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Dealing with defaulting suppliers using behavioral based governance methods: an agency theory perspective

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Abstract

Purpose – The purpose of this paper is to explore factors influencing the effectiveness of buyer initiated behavioral-based governance methods (BBGMs). The ability of BBGMs to improve supplier performance is assessed considering power imbalances and the resource intensiveness of the BBGM. Agency Theory is used as an interpretive lens.

Design/methodology/approach – An explorative multiple case study approach is used to collect qualitative and quantitative data from buying companies involved in 13 BBGMs.

Findings – Drawing on Agency Theory several factors are identified which can explain BBGM effectiveness considering power differences and the resource intensiveness of the BBGM. The data show that even high resource intensive BBGMs can be implemented effectively if there are benefits for a powerful supplier. Cultural influences and uncertainty of the business environment also play a role.

Originality/value – This study develops a series of propositions indicating that Agency Theory can provide valuable guidance on how to better understand the effectiveness of BBGMs. Underlying mechanisms are identified that explain how power imbalance does not necessarily make improvement initiatives unsuccessful.

Keywords Agents, Theories, Supplier management

Paper type Research paper

Introduction

In today's interconnected world, organizations depend on their suppliers to create customer value (Tan *et al.*, 2002). When suppliers do not perform well – e.g. late deliveries or poor product quality – buyers' business performance is at serious risk (Hendricks and Singhal, 2005). However, a buyers' ability to overcome supplier defaults can be influenced by power imbalances between buyers and suppliers (Cox, 2001). It is therefore not surprising that the subject of supplier improvements (Giunipero *et al.*, 2006; Mortensen and Lemoine, 2008; Prajogo and Olhager, 2012) and the influence of power on this (Zhao *et al.*, 2008) have attracted growing attention both in the literature and in practice. Agency Theory has been shown to be valuable in understanding how participants within the supply chain manage risks, align incentives (Fayezi *et al.*, 2012) and how they avoid supply

problems (Ketchen and Hult, 2007; Rungtusanatham *et al.*, 2007). Moreover, Agency Theory offers explanations for supplier defaults (Zsidisin and Ellram, 2003). Drawing on the basic assumptions of Agency Theory that self-interested behavior, bounded rationality, goal incongruence, power and information asymmetries determine the probability that suppliers (deliberately) default (Fama and Jensen, 1983; Jensen and Meckling, 1976), this study extends prior research in this area with the aim of exploring factors influencing the effectiveness of buyer initiated behavioral-based governance methods (BBGMs).

BBGMs comprise a wide range of management methods such as supplier certification, demand and information sharing and supplier development (Zsidisin *et al.*, 2004; Zu and Kaynak, 2012). These methods require different amounts of resource commitment from the supplier (Celly and Frazier, 1996; Zsidisin and Ellram, 2003). Literature suggests that suppliers are often prepared to accept risks as power and choice options are not constant and prone to changes as sectors and economies evolve (Fayezi *et al.*, 2012). Therefore, negligent suppliers can act opportunistically by not allocating

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adequate resources to BBGMs. Subsequently, resource-intensive BBGMs may be expected to suffer more from self-interested supplier behavior than low resource intensive ones due to opportunity costs associated with higher levels of resource commitment. At the same time, research indicates that power imbalances between buyers and suppliers also influence the effectiveness of BBGMs (Cox, 2001), however with contradicting results (Hausman and Johnston, 2010; Van Donk and Van der Vaart, 2005 vs Cox, 2001; Zhao *et al.*, 2008). Therefore, it remains unclear how agency relationships might be conditioned by factors other than contractual obligations and risk assessments (Eisenhardt, 1989a; Fayezi *et al.*, 2012), requiring further exploration in line with the aim of this paper. In particular, we ask *how power imbalances between buyers and suppliers influence the effectiveness of high and low resource intensive BBGMs*.

Analyzing data from qualitative case studies, our findings contribute to extant knowledge in three important ways. First, we extend the existing body of knowledge on supplier improvement approaches by providing a series of propositions that show how Agency Theory can provide valuable guidance on how to better understand the effectiveness of BBGMs. Second, our research extends well-established understandings of Agency Theory in relation to supplier improvement tools by showing that power imbalances do not necessarily make improvement initiatives unsuccessful. The case study data show that even high resource intensive BBGMs can be implemented effectively if there are benefits for powerful suppliers. Furthermore, we also identify contingent factors enabling this to occur. This knowledge can simultaneously be applied to practice as virtually every firm encounters situations where stronger or weaker suppliers default. Therefore, third, our findings offer guidelines that managers can follow to improve the potential for success of improvement initiatives.

This paper is organized as follows. We begin by reviewing the literature on Agency Theory showing that it provides a useful interpretive lens to study the effectiveness of supply chain management practices in overcoming supplier defaults considering power imbalances in buyer–supplier relationships. We then present our case study design, followed by a brief description of our cases. Subsequently, our results are presented followed by an analysis and discussion where we develop propositions for future research. The paper concludes with managerial and theoretical implications.

Literature review

Competitive advantage is achieved by organizations that combine their internal core competencies and abilities with those of their suppliers, customers and other external resources (Constantino and Pellegrino, 2010). Therefore, firms delegate the delivery of certain goods and/or services to suppliers tied to specific requirements (Zu and Kaynak, 2012) such as on-time in-full delivery or quality standards. However, this is not without a risk as there are various reasons why suppliers may not perform the delegated tasks in conformance with an agreement, possibly harming the buying firm's performance (Hendricks and Singhal, 2005). Some defaults, stemming from, particularly, catastrophic or economic risks are outside the control of the buyer and supplier. Other defaults related to capacity constraints, quality-related risks, production and/or technological changes or

product design changes (Zsidisin *et al.*, 2000) can, however, be managed by the buyer. As different improvement initiatives and tools have different costs and, most likely, have different impacts on the performance of the supplier (Carr *et al.*, 2008), it is important for buyers to make the right choices in the management of supplier defaults.

Agency theory

Past research has shown that Agency Theory gives guidance on how to deal with defaulting suppliers (Zsidisin *et al.*, 2004; Ketchen and Hult, 2007), while overcoming shortcomings of Transaction Costs Theory, e.g. not being able to explain supply chain relationship dynamics (Fayezi *et al.*, 2012). Agency Theory is concerned with circumventing problems arising in an agency relationship, which we define as a contract under which the principle (the buyer) engages the agent (the supplier) to perform some service on their behalf (Jensen and Meckling, 1976). Suppliers attempting to maximize their own position (self-interested behavior) give rise to agency problems on account of goal incongruence between the buyer and the supplier (Fama and Jensen, 1983; Jensen and Meckling, 1976). At the same time, bounded rationality makes it impossible for a buyer to cover every possible default of suppliers in a contract. This gives suppliers the opportunity for self-interested behavior. However, relationships operate in an environment of relative buyer and supplier power; the relative utility and scarcity of resources that are exchanged between the two parties determines whether the buyer has power attributes that provide the basis for the buyer to leverage the supplier's performance on quality and/or cost improvement (Cox, 2001). Therefore, the chance of supplier defaults is augmented by potential power and information asymmetries which limit the ability of buyers to monitor a supplier or to actively change their behavior (Byrne and Power, 2014; Eisenhardt, 1989a; Heath, 2009; Heide, 2003). However, at the same time, it has been found that suppliers that have significantly lower levels of power than buyers are less likely to put the relationship at risk as it would not be in their self-interest (Fama and Jensen, 1983; Jensen and Meckling, 1976; Logan, 2000). Hence, the relative power imbalance can alter the nature of self-interest (Cox, 2001), affecting whether improvement tools will be accepted by suppliers. Consistent with this, Modi and Mabert (2007) find suppliers with low levels of relative power to be more willing to embark on improvement programs, and Kähkönen (2014) shows that less powerful suppliers are more likely to commit to a relationship based on trust, commitment and information sharing. Power ensues from dependence between parties (Caniëls and Gelderman, 2007; Hausman and Johnston, 2010). Bacharach and Lawler (1981, p. 65), emphasize added) define power as “the *dependence* of one party [buyer or supplier] compared to the dependence of the other party”. Following this definition, power resides with the least dependent party (Bacharach and Lawler, 1981; Hausman and Johnston, 2010), determined by, particularly, percentage share of total market for the supplier, switching costs, search costs, information asymmetry or the number of available suppliers (Cox, 2001). Hence, the supplier's interests are more likely to align with those of the buyer if its security and income are dependent on a particular buyer (Eisenhardt, 1989a; Tate *et al.*, 2010).

To deal with defaulting suppliers, Agency Theory suggests to either use outcome based governance methods or BBGMs (Eisenhardt, 1989a; Rungtusanatham *et al.*, 2007; Zsidisin and Ellram, 2003). The former comprises a set of methods which intend to shield buyers from the negative effects of defaulting suppliers (Eisenhardt, 1989a) via, for example, demanding suppliers to keep additional inventory or inspecting incoming supplies (Zsidisin and Ellram, 2003; Zu and Kaynak, 2012). The latter refers to methods which deliberately manipulate a supplier's behavior to achieve great compliance (Fayezi *et al.*, 2012). BBGMs focus on reducing aberrant activities in the suppliers processes, emphasizing tasks and activities (Eisenhardt, 1989a) through, for example, improving supplier capabilities, improved information sharing, closer relationships or supplier integration (Zsidisin and Ellram, 2003; Zu and Kaynak, 2012). In addition, BBGMs lock suppliers into the supply chain (Zsidisin and Smith, 2005; Fayezi *et al.*, 2012), as such, augmenting the power of the buyer by isolating the supplier from the market (Cox, 2001). Therefore, in line with recent theory that emphasizes the benefits of supply chain integration and collaboration (Singh and Power, 2009), rather than trying to cope with risk of defaults via outcome-based governance methods, we focus on BBGMs in the remainder of this paper.

The umbrella term “BBGM” comprises a wide range of different management methods initiated by the buyer that help to align the goals of both parties. Zsidisin and Ellram (2003) mention four BBGMs that serve to align the goals of the principle and agent while focusing on supplier behaviors/processes: supplier certification, quality management programs, target costing and supplier development. These examples highlight that BBGMs can differ in terms of the resource intensiveness for suppliers. As depicted in Figure 1, resource intensiveness increases, for example, when suppliers have to make investments (e.g. supplier certification, awarding suppliers), the supplier's employees engage in resource exchanges (e.g. demand information sharing or target costing) or when the supplier has to train or educate its employees (e.g. supplier development) (Krause *et al.*, 2000). Classifying BBGMs based on their resource intensiveness provides a platform for identifying reasons why suppliers may impede BBGMs or factors enhancing the likelihood of goal incongruence. For example:

- intensified collaboration and investments lead to asset specificity, which creates greater dependence and possibly leads to undesired power erosion (Williamson, 1981);
- the fear of power erosion as a result of increased information sharing (Sezen, 2008; Kähkönen, 2014); and
- higher levels of investment by the supplier represent significant opportunity costs – money they might rather spend elsewhere (Batt and Purchase, 2004).

Figure 1 Examples of BBGMs and their resource intensiveness

Agency Theory identifies risks associated with BBGMs and therefore proposes that the effectiveness of BBGMs can be impeded by self-interested suppliers in cases where buyers and suppliers have goal incongruence about the implementation (Kähkönen, 2014). As the likelihood and magnitude of goal incongruence between trading partners increases when BBGMs are more resource intensive, the risk of suppliers impeding resource intensive BBGMs initiated by buyers can be expected to increase. Whether suppliers actually impede BBGMs is likely to be influenced by the supplier's power relative to the buyer (Cox, 2001). Suppliers with lower levels of relative power are less prepared to risk the relationship by impeding BBGMs, as they are dependent on the buyer (Kähkönen, 2014). However, while previous research shows that power influences the effectiveness of BBGMs (Cox, 2001), findings on the impact of power imbalances indicate some ambiguity (compare Hausman and Johnston (2010) with Zhao *et al.* (2008)). There is a need to further investigate and understand how power influences the effectiveness of BBGMs. This is in line with the aim of this research. We therefore use a multiple case study approach to explore how power imbalances between buyers and suppliers influence the effectiveness of low and high resource intensive BBGMs using the lens of Agency Theory.

Methodology

To empirically investigate the effectiveness of high and low resource intensive BBGMs in different power contexts, we adopted a multiple case research design (Eisenhardt, 1989b). Given the exploratory nature and aim of this study, a case study design was particularly suited as it allows us to gain a holistic and in-depth understanding of the underlying mechanisms of the phenomenon (Eisenhardt, 1989b; Yin, 2009) – here effectiveness of BBGMs. The multiple case approach was used to gather comparative data that augment external validity and guard against misjudgment based on observing a single event or organization (Voss *et al.*, 2002). We define the unit of analysis as a BBGM.

Case selection

The buying firms involved in this study were all medium- to large-sized firms to ensure possession of sufficient (financial) resources to engage in BBGMs (Zsidisin and Ellram, 2003). Furthermore, we focused on BBGMs used by buyers procuring tangible items as the process of purchasing services has been shown to be different and far more complex (Van der Valk and Van Iwaarden, 2011); additional human interaction is required which is hard to capture and assess in terms of effectiveness. While all buying organizations involved were located in The Netherlands to ensure a consistency in the logical application of a BBGM, their suppliers, and hence the supply problem for which the BBGM was applied, originate from different countries around the world.

The 13 cases – BBGMs – were selected based on theoretical replication of the two main variables of interest: resource intensiveness of BBGMs and supplier power (based on dependency). This resulted in four different research settings as depicted in the first column of Table I. To determine the specific research question, we asked all buyers some initial questions in relation to power (drawing on Caniels and

Table I Background of the cases

Research setting	Case	Principal domain in industry	Buyer size ^a	Supplier size ^a	Location of the supplier	Content of the BBGM (Resource intensiveness)	Performance default	Data source(s)	Involvement in relationship ^{a,b} (years)
1: Buyer power; low resource intensive BBGM	A	Bathroom and wellness products	Large	Small	The Netherlands	Meetings; small process adjustments	Product quality; delivery performance	Senior buyer; Lead buyer	15
	B	Facade construction	Large	Medium	The Netherlands	Meetings	Delivery performance; transparency	Head of purchasing	5
	C	Publishing of educational books	Large	Medium	China	Meetings; supplier certification	Delivery performance; transparency	Procurement manager	15
	D	Fast food restaurant chain	Large	Large	Belgium	Meetings; small process changes	Product quality	Trade manager; Product manager; Senior stock manager; Archival sources	9
2: Buyer power; high resource intensive BBGM	E	Infant care products	Large	Small	The Netherlands	Information sharing; meetings; employee exchange; process changes	Delivery performance; agility	Purchasing manager	19
	F	Pipeline protection	Medium	Small	The Netherlands	Information sharing; meetings; investments	Delivery performance; product quality	Purchasing manager	11
	G	High-tech machine tools	Medium	Small	The Netherlands	Meetings; investments	Product quality	Operations manager; Purchaser A	5.5
	H	Off-shore drilling solutions	Medium	Small	Lithuania	Meetings; investments	Product quality	Purchaser B	11
3: Supplier power; low resource intensive BBGM	I	High-end customer electronics	Medium	Large	Malaysia	Forecast sharing; evaluation reports	Delivery performance	Supply chain manager	7
	J	Advertising press-world	Medium	Large	The Netherlands	Forecast sharing; meetings	Delivery performance	Archival sources	4.5
	K	Floorcoverings	Medium	Large	Germany	Investments; meetings; integrated IT	Product quality; delivery performance	Purchasing manager	12
	L	Agricultural products	Large	Large	The Netherlands	Meetings; employee exchange; process changes	Product quality; agility	Product manager; Archival sources	16
4: Supplier power; high resource intensive BBGM	M	Air heat exchangers	Large	Large	Austria	Process changes; investments	Delivery performance	Supply chain manager; Archival sources	6
									1
									8
									14

Notes: ^a Based on the criteria of the Dutch Chamber of Commerce; a company is considered as "medium" when they meet at least two out of the three following criteria: total value of the assets: €4.4-17.5 million; turnover: € 8.8-35 million; number of FTE's: 50-250; a company is considered as "large" when they score above the aforementioned upper limits for at least two of the three times; in all other cases, a company is considered as "small"; ^b number of years the interviewee has worked together with the supplier under investigation (actual buyer-supplier relationship might be longer)

Gelderman, 2007) and resource intensiveness (drawing on Krause and Ellram, 1997, Ragatz *et al.*, 2003; Ring and Van der Ven, 1994). For each research setting, we selected and added cases until we reached theoretical saturation in terms of a solid understanding of what underlying mechanisms determine the effectiveness of BBGMs (Eisenhardt, 1989b). As a result of the four research settings requiring different contexts, the BBGMs were applied in various industries ranging from consumer electronics to industrial equipment and book publishers. Although we are aware of the impact of context, the problems encountered by the buying firms were quite similar across research settings; hence, we do not expect there to be related biases in our findings.

Data collection

The core of the data collection consisted of 20 semi-structured interviews with knowledgeable key persons selected based on their long-term involvement in the buyer–supplier relationship and the application of the BBGM. Column 9 of Table I depicts the role each interviewee had in the buyer–supplier relationship. The years of experience of each interviewee with the buyer–supplier relationship under investigation are denoted in Column 10 of Table I, showing that the buyer–supplier relationships in our study have been going on for at least five years, with some extending to almost 20 years, as such indicating the presence of relational assets. Prior to the interviews, each participant received a document outlining the aim of the interview as well as the topics and questions being covered during the interview. All interviews took place at the company premises of the buyers in The Netherlands. This allowed us to enhance our understanding of the business context and the buyer–supplier impact of supplier defaults. Table I provides an overview of the BBGMs, the supply problems, firms and their context.

The interviews themselves took place between April 2013 and March 2014 and lasted on average about one hour with some continuing up to three hours. The main part of the interviews followed a standard set of questions to facilitate data comparison while at the same time increasing reliability (Voss *et al.*, 2002; Yin, 2009). Therefore, the interview protocol contained broadly defined themes derived from literature with open-ended questions and probes to encourage detailed responses (see Appendix A for the interview protocol). Questions focused on the power relation between the buyer and the supplier; the nature of the supply problem; the content and resource intensiveness of the BBGM and the willingness of the supplier to adopt the BBGM; and the effectiveness of the BBGM. All interviews were, if allowed, recorded and transcribed verbatim. When recording was not allowed (Cases F and I), detailed notes were taken during the interview, complemented with further information and impressions directly after the interview. In all cases, data collection was followed up with emails and calls with the interviewee to ascertain the quality of the data and to fill in missing details. In Cases A, D, G and K, we interviewed multiple persons about the same BBGM to overcome remaining ambiguities. Furthermore, the purchasing manager of Case E was interviewed twice as he was unable to answer all questions in the first interview. While we did not interview suppliers, we did make use of written documentation about

supplier performance and the content of the BBGM along with the buyer's perception of the supplier's reaction toward the BBGM. Hence, archival sources, such as supplier evaluation reports and strategic documents, often rendered additional and supplemental data and increased construct validity (Voss *et al.*, 2002; Yin, 2009). Reports and strategic documents with detailed descriptions of the BBGM and documents logging the implementation process provided valuable insights into the resource intensity of the BBGM and the supplier's reaction toward it. In Case H, for example, the reports indicated how the supplier was approached and how the supplier reacted to the BBGM; in Case M, the reports showed how the supplier benefited from the BBGM and that the supplier accepted the BBGM once they acknowledged the benefits for their business exchange. Furthermore, supplier evaluation reports provided us with insights on how the BBGMs improved supplier performance over time. Drawing on the different sources of data for internal triangulation, we formulated narratives that were sent back to the interviewees to ascertain further possible ambiguities.

Data analysis

On analyzing the data, we first applied a data reduction approach to structure and classify the data into first-order codes. Therefore, we coded words, sentences or paragraphs (statements) from interviews that were clearly linked to the aim of the research: exploring factors influencing the effectiveness of BBGMs. Following, we used a two-step approach. First, we analyzed all BBGMs for their effectiveness, which we define as the degree to which the BBGM closes the gap between actual and desired supplier performance (e.g. product/service quality, quantities, on-time delivery, costs, use of EDI and flexibility to changes) within a predetermined time *and* using predetermined resources. For each case, we analyzed the agreed content of the BBGM in relation to what actually happened (first-order codes). We derived whether the objectives of the BBGM were achieved (not) within the predetermined time and using or exceeding predetermined resources. This allowed us to determine whether BBGMs closed the gaps between actual and desired supplier performance effectively, within the predetermined time and using predetermined resources (as coded in the step beforehand); somewhat effective, either within the predetermined time or using predetermined resources; or ineffective, neither within the predetermined time nor with the predetermined resources (see Figure 2 for an example of coding). Hence, whether a BBGM was considered as effective was dependent upon the second coding step where cases were classified according to their time and resources.

Second, due to the exploratory nature of this research, we then searched for (potential) underlying phenomena which might influence BBGM effectiveness. We therefore went back to our first-order codes and analyzed them in relation to Agency Theory. Accordingly, we deduced second-order categories such as power imbalance and goal incongruence, wherever possible. In a final step, we analyzed all first-order codes and their second-order categories for explanatory themes. We used descriptive coding to identify contingent factors that explain how power imbalances between buyers and suppliers influence the effectiveness of BBGMs within the context of Agency Theory,

Figure 2 Excerpt of coding

High Buyer power

Research Setting 1			
Within Case Analysis			
First-order codes	Use of time and resources in relation to agreement (BBGM)	Effectiveness of BBGM	
Case B			
"We just told them, and they listened immediately." (Case B)	Goal achieved within predetermined time	Effective	
"We just told them, and they listened immediately." (Case B)	Goal achieved with pre-determined resources		
Case C			
"Although it [on-time delivery performance] improved in one year from 80% up to 92%, it was still not good enough [aim was 95%]." (Case C)	Goal not achieved within predetermined time	Ineffective	
"Well, we had to spend a lot of time in the end to ensure that they understood us and that we understood them." (Case C)	Goal not achieved with pre-determined resources		
"You need to spend more time and pay more attention to get it through." (Case C)			
Case D			
"It was solved rather quickly through our clear communication and because we are a huge customer: we have such a strong position that we experience no problems with that." (Case D, trade manager)	Goal achieved within predetermined time	Effective	
There were no problems since (Case D, supplier evaluation report)			
"We just needed one meeting to explain them that they had to change." (Case D, product manager)	Goal achieved with pre-determined resources		
Cross Case Analysis			
First-order Codes	Second Order Category: Link to Agency Theory	Third Order Theme: Explanation	
"They really want to work with us because of our good name in the industry in terms of quality. If you work for us, it means you can deliver the best quality. And they know that if they keep us as a customer, they attract other customers as well. That is why they listen to our requests." (Case A, senior buyer)	Low goal incongruence	No self-interested supplier behavior	
"You can always ask your supplier for a favor, and normally they will do that. As long as they are capable of doing it and it is something reasonable you asked for." (Case B)			
"It are just small adaptation which they have to make. So it is rather easy for them to implement it." (Case D, trade manager)			
"Yes, they changed to another, better, logistical provider because they know they do not get the next order otherwise." (Case B)	Power imbalance		
"They will not take the risk to loose us by using tricks to avoid the BBGM." (Case C)			
"Since we are their only [important] customer, they are always willing to solve problems... We never encountered any form of resistance towards our demands [the BBGM]." (Case D, trade manager).			
"Their [China's] culture is different from our [the Dutch] culture. They find it more difficult to deliver bad news and therefore postpone this until the latest moment... They think that delivering bad news has a detrimental effect on the relationship... This has harmed the effectiveness [of the BBGM] in the beginning." (Case C)	---	Cultural differences	
Low Resource Intensiveness			

e.g. cultural differences between buyers and suppliers or the uncertainty of the business environment (third-order themes – see Figure 2 for coding examples). Table II provides representative quotes from the different research settings on the main constructs of our study (i.e. power imbalance, resource intensity, goal incongruence and the two contingency factors cultural differences and uncertainty of the business environment). The analysis of data was initially conducted on a case-to-case basis (within case analysis) (Eisenhardt, 1989b). We formulated case narratives per setting to get a detailed overview of the situations. Based on the initial analysis, we then compared the (in)effectiveness of BBGMs across cases within specific research settings as well as across settings. This was aimed at identifying whether findings were case specific or linked to a pattern within a research setting and/or across several research settings.

Throughout the data analysis process, we tried to balance induction with early structure applying an analytical deductive

approach where findings were generated in a recursive iterative process in relation to existing theoretical frameworks – i.e. Agency Theory (Eisenhardt and Graebner, 2007). Furthermore, confirming the validity of the analysis with interviewees and using Atlas.ti to manage the data analysis process in a systematic and consistent manner (chain of evidence, case study data base, overview of codes, etc.) facilitated reliability and validity (Yin, 2009).

Empirical results

We structure our findings along the four research settings. Accordingly, we present findings for each research setting, drawing on the content as well as problems of the individual cases (see Columns 7 and 8 in Table I). In line with the aim of this research, we focus on the underlying mechanisms that reveal how power imbalances between buyers and suppliers influence the effectiveness of high and low resource intensive BBGMs in the

Table II Representative quotes on the main constructs of our study

Construct	Representative quotes
Power imbalance/dependence	<p>"They know they do not get the next order [when they do not improve]" (Case B)</p> <p>"When they do not work on their points of improvement, we simply say goodbye to them" (Case H)</p> <p>"We can demand everything we want. . . We say to the supplier that when they do not make the investments we demand, we will go to another supplier" (Case G, operations manager)</p> <p>"We are just a little customer" (Case I)</p> <p>"We account for a too small part of their turnover to be taken seriously" (Case J)</p> <p>"It was a large supplier; yes a really big player. . . They have other customers which order much larger quantities than we do" (Case M)</p>
Resource intensiveness	<p>"It are just small adaptations which they have to make" (Case D, trade manager)</p> <p>"They sent their employees to our site so they could understand our processes and what we wanted" (Case E, purchase manager)</p> <p>"They even appointed a special manager to make sure that the changes come through" (case H, supply chain manager)</p> <p>"They have putted in a lot of effort. Absolutely. They had to change their production processes and they have had a lot of internal discussions" (Case L)</p> <p>"We went to their factory for two days and performed a value-stream mapping in order to identify possible process improvements which would lead to improved delivery performance. . . They had to make investments in their production process" (Case M)</p>
Goal incongruence	<p>"They really want to work with us because of our good name in the industry in terms of quality. If you work for us, it means you can deliver the best quality. And they know that if they keep us as a customer, they attract other customers as well. That is why they listen to our requests" (Case A, senior buyer)</p> <p>"It are just small adaptations which they have to make. So it is rather easy for them to implement it" (Case D, trade manager)</p> <p>"It [the BBGM] helped the supplier to improve its products which [in turn] helped the supplier to maintain their good reputation in the market" (Case L)</p> <p>"The supplier initially resisted to send his employees to our site so they could understand the processes and what they we wanted. They thought it was a waste of time" (Case E)</p> <p>"In the beginning they made a fuss about providing transparency. We asked them if we could have a look at their processes so we could help them improve. They resisted. It turned out they were afraid we would copy their processes and take production in-house" (Case G, operations manager)</p>
Cultural differences	<p>". . . their [China's] culture is different from our [the Dutch] culture. They find it more difficult to deliver bad news and therefore postpone this until the latest moment . . . They think that delivering bad news has a detrimental effect on the relationship. . . This has harmed the effectiveness [of the BBGM] in the beginning" (Case C)</p> <p>"There is both a language and a cultural barrier" (Case H)</p> <p>"Sometimes they think they understand it, but they don't. It really is their culture" (Case H)</p> <p>"Language is a big problem as they barely speak English. Plus their culture is non-European" (Case H)</p>
Uncertain business conditions	<p>"It [the BBGM] is rather complex and difficult to implement. The requirements [due to legislation and increasing requirements of end customers] change quickly. . . This explains why the supplier performs not always as desired as it is difficult for him to comply to all this" (Case H)</p> <p>"The requirements for the products are becoming increasingly strict, so they are always a bit behind and it is hard to keep up pace" (Case H)</p>

context of Agency Theory. However, as we were not able to clarify all findings by using the lens of Agency Theory, some additional explanations and relationships derived from the data analysis are provided.

Research setting 1: powerful buyers and low resource intensive behavioral-based governance methods

We found low resource intensive BBGMs to be effective in improving the performance of suppliers with low levels of power in all four cases. At the same time, we observed, based on the suppliers' high dependency on the buying firm, that the interest of the supplier aligns with the goals of low resource intensive BBGMs. As illustrated by the trade manager in Case D *"since we are their only [important] customer, they are always willing to solve problems. We never encountered any form of resistance towards our*

demands [the BBGM]". Similarly, in Case B, the supplier switched to another logistics provider to ensure that the glass being transported would not break. The new logistics service provider could also be used to serve other customers increasing the quality of the overall service. Dependence also aided the implementation of BBGMs: in Cases A, B and C, the suppliers implemented the BBGM on account of their dependence on the buyer:

[. . .] the supplier knows we can quickly replace them [. . .] and, well, then it [the BBGM] will be executed. They got no choice: otherwise they will not get the next order (Case B).

Additionally, our data show that the low resource intensiveness of the BBGMs within this research setting further minimizes the reasons for suppliers to act in a self-interested way. For example, acquiring a cheap product specific production tool (Case A) or

small adjustments of operational routines in relation to quality control (Case D) did not lead to higher asset specificity or use up resources which could be invested elsewhere. Consequently, as derived from our data analysis, BBGMs in this setting are effective as they are implemented within the predetermined timeframe using predetermined resources.

However, we also found indications that other contingencies influenced these observations. Specifically, in Case C, cultural differences were found to lead to the supplier initially resisting to provide transparency about delivery failures:

[...] their [China's] culture is different from our [the Dutch] culture. They find it more difficult to deliver bad news and therefore postpone this until the latest moment [...]. They think that delivering bad news has a detrimental effect on the relationship [...]. This has harmed the effectiveness [of the BBGM] in the beginning.

Therefore, due to misunderstandings, the BBGM could not close the gap between actual and desired supplier performance within the predetermined time. Furthermore, more resources than anticipated had to be used to make the supplier understand what is needed and why. This illustrates that, cultural differences between the buyer and the supplier negatively influenced the effectiveness of BBGMs in Case C. In this case, it renders BBGMs ineffective rather than effective as the BBGM does not close the gap between actual and desired supplier performance neither within a predetermined time nor with the predetermined resources.

Research setting 2: powerful buyers and resource intensive behavioral-based governance methods

We found BBGMs to be somewhat effective if the supplier has less power and the BBGM is resource intensive. Similar to Research setting 1, our analysis reveals that buyer power plays a positive and pre-eminent role in the effectiveness of resource intensive BBGMs. The power imbalance in favor of buyers as a result of dependence on the buyer emerges in all four cases within this research setting. As highlighted in Case H: *“when they do not work on their points of improvement [the BBGM], we simply say goodbye to them”*. Similarly, in Case G the operations manager states that:

[...] [due to our buyer power] we can demand everything we want [...]. We say to the supplier that when they do not make the investments we demand, we will go to another supplier.

Comparable words were also used in Cases E and F where the suppliers constantly feel the pressure of being replaced by another supplier. As a result, all buyers within this research setting claimed that their suppliers were willing to implement the BBGMs to solve the problems due to low levels of relative power. However, despite the fact that in all cases the suppliers implemented the desired BBGM, our findings also show that suppliers were initially resistant to these resource intensive BBGMs; buyers had to compel suppliers to implement the BBGMs by using their power:

[...] in the beginning they made a fuss about providing transparency. We asked them if we could have a look at their processes so we could help them improve. They resisted. It turned out they were afraid we would copy their processes and take production in-house (Operations manager, Case G).

Furthermore, the supplier in Case E and Case F initially resisted making the required investments due to an increase in asset specificity with the particular buyer. In Case F, the supplier had to make changes to processes so that they became unique to the buying firm. Nevertheless, the resistant attitude

of the suppliers towards the BBGMs did not result in impeding the BBGMs because of the suppliers' weak power position: *“if they don't give the transparency and don't make the investments, we just go to another supplier. That is a game of power which we can play”* (Case G, purchaser A). Nevertheless, the outcome of the BBGM can only be considered somewhat effective: the BBGM was implemented within the predetermined time frame, but required additional (human) resources due to this goal incongruence.

Furthermore, similar to Research setting 1, our results highlight that cultural differences influence the effectiveness of resource intensive BBGMs. Here, the supplier of Case H explains that the implementation of the BBGM was difficult: *“language is a big problem as they barely speak English. Plus their culture is non-European”*. Therefore, additional resources had to be spent to enable the BBGM eventually, but not within the predetermined timeframe. Supplier performance only began to improve once the BBGM was completely implemented. This is supported by archival sources – specifically supplier evaluation reports – which showed almost no improvement in the early phase of the BBGM. This underlines findings from Research setting 1 that contingent factors also play a role in BBGM effectiveness. More specifically, we found further evidence that cultural differences may create misunderstandings and have a negative impact on the effectiveness of the BBGM.

Our findings in this setting also reveal the presence of a further contingent factor. Uncertainty of business conditions was also found to influence the effectiveness of BBGMs. As the supply chain manager of Case H points out:

It [the BBGM] is rather complex and difficult to implement. The requirements [due to legislation and increasing requirements of end customers] change quickly [...]. This explains why the supplier performs not always as desired as it is difficult for him to comply with all this [the content of the BBGM].

In this case, the BBGM did not become effective within the predetermined time frame; before the BBGM was fully implemented, legislation and/or customer requirements had already changed and the content of the BBGM had to be adjusted accordingly. Additional resources were required to make these adjustments. While the BBGM slowly closed the gap between actual and desired performance, the archival sources showed that it took more than ten years (from 2001 to 2012) to reach the desired performance level. Hence, here, the effectiveness of BBGMs is contingent on levels of uncertainty in the business environment.

Research setting 3: powerful suppliers and low resource intensive behavioral-based governance methods

Our findings show that it is ineffective for a buyer with low levels of power to use low resource intensive BBGMs when trying to solve supply problems. In our sample, powerful suppliers pursued their own self-interest due to the buyer not being able to switch to another supplier or because the buyer was too small in volume to be of high importance to the supplier. In Case I, additional to the BBGM of sharing forecasts, supplier evaluation reports showing poor delivery performance were shared, indicating problems for the buyer. The purchasing manager of Case I explained that *“the supplier showed an arrogant attitude towards us because we are just a little customer”* and ignored the highlighted problems of the buyer.

Similarly, the supplier in Case J stopped regular meetings as “we [the buyer] were wasting their [the supplier’s] time”. Moreover, the supplier of Case J also resisted the use of shared forecasts. Case J’s supply chain manager attributed this to supplier power by stating that “it [the BBGM] failed because the supplier had more power” and “the supplier let us know that we did account for a too small part of their turnover to be taken seriously”. Therefore, our analysis shows that low resource intensive BBGMs are ineffective in solving the supply problem in cases of supplier power. In line with this, none of the BBGMs within this research setting achieved improved supplier performance. Instead, the BBGMs yielded negative results as “the costs of our efforts did not weigh to the little improvements of the supplier, if there were improvements at all” (Case J).

Research setting 4: powerful suppliers and resource intensive behavioral-based governance methods

We found resource intensive BBGMs to be somewhat effective with powerful suppliers in solving supply problems. While additional resources were required from the buyer, the high resource intensive BBGMs were implemented within the predetermined time. Consequently, all BBGMs improved supplier performance. As Case K illustrates:

[. . .] we called [the supplier] almost every day until he started listening to us. He probably became quite fed up. Anyway, our complaints were taken quite seriously from that moment on (supply chain manager).

At the same time, we found that the high resource intensive BBGMs “helped the supplier to improve its products which [in turn] helped the supplier to maintain their good reputation in the market” (Case L). Likewise, in Case K, the other customers of the supplier also benefited from the improved yarn quality: the BBGM strengthened the competitive position of the supplier. Hence, as a consequence of investing additional resources to build stronger relationships, the supplier implemented the BBGM: there were meetings involving top managers from both firms to discuss the issues, forecasts were shared, the supplier made process changes, information systems were integrated and the supplier improved the quality of their products (Case K). Therefore, our findings highlight that when BBGMs include supplier benefits, powerful suppliers may be more willing to accept the BBGM.

In summary, we found the BBGMs in Research setting 1 to be effective, in Research setting 2 somewhat effective, in Research setting 3 ineffective and in Research setting 4 somewhat effective. An overview of these findings is depicted in Figure 3. These results can be explained by the degree of alignment between supplier and buyer interests or goal incongruence (risks associated with asset specificity, low incentives for BBGMs, fear of losing intellectual capital) and

by power differences between trading partners (this will be further discussed in the following section). Interestingly, we also found evidence that prudent resource investment served to support buyers in convincing suppliers of benefits to be gained negating the negative potential impacts of these factors. At the same time, we found our results to be contingent upon other factors such as cultural differences and uncertainty in the business environment. In our cases, these contingent factors negatively influenced the effectiveness of BBGMs as they hinder the BBGM to close the gap between actual and desired supplier performance within a predetermined time and with predetermined resources.

Discussion

Agency Theory discourages the employment of BBGMs when suppliers have high levels of power, as they may be more inclined to act in their own perceived self-interest and thereby impede BBGMs (Eisenhardt, 1989a; Zu and Kaynak, 2012). We would have particularly expected this for high resource intensive BBGMs. Our findings, however, indicate that actual BBGM effectiveness deviates somewhat from what we set out based on the traditional predictions of Agency Theory. It has been highlighted previously that it remains unclear how agency relationships might be conditioned by factors other than contractual obligations and risk assessments (Eisenhardt, 1989a; Fayezi et al., 2012). Therefore, in line with the aim of this paper, we will now discuss our findings in the context of Agency Theory explaining how the effectiveness of a BBGM is influenced by different power contexts, the resource intensiveness of the BBGM and additional factors (e.g. cultural factors and business conditions) that we found to play a role.

The effect of power on the effectiveness of behavioral-based governance methods

Following the assumptions of Agency Theory, BBGM effectiveness can be expected to be influenced by power; BBGMs initiated by buyers ought to be more effective when buyers are more powerful and less effective when suppliers are more powerful (Celly and Frazier, 1996; Eisenhardt, 1989a). Our findings appear consistent with this prediction: in Research settings 1 and 2, suppliers with less power cannot afford risking the relationship by impeding the BBGMs and therefore embark on the BBGM. In Research setting 3, on the other hand, suppliers impede the BBGMs, and also in Research setting 4, the buyers indicated that powerful suppliers would act in their own self-interest and are less inclined to comply with the BBGM if there is not a clear incentive for them to do so. Hence, in line with Agency Theory, we propose that:

- P1. BBGMs are more effective when buyers are more powerful; BBGMs are less effective when suppliers are more powerful.

This finding gives additional insights. Cox (2001), Hausman and Johnston (2010) and Kähkönen (2014) indicate that cooperation, such as a BBGM, is ineffective when power is unbalanced between buyers and suppliers. These authors argue that powerful actors do not want to cooperate due to the

Figure 3 The effectiveness of BBGMs per research setting

Buyer Power	High	Research Setting 1: Effective	Research Setting 2: Somewhat Effective
	Low	Research Setting 3: Ineffective	Research Setting 4: Somewhat Effective
		Low	High

fear of power erosion and that powerless actors likely lack the required level of trust to make cooperation effective. This was confirmed in Research setting 3 where we found empirical support for the arguments of Cox (2001), Hausman and Johnston (2010) and Kähkönen (2014). There we did find powerful suppliers who did not want to cooperate. However, we also found that BBGMs can be (somewhat) effective, despite power imbalances in Settings 1, 2 and 4 based on the level of resource intensiveness.

The role of resource intensiveness

Agency Theory's assumption of goal incongruence combined with self-interested behavior suggests that suppliers are more inclined to resist resource intensive BBGMs to avoid power erosion (Croom *et al.*, 2000; Williamson, 1981) and undesired investments that might increase asset specificity (Batt and Purchase, 2004). Our findings in Research setting 2 support this reasoning: while the BBGM was ultimately implemented, buyers had to compel suppliers to do so using their power. Consequently, the gap between actual and desired supplier performance could not be closed with the predetermined resources, irrespective of the power of the buyer. We therefore propose:

- P2. The higher the resource intensiveness, the more obstructive suppliers are and the longer it takes before BBGMs are implemented.

Furthermore, our findings suggest that (somewhat) effective BBGMs in Research settings 1 and 2, where buyers have significantly more power, are mainly focused on buyer-related benefits, whereas somewhat effective BBGMs in Research setting 4, where buyers have less power, are more focused on joint benefits. As powerful suppliers can be expected to leverage this power to maximize their self-interest, a BBGM that improves the supplier's competitive edge will more likely be accepted. Hence, the buyer needs to consider that to make the BBGM attractive to a powerful supplier it needs to be designed to align with or at least complement the self-interest of the supplier. As such, prudent resource investments consistent with this objective combined with pro-active relationship building (Case K) will enable achievement of this aim. This change in BBGM content is in line with Cox (2007) who argues that power affects how buyers and suppliers approach each other. Hence, a possible explanation for the surprising finding in Research setting 4 is that in cases of high supplier power it makes sense for the buyer to give the supplier incentives by incorporating supplier specific benefits. This leads to less goal incongruence and therefore more effectiveness in relation to the BBGM. Investing additional resources in relationship building activities such as mutual site visits, meetings with executives and rich communication can be a catalyst in improving supplier performance (Prahinski and Benton, 2004). Our findings show that while this is not necessarily needed in cases of buyer power, it can be a helpful approach to overcome goal incongruence of powerful suppliers. We therefore pose the following propositions:

- P3. Buyers should align the content of resource intensive BBGMs with the power context: the more powerful the buyer, the more buyer oriented the benefits should be;

the more powerful the supplier, the more supplier oriented the benefits should be.

- P3a. Powerful suppliers are inclined to accept resource intensive BBGMs when supplier benefits are incorporated into the BBGM.
- P3b. Relationship building can overcome the negative effects of supplier power and the lack of supplier oriented benefits on the effectiveness of BBGMs.

Additional factors influences the effectiveness of behavioral-based governance methods

While we are able to link the (in)effectiveness of most BBGMs to Agency Theory mechanisms, we also came across cases where the effectiveness of a BBGM was contingent upon additional factors. In Research setting 1 and 2, we observed that cultural differences increase the difficulty of implementing low and high resource intensive BBGMs. Additional time and resources are needed to understand and eliminate such differences which make the BBGMs ineffective. This finding sheds a different light on the study of Zhao *et al.* (2008). These authors suggest that cultural differences have an impact on supplier integration efforts as different cultures perceive power differently. However, our findings suggests that it is not power, based on dependence, that cannot be used to coax suppliers from different countries to adopt BBGMs but rather misunderstandings in the process of implementing the BBGMs that limit the effectiveness of BBGMs.

Furthermore, our findings reveal that the uncertainty of the business conditions also influence BBGM effectiveness. Zsidisin and Ellram (2003) show that BBGMs need long lead times before results are achieved no matter what the situation. If the business conditions are uncertain and constantly change, there might not be enough time for BBGMs to become effective. Hence, BBGMs have to be adapted along the way, necessitating additional resources and time, which in turn renders the BBGM ineffective. While there is an increasing focus on how to deal with complexity in supply chains and changing business conditions (Manuj and Sahin, 2011), literature to date has been unclear on how to deal with complexity. Our findings provide initial insights by showing that solutions with long implementation times are vulnerable in these situations. In line with this we propose that:

- P4. Cultural differences may complicate the implementation of BBGMs resulting in longer lead times and additional resources required before BBGMs become effective.
- P5. BBGMs with long lead times are vulnerable to uncertainties in business conditions and subsequently might be less effective.

Conclusion

This research sets out to explore how power imbalances between buyers and suppliers influence the effectiveness of low and high resource intensive BBGMs. As such, we develop an understanding about how agency relationships might be conditioned by factors other than contractual obligations and risk assessments (Eisenhardt, 1989a; Fayezi *et al.*, 2012). Applying a multiple case study approach to analyze different BBGMs

enabled us to extend current well-established understandings of Agency Theory in relation to supplier improvement tools (Zsidisin and Ellram, 2003; Zu and Kaynak, 2012). We found that self-interested behavior and goal incongruence resulting from power imbalances explain the effectiveness of BBGMs: BBGMs are effective when suppliers do not act in a self-interested way due to their high level of goal congruence; BBGMs are less effective for the opposite reason. However, BBGMs which include joint benefits consistent with the self-interest of even powerful suppliers were also shown to have potential for success – particularly, if resource investments are prudent and supported by relationship building efforts. Finally, our study shows that these findings are contingent upon cultural differences and uncertainties in the business environment, factors that can negatively influence the effectiveness of BBGMs.

This study is not without limitations. We tried to limit the potential of a hindsight bias due to investigating completed cases by triangulating the data with archival sources and sending back the results to the interviewees for a final check. However, we did not get access to archival sources in all cases. Furthermore, we based our findings on interviews conducted solely with buyers, and as such we could only assess suppliers' actions based on archival documents and interviews with the buyers. In future research, it would be important to also incorporate the perceptions of suppliers on why certain BBGMs were impeded or not. A final limitation of this study is that the propositions are drawn from a limited set of cases. Nevertheless, as we added additional cases until we reached theoretical saturation, we do not expect our results to be biased. Additionally, we suggest for future research that confirmatory work should be conducted to empirically test our propositions and increase the generalizability and validity of our findings. Here, it would be of particular interest to investigate in more detail, how BBGMs can be made effective when suppliers are most powerful.

