of opportunistic behaviour and conflict resolution. It is evident that this then leads to more efficient operations thus enhancing buyer performance. The following quote support this notion: “A lot of our suppliers are very accepting of us when we contact them and communicate their quality issues with them, and they’re also very forthcoming to find resolutions when we contact them regarding late supply or supply that’s not up to quality.” Similarly, “generally it comes down to that goodwill bit. If you have got a good relationship with suppliers they will acknowledge their error and fix it.” The interviews confirm that effectively building relational capital generates many benefits within buyer-supplier relationships. Most importantly, in the context of this study, the effective building of relational capital appears to limit opportunistic behaviour on part of supplier and improve buyer performance.

**Discussion**

From a theoretical perspective, the findings generally confirm conceptual work of the past. More specifically, we find that in order for governance mechanism to be effective in reducing opportunistic behaviour of suppliers, evaluation is necessary at various stages of the relationship. It is not sufficient to rely on supplier selection criteria to prevent opportunism. On-going monitoring of supplier adherence to desired outcomes is needed to truly benefit the buyer and enhance their performance. In relation to contractual governance mechanisms, the findings from the current study also reflect the opposing views commonly held in the literature, with regards to the question of whether contracts are useful from both a performance and opportunism perspective (Brown et al., 2000; Lee and Cavusgil, 2006). For example, we found that formal contracts are best used in combination with other governance tools in order to resolve issues with rigidity and complexity. A number of related studies have also documented the benefits in simultaneously employing formal contracts with other governance structures (e.g. Cai et al., 2009; Liu et al. 2009; Poppo and Zenger, 2002). Further, this study maintains that relational capital is of highest importance in governing buyer-supplier relationships. Various communication aspects were found to be vital in preventing and mitigating opportunistic behaviour, as well as assisting conflict resolution, to ensure the success of the relationship and to enhance performance outcomes for the buyer. The findings align with studies, such as Cousins et al. (2008) and Paulraj et al. (2008), in supporting the presence of trust, respect, and open communication to facilitate more cooperative relationships and bring about greater benefits for both partners.

The managerial implications of this research show that managers should focus their efforts on activities that will build relational capital with their supply chain partners. Transactional mechanisms, including formal contracts, can be effective in reducing opportunism on part of suppliers. However, this research implies that such mechanisms should be supplemented by aiming to enhance other structures, particularly relational aspects of the exchange. Frequent and open communication is of most importance to promote cooperation and commitment between partners. It is also fundamental in resolving partner conflict more efficiently. The findings from this study suggest to managers that evaluating suppliers on an on-going basis is more effective in not only detecting opportunistic behaviour, but also preventing it from happening in the first place.

**Conclusion**
In this study, we explore how formal and informal governance mechanism can reduce opportunistic behaviour and thereby improve buyer performance. Using primary interview data from eight manufacturing firms. We find compelling evidence to suggest that there is a destructive association between opportunism and the damaging effect on buyer performance was evident from the interview data. The choice between formal contracting – such as evaluation systems, supplier selection and on-going monitoring – and informal contracting, which builds on the relational view and emphasise trust and communication, is however not a straightforward decision. It appears that the optimal solution to reducing opportunistic behaviour is one where the two governance mechanism (formal vs. informal) are treated as compliments.

References:


