(Araştırma)

CONTRACTUAL AND RELATIONAL GOVERNANCE, SUPPLIER INTEGRATION AND NEW PRODUCT PERFORMANCE: MODERATING ROLES OF SUPPLIER DEPENDENCE AND SUPPLIER-SPECIFIC INVESTMENT

Volkan YENİARAS[1]

ABSTRACT

This study provides deeper insight into the management of supplier integration and a better understanding of ways that companies in emerging economies should govern these relationships to enhance new product performance. Looking through the lens of relational governance, transactional cost, and resource dependence theories, we distinguish between the effects of relational and contractual governance on the outcome of supplier integration conditional to supplier dependence and supplier-specific investments. An analysis of dyadic survey data, which consists of 125 dyads (i.e., 125 manufacturers and 125 main suppliers) in Turkey, reveals that supplier dependence enhances the relationship between contractual governance and supplier integration while decreasing the relational governance – supplier integration relationship. In addition, we offer empirical evidence to suggest that supplier-specific investment has a negative effect on the relationship between supplier integration and new product performance. We also find that the indirect relationship between contractual governance and new product performance is at its highest at high levels of supplier dependence and low/medium levels of supplier-specific investments. Conversely, we discover that relational governance has the strongest relationship with new product performance at low levels of supplier dependence and supplier-specific investment.

Keywords: Contractual and relational governance, supplier integration, new product performance, supplier dependence, supplier-specific investment

Doi: 10.15659/ppad.16.1. 1168902

1 Dr. Öğretim Üyesi, Özyeğin Üniversitesi İşletme Fakültesi, volkan.yeniaras@ozyegin.edu.tr, ORCID: 0000-0002-1055-1098
Geliş Tarihi / Received: 31.08.2022, Kabul Tarihi / Accepted: 24.11.2022

SÖZLEŞMEYE DAYALI VE İLİŞKİSEL YÖNETİŞİM, TEDARİKÇİ ENTEGRASYONU VE YENİ ÜRÜN PERFORMANSI: TEDARİKÇİ BAĞIMLILIĞININ VE TEDARİKÇİYE ÖZEL YATIRIMIN DÜZENLEYİCİ ROLLERİ

ÖZ

Bu çalışma, tedarikçi entegrasyonunun yönetimine ilişkin daha derin bir kavrayış ve gelişmekte olan ekonomilerdeki şirketlerin yeni ürün performansını artırmak için bu ilişkileri yönetmesi gereken yolların daha iyi anlaşılmasını sağlar. İlişkisel yönetişim, işlemsel maliyet ve kaynak bağımlılığı teorilerinin merceğinden bakıldığında, tedarikçi bağımlılığına ve tedarikçiye özgü yatırımlara bağlı olarak tedarikçi entegrasyonunun sonucu üzerindeki ilişkisel ve sözleşmeye dayalı yönetişimin etkileri arasında ayrım yapıyoruz. Türkiye'de 125 ikiliden (125 üretici ve 125 ana tedarikçi) oluşan ikili anket verilerinin analizi, tedarikçi bağımlılığının sözleşmeye dayalı yönetişim ve tedarikçi entegrasyonu arasındaki ilişkiyi geliştirirken ilişkisel yönetişim-tedarikçi entegrasyonu ilişkisini azalttığını ortaya koymaktadır. Ek olarak, tedarikçiye özgü yatırımın, tedarikçi entegrasyonu ile yeni ürün performansı arasındaki ilişki üzerinde olumsuz bir etkiye sahip olduğunu öne süren ampirik kanıtlar sunuyoruz. Ayrıca, sözleşmeye dayalı yönetişim ile yeni ürün performansı arasındaki dolaylı ilişkinin, yüksek düzeyde tedarikçi bağımlılığı ve düşük/orta düzeyde tedarikçiye özgü yatırımlarda en yüksek seviyede olduğunu bulduk. Tersine, ilişkisel yönetişimin, düşük tedarikçi bağımlılığı ve tedarikçiye özgü yatırım seviyelerinde yeni ürün performansıyla en güçlü ilişkiye sahip olduğunu keşfediyoruz.

Anahtar Kelimeler: Sözleşmeye dayalı yönetişim, ilişkisel yönetişim, tedarikçi entegrasyonu, tedarikçi bağımlılığı, tedarikçiye özel yatırım

1. Introduction

In PWC's 2022 survey on supply chain trends[2], 64 percent of 244 participating operations and technology leaders identified securing raw materials from suppliers as a moderate to major risk, while 68 percent highlighted supplier operational issues, and 58 percent perceived the financial health of the supplier as areas of moderate to major risk. Under such conditions, logistics managers need to be wary of strategies to ascertain sourcing and procurement while overseeing supply management pursuits (Stank et al., 2005) to avoid the adverse effects of dependence on suppliers (Maltz & Ellram, 1997; Petersen, Handield, Lawson & Cousins, 2008). Supplier integration strategy, where the supplier becomes dependent on the buyer to enhance performance while the buyer continues to depend on the supplier for services or materials, makes supplier integration a powerful dependence-coping mechanism for buyers (Freije, de la Calle & Ugarte; 2022; Kull & Ellis, 2016). Nevertheless, in relationships where the buyer is dependent on the supplier, the supplier is not equally willing to integrate since the balance of power within the exchange is tilted toward the supplier (Emerson, 1962). This causes the supplier not to be equally cooperative, resulting in weaker buyer-supplier integration (Williamson, 1985), which may reduce the buyer's ability to the external acquisition, outsourcing, and cost reduction (Das, Narashiman, & Talluri, 2006; Handfield & Ragatz, 1999).

To mitigate risks and promote supplier cooperation in their attempts to integrate with their suppliers, buyers rely on governance mechanisms (Carey et al., 2011; Lumineau & Quélin, 2012; Memis & Korucuk, 2021). The extant literature recognizes relational and contractual governance as antecedents of successful inter-organizational relationships in general (Kwon & Suh, 2004; Kingshott, 2006; Hawkins et al., 2008) and supplier integration specifically (e.g., Cai, Cheng, Shi & Feng, 2022; Cao and Lumineau 2015; Huo et al. 2016; Li et al. 2010; Sheng et al. 2018; Yang et al. 2016). Nevertheless, the role that both relational and contractual governance may play in supplier integration where the buyer depends on the supplier has not been empirically tested. In this study, to add to the limited extant literature (Carr et al., 2008; Krause & Scannell, 2002), we scrutinize relational and contractual governance as strategic tools that may be resorted to when supplier firms face a dilemma regarding whether to provide valuable resources to a few dominant customers or offer them to a more expanded customer base (Irvine, Park & Yildizhan, 2016).

Supplier integration aims to make information and material exchanges between a company and its suppliers more effective and efficient, creating streamlined processes and coherent supply networks that are challenging for rivals to match (Memis & Korucuk, 2021; Yeung et al. 2009; Lai et al. 2012; Zhao et al. 2013).

2 Last access: 28/07/2022: https://www.pwc.com/us/en/services/consulting/business-transformation/digital-supply-chain-survey.html

This also helps manufacturers to establish a sustainable competitive advantage through co-value creation in developing new products with suppliers (Hartley, Zirger, & Kamath, 1997; Petersen, Handfield, & Ragatz, 2003). Supplier-specific investments, which are investments done by the buying company that is exclusively committed to a particular supplier, are often used to incentivize the supplier to the relationship and to return the buyer's investment (Bensaou & Anderson, 1999). The extant literature underscores the performance benefits of supplier-specific investments (Dyer & Singh, 1998; Pulles, Ellegaard & Waldman, 2022). Nevertheless, there exists a dark side of such investments, which may create unplanned lock-in effects (Dyer, Singh & Hesterly, 2018), limiting knowledge sharing for innovation (Noordhoff et al., 2011) and market orientation capabilities of parties in collaboration (Wei & Morgan, 2004). Successful new product performance is becoming the chief factor behind sustainable competitive advantage and the main element of a company's success (Loch, Stein & Terwiesch, 1996; Thomas, 2013). We aim to uncover whether supplier-specific investments have new product performance implications in buyer-supplier relationships where supplier integration exists. Based on these issues, our research questions can be condensed as follows:

RQ1. What are the dissected effects of contractual and relational governance to supplier integration at different levels of supplier dependence?

RQ2. How does a supplier-specific investment affect the relationship between supplier integration and the new product performance of the manufacturer?

RQ3. How does contractual and relational governance affect new product performance through supplier integration and, ultimately, new product performance at varying levels of (1) supplier dependence and (2) supplier-specific investment?

We build a conceptual model encompassing four hypotheses to scrutinize our research questions. Through empirical observation, we test our hypotheses using a dyadic survey research design to capture both the manufacturer's and the supplier's perspectives. To that end, we use survey data from a total of 250 SMEs, which consists of 125 dyads of a manufacturing firm and its main supplier. We test our hypotheses by using a dyadic SME sample in Turkey for four reasons. First, we intend to address calls to test the role of supplier integration in firm performance in an emerging market (Simpson, Meredith, Boyer, Dilts, Ellram & Leong, 2015; Kouvelis, Chambers &Wang 2006; Zhang et al., 2022). Second, and relatedly, SMEs in emerging economies have significantly restricted internal and external capital equity (Schiffer & Weder, 2001; Yeniaras et al., 2021) and professional ability (Hitt, Li & Worthington IV, 2005) in comparison with developed economy SMEs (Yeniaras et al., 2020). The lack of such vital resources makes it imperative for emerging economy SMEs to rely on external capital (Yildirim, Akci & Eksi, 2011) that they may have access via interfirm integration (Yeniaras, Kaya & Ashill, 2020; Zhou & Poppo, 2010). Third, Turkey continues to perform strongly

in the global economy from 1999 to 2022, with an average GDP growth rate of 6.8 %. Turkish businesses are driven to achieve worldwide success. Fourth, research pertinent to examining governance and supplier integration mainly draws from transaction cost, relational exchange, and resource dependence theories (Kwon & Suh, 2004; Kingshott, 2006; Hawkins et al., 2008; Tangpong et al., 2010). Nevertheless, while the extant literature uses single respondent and dyadic samples when customers and suppliers are in the same relationship, antecedents and dynamics are rarely evaluated between buyers and suppliers in the same relationship (O'Toole & Donaldson, 2002; Terpend et al., 2008). To fill this gap, we use 125 dyads, which consist of a manufacturing firm and its main supplier.

In a nutshell, the purpose of the study is to dissect interfirm governance into relational and contractual governance mechanisms and examine their distinct relations to supplier integration and new product performance where (1) the manufacturer is dependent on the supplier for the procurement of vital resources and where (2) supplier-specific investments are made. Theoretically, this study unpacks whether relational and contractual governance mechanisms are dependence-coping mechanisms. Simultaneously, this study specifies the boundary conditions where contractual and relational governance achieves higher new product performance levels via supplier integration. Managerially, we aim to provide emerging economy SME manufacturers with a toolbox that will help them increase new product performance levels through the pursuit of supplier integration strategies. Concurrently, this study tries to uncover whether supplier-specific investments hinder or enhance the relationship between supplier integration and new product performance. This will help emerging-economy SME managers to better manage their already restricted resources while integrating with their suppliers.

2. Overview of the conceptual model

Firms are not self-sufficient; they depend on other organizations for vital resources, which makes them vulnerable and weaker in an exchange relationship (Provan & Gassenheimer 1994). The buyer's dependence on the supplier, where the supplier mediates the buyer's goals, restricts the buyer's capacity to secure value in the exchange relationship (Priem & Swink 2012). In such instances, suppliers may be implementing harsh treatments, refusing knowledge, and offering inadequate service to obtain benefits from dependent buyers (Kumar et al., 1995). While the anecdotal and descriptive evidence indicates that the buyers may be benefiting from buyer-supplier relationships at the expense of the suppliers (e.g., Womack et al. 1990, Helper & Sako 1995), suppliers may employ financial and operational reprimands (Gundlach & Codotte, 1994) and engage in opportunistic action (Lumineau & Henderson, 2012) in their relationships with dependent buyers. Given this potential of supplier opportunism, buyers, as a potent dependence-coping mechanism, attempt to integrate with suppliers, where the suppliers also become reliant on the buyer for performance improvements. This integrative strategy suppresses high supply-dependent conditions for buyers (Gundlach &

Cadotte 1994). In the process of this integration, buyers depend on governance instruments to alleviate risks and encourage collaboration (Carey et al., 2011; Lumineau & Quelin, 2012).

Traditionally, the extant literature approaches supply chain governance from two theoretical perspectives, namely relational and contractual governance. The first viewpoint considers relational governance as a technique for regulating inter-organizational interaction by enforcing a set of standards that define satisfactory conduct among exchange parties (Heide & John, 1992; Lusch & Brown, 1996; Macneil, 1980). The relational governance lens, which draws from relational exchange theory (Macneil, 1980; Palmetier et al., 2007), suggests that as the buyer-supplier relationship evolves temporarily, the relational values of participation, flexibility, cohesion and trust (Griffith & Myers, 2005) will emerge to ascertain the longevity of the relationship and restrict the individual goals of the parties (Heide & John, 1992; Zhang et al., 2003). The second perspective, which draws from transaction cost economics (Williamson, 1985), focuses on the chief role of contractual governance between the trading partners (i.e., buyers and suppliers) and formalizes a set of rules and clauses. This ensures that conflict and opportunism are minimized. Contractual governance mechanisms ascertain this minimization by specifying the responsibilities, monitoring processes, and penalties for non-compliance to be performed by the exchanging parties (Poppo & Zenger, 2002; Reuer & Arino, 2007). Nevertheless, the dissected dependence-coping role that relational and contractual governance mechanisms may play in supplier integration remains to be scrutinized. Our research focuses on the performance consequences of governance preferences that come with buyer-supplier relationships where the buying party is dependent on the supplier and seeks to integrate with its main supplier. Furthermore, we aim to understand the performance implications of supplier integration given varying degrees of manufacturer supplier-specific investment, as exhibited in Figure 1.

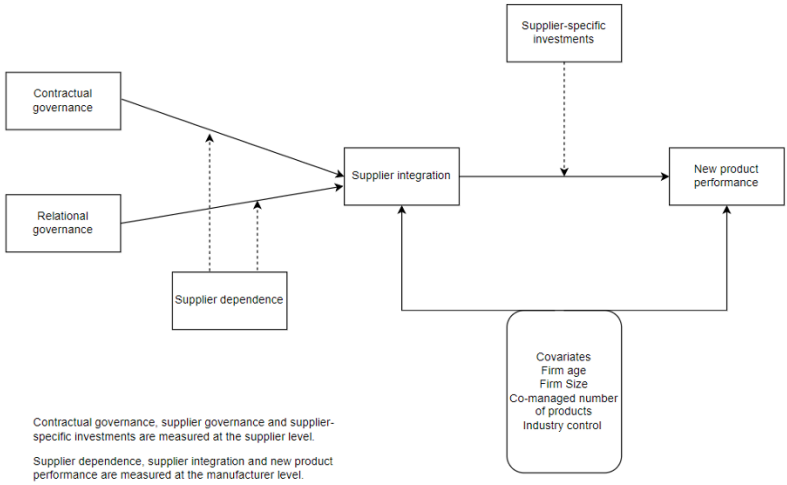

Figure 1. Conceptual framework

2.1. Contractual governance

Due to the relationship between power dynamics in a relationship and dependency (Bresnen, 1996; Buchanan, 1992), the supplier may be inclined to exploit its strong dominance, which could lead to opportunistic actions and conflicts (Heide & John, 1988; Kumar, Scheer, & Steenkamp, 1995). Given that the manufacturer is dependent on a specific supplier and that there is a limited number of supplier options, the supplier will be less concerned about the effects of any hidden action, should they ever become evident (Steinle, Schiele, & Ernst, 2014). In such conditions, the manufacturer dependent on a supplier may rely on formal and legal contracts where both partners explicitly specify their responsibilities, requirements, and expectations (Cao & Lumineau, 2015) to minimize opportunism and ascertain long-term collaborations (Williamson, 1985). To that end, we draw from transactional cost theory (henceforth, TCT), which suggests that fitting governance mechanisms should be in place to control potential deviations that may be caused by asset specificity and uncertainty (Williamson, 1985) from previously agreed-upon inter-organizational responsibilities. TCT, which is extensively employed in investigations encompassing contractual governance (e.g., Cai & Yang, 2008; Malhorta & Lumineau, 2011), underlines the importance of contractual governance in maintaining inter-organizational relationships where parties rely on formal (Li et al., 2010), legal (Achrol & Gundlach, 1999), explicit (Zhou & Poppo, 2010) or legitimate contracts (Lui & Ngo, 2004).

Contractual governance may be used as an exchange hazard control mechanism (Weber & Mayer