Implications for theory

We contribute to the field of supply chain management by providing a new theoretical perspective on how to deal with defaulting suppliers. Agency Theory suggests that agents – in our study suppliers – can be expected to react in the same way to all types of BBGMs based on relative power and associated self-interest (Eisenhardt, 1989a; Zsidisin and Ellram, 2003; Zu and Kaynak, 2012). Our findings, however, indicate that this is not necessarily the case. We showed that the content of BBGMs needs to change in accordance with the power distribution between the buyer and the supplier and that suppliers are more inclined to impede resource intensive BBGMs, especially when these BBGMs do not include clearly articulated supplier benefits. Additionally, following Danase (2006) and Krause *et al.* (2000), we distinguished BBGMs based on their resource intensiveness. Our results show that suppliers can be expected to resist highly resource intensive BBGMs (P2). Furthermore, our results reveal that BBGMs including supplier benefits are perceived differently than BBGMs without supplier benefits (P4), irrespective of the power imbalance.

Next to the different supplier reactions towards BBGMs, we identified the effectiveness of BBGMs to be contingent upon contextual factors. Particularly, cultural differences, and

uncertain business conditions have an impact on the degree to which BBGMs improve supplier performance.

Implications for managers

As virtually every firm encounters situations where a more or less powerful supplier defaults, several important managerial implications can be gleaned from this study. First, this study provides an in-depth explanation on how to facilitate the likelihood of performance improvements of defaulting suppliers while taking into account factors such as power imbalances, cultural differences and uncertain business conditions. Therefore, buyers facing similar problems can benefit from the findings of this research if they understand the dynamics of these interactions. Second, adding joint benefits to the BBGMs appears to be an effective approach for improving performance of powerful suppliers. Buyers that are not aware of this, for example those in Research setting 3, should consider incorporating supplier benefits into BBGMs to increase the likelihood of improved supplier performance. Notwithstanding, we are not arguing that resource intensive BBGMs with joint benefits are always preferable in situations where powerful suppliers default. One has to consider transaction costs (Williamson, 1981) and the strategic importance of the supplier (Cousins *et al.*, 2008) along with the findings of our study before making a decision.

References

- Bacharach, S. and Lawler, E. (1981), *Power and Politics in Organizations*, Jossey-Bass, San Francisco, CA.
- Batt, P. and Purchase, S. (2004), "Managing collaboration within networks and relationships", *Industrial Marketing Management*, Vol. 33 No. 3, pp. 169–174.
- Byrne, R. and Power, D. (2014), "Exploring agency, knowledge and power in an Australian bulk cereal supply chain: a case study", *Supply Chain Management: An International Journal*, Vol. 19 No. 4, pp. 431–444.
- Caniëls, M. and Gelderman, C. (2007), "Power and interdependence in buyer-supplier relationships: a purchasing portfolio approach", *Industrial Marketing Management*, Vol. 36 No. 2, pp. 219–229.
- Carr, A., Kaynak, H., Hartley, J. and Ross, A. (2008), "Supplier dependence: impact on supplier's participation and performance", *International Journal of Operations and Production Management*, Vol. 28 No. 9, pp. 899–916.
- Celly, K. and Frazier, G. (1996), "Outcome-based and behavior based coordination efforts in channel relationships", *Journal of Marketing Research*, Vol. 33 No. 2, pp. 200–210.
- Constantino, N. and Pellegrino, R. (2010), "Choosing between single and multiple sourcing based on supplier default risk: a real options approach", *Journal of Purchasing and Supply Management*, Vol. 16 No. 1, pp. 27–40.
- Cousins, P., Lamming, R., Lawson, B. and Squire, B. (2008), *Strategic Supply Chain Management: Principles, Theories and Practice*, Prentice Hall, Harlow.
- Cox, A. (2001), "Understanding buyer and supplier power: a framework for procurement and supply competence", *Journal of Supply Chain Management*, Vol. 37 No. 2, pp. 8–15.
- Cox, A. (2007), "Transactions, power and contested exchange: towards a theory of exchange in business relationships",

- International Journal of Procurement Management*, Vol. 1 No. 1, pp. 38–59.
- Croom, S., Romano, P. and Giannakis, M. (2000), "Supply chain management: an analytical framework for critical literature review", *European Journal of Purchasing and Supply Management*, Vol. 6 No. 1, pp. 67–83.
- Danase, P. (2006), "Collaboration forms, information and communication technologies, and coordination mechanisms in CPFR", *International Journal of Production Research*, Vol. 44 No. 16, pp. 3207–3226.
- Eisenhardt, K. (1989a), "Agency theory: an assessment and review", *Academy of Management Review*, Vol. 14 No. 1, pp. 57–74.
- Eisenhardt, K. (1989b), "Building theories from case study research", *Academy of Management Review*, Vol. 14 No. 4, pp. 532–550.
- Eisenhardt, K. and Graebner, M. (2007), "Theory building from cases: opportunities and challenges", *Academy of Management Journal*, Vol. 50 No. 1, pp. 25–32.
- Fama, E. and Jensen, M. (1983), "Agency problems and residual claims", *Journal of Law and Economics*, Vol. 26 No. 2, pp. 327–349.
- Fayez, S., O'Loughlin, A. and Zutshi, A. (2012), "Agency theory and supply chain management: a structured literature review", *Supply Chain Management: An International Journal*, Vol. 17 No. 5, pp. 556–570.
- Giunipero, L., Handfield, R. and Eltantawy, R. (2006), "Supply management's evolution: key skill sets for the supply manager of the future", *International Journal of Operations and Production Management*, Vol. 26 No. 7, pp. 822–844.
- Hausman, A. and Johnston, W. (2010), "The impact of coercive and non-coercive forms of influence on trust, commitment and compliance in supply chains", *Industrial Marketing Management*, Vol. 39 No. 3, pp. 519–526.
- Heath, J. (2009), "The uses and abuses of agency theory", *Business Ethics Quarterly*, Vol. 19 No. 4, pp. 497–528.
- Heide, J. (2003), "Plural governance in industrial purchasing", *Journal of Marketing*, Vol. 67 No. 4, pp. 18–29.
- Hendricks, K. and Singhal, V. (2005), "An empirical analysis of the effect of supply chain disruptions on long-run stock price performance and equity risk of the firm", *Production and Operations Management*, Vol. 14 No. 1, pp. 35–52.
- Jensen, M. and Meckling, W. (1976), "Theory of the firm: managerial behaviour, agency costs and ownership structure", *Journal of Political Economics*, Vol. 3 No. 4, pp. 305–360.
- Käkhönen, A. (2014), "The influence of power positions on the depth of collaboration", *Supply Chain Management: An International Journal*, Vol. 19 No. 1, pp. 17–30.
- Ketchen, D. and Hult, G. (2007), "Bridging organization theory and supply chain management: the case of best value supply chains", *Journal of Operations Management*, Vol. 25 No. 2, pp. 573–580.
- Krause, D. and Ellram, L. (1997), "Critical elements of supplier development: the buying firm perspective", *European Journal of Purchasing and Supply Management*, Vol. 3 No. 1, pp. 21–31.
- Krause, D.R., Scannell, T.V. and Calantone, R.J. (2000), "A structural analysis of the effectiveness of buying firm's strategies to improve supplier performance", *Decision Sciences*, Vol. 31 No. 1, pp. 33–55.
- Logan, M. (2000), "Using agency theory to design successful outsourcing relationships", *International Journal of Logistics Management*, Vol. 11 No. 2, pp. 21–32.
- Manuj, I. and Sahin, F. (2011), "A model of supply chain and supply chain decision-making complexity", *International Journal of Physical Distribution and Logistics Management*, Vol. 41 No. 5, pp. 511–549.
- Modi, S. and Mabert, V. (2007), "Supplier development: improving supplier performance through knowledge transfer", *Journal of Operations Management*, Vol. 25 No. 1, pp. 42–64.
- Mortensen, O. and Lemoine, O. (2008), "Integration between manufacturers and third party logistics providers", *International Journal of Operations and Production Management*, Vol. 28 No. 4, pp. 331–359.
- Prahinski, C. and Benton, W. (2004), "Supplier evaluations: communication strategies to improve supplier performance", *Journal of Operations Management*, Vol. 22 No. 1, pp. 39–62.
- Prajogo, D. and Olhager, J. (2012), "Supply chain integration and performance: the effects of long-term relationships, information technology and sharing, and logistics integration", *International Journal of Production Economics*, Vol. 135 No. 1, pp. 514–522.
- Ragatz, G., Handfield, R. and Scannell, T. (2003), "Success factors for integrating suppliers into new product development", *Journal of Product Innovation Management*, Vol. 14 No. 3, pp. 190–203.
- Ring, P. and Van der Ven, A. (1994), "Developmental processes of cooperative interorganizational relationships", *The Academy of Management Review*, Vol. 19 No. 1, pp. 90–118.
- Rungtusanatham, M., Rabinovich, E., Ashenbaum, B. and Wallin, C. (2007), "Vendor-owned inventory management arrangements in retail: an agency theory perspective", *Journal of Business Logistics*, Vol. 28 No. 1, pp. 111–135.
- Sezen, B. (2008), "Relative effects of design, integration and information sharing on supply chain performance", *Supply Chain Management: An International Journal*, Vol. 13 No. 3, pp. 233–240.
- Singh, P.J. and Power, D. (2009), "The nature and effectiveness of collaboration between firms, their customers and suppliers: a supply chain perspective", *Supply Chain Management: An International Journal*, Vol. 14 No. 3, pp. 189–200.
- Tan, K., Lyman, S. and Wisner, J. (2002), "Supply chain management: a strategic perspective", *International Journal of Operations and Production Management*, Vol. 22 No. 6, pp. 614–631.
- Tate, W., Ellram, L., Bals, L., Hartmann, E. and van der Valk, W. (2010), "An agency theory perspective on the purchase of marketing services", *Industrial Marketing Management*, Vol. 39 No. 5, pp. 806–819.
- Van der Valk, W. and Van Iwaarden, J. (2011), "Monitoring in service triads consisting of buyers, subcontractors and end customers", *Journal of Purchasing and Supply Management*, Vol. 17 No. 3, pp. 198–206.

- Van Donk, D. and Van der Vaart, T. (2005), "A case of shared resources, uncertainty and supply chain integration in the process industry", *International Journal of Production Economics*, Vol. 96 No. 1, pp. 97–108.
- Voss, C., Tsikriktsis, N. and Frohlich, M. (2002), "Case research in operations management", *International Journal of Operations and Production Management*, Vol. 22 No. 2, pp. 195–219.
- Williamson, O. (1981), "The economics of organisation: the transaction cost approach", *American Journal of Sociology*, Vol. 81 No. 3, pp. 548–577.
- Yin, R. (2009), *Case Study Research: Design and Methods*, Sage Publications, London.
- Zhao, X., Huo, B., Flynn, B. and Yeung, J. (2008), "The impact of power and relationship commitment on the integration between manufacturers and customers in a supply chain", *Journal of Operations Management*, Vol. 26 No. 3, pp. 368–388.
- Zsidisin, G. and Ellram, L. (2003), "An agency theory investigation of supply risk management", *Journal of Supply Chain Management*, Vol. 39 No. 3, pp. 15–27.
- Zsidisin, G., Ellram, L., Carter, J. and Cavinato, J. (2004), "An analysis of supply risk assessment techniques", *International Journal of Physical Distribution and Logistics Management*, Vol. 34 No. 5, pp. 397–413.
- Zsidisin, G., Panelli, A. and Upton, R. (2000), "Purchasing organization involvements in risk assessment, contingency plans, and risk management: an exploratory study", *Supply Chain Management: an international journal*, Vol. 5 No. 4, pp. 197–197.
- Zsidisin, G. and Smith, M.E. (2005), "Managing supply risk with early supplier involvement: a case study and research propositions", *Journal of Supply chain Management*, Vol. 41 No. 4, pp. 44–57.
- Zu, X. and Kaynak, H. (2012), "An agency theory perspective on supply chain quality management", *International Journal of Operations and Production Management*, Vol. 32 No. 4, pp. 423–446.

Further reading

- Humphreys, P., Li, W. and Chan, L. (2004), "The impact of supplier development on buyer-supplier performance", *Omega*, Vol. 32 No. 2, pp. 131–143.

Appendix A – interview protocol

- Can you describe the relationship between you and the supplier?
 - How long have you been working together?
 - What sort of products do you buy at this supplier?
 - How would you describe the market?
 - Where is the supplier located?
 - How do you normally (when there are no problems) work with this supplier?

- Can you tell me about the power distribution in the relationship?
 - How important is this supplier for your firm's performance, and why?
 - How difficult is it to replace this supplier in terms of, for example, costs, availability of other suppliers, available product substitutes?
 - How dependent is the supplier on you, and why?
- Can you describe the supplier default you encountered?
 - Why did the problem happen?
 - How severe was the problem and how did the problem affect your firm's performance?
 - Can you describe the underlying causes of the problem?
- Can you describe how you aimed to solve the supplier default?
 - What were the objectives of the solution?
 - What does the solution require from the supplier and to what extent?
 - Did the solution require increased integration, information sharing, joint teams or employee exchanges?
 - Did the solution require the supplier to train their employees?
 - Did the solution require supplier top-management commitment?
 - Did the solution require cultural change?
 - What was the impact of the solution on the supplier's resources?
 - How did you implement and communicate the solution to the supplier?
 - What was the time frame in which you expected better supplier performance due to the solution?
- How did the supplier respond to the solution?
 - How willing was the supplier to adopt the proposed changes?
 - Was their resistance from the supplier's side, and if so, on what aspects of the BBGM and why?
 - How did you act on resistance?
 - Additional resources?
 - Time delays?
 - Why was your reaction effective or not effective?
 - What things have changed in the implemented solution compared to the proposed solution, and why?
- How effective was the solution?
 - How well did the supplier perform after the solution was/or was not implemented?
 - What improvements were made, and which aspects were not improved?

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1. ArroyoPilar Ester, Pilar Ester Arroyo, HolmenElsebeth, Elsebeth Holmen, De BoerLuitzen, Luitzen De Boer. 2018. Integration in loosely coupled garment supply chains. *Journal of Global Operations and Strategic Sourcing* **11**:3, 357-383. [[Abstract](#)] [[Full Text](#)] [[PDF](#)]
2. DelbufaloEmanuela, Emanuela Delbufalo, BastlMarko, Marko Bastl. 2018. Multi-principal collaboration and supplier's compliance with codes-of-conduct. *The International Journal of Logistics Management* **29**:4, 1237-1254. [[Abstract](#)] [[Full Text](#)] [[PDF](#)]
3. MirSaif, Saif Mir, LuShih-Hao, Shih-Hao Lu, CantorDavid, David Cantor, HoferChristian, Christian Hofer. 2018. Content analysis in SCM research: past uses and future research opportunities. *The International Journal of Logistics Management* **29**:1, 152-190. [[Abstract](#)] [[Full Text](#)] [[PDF](#)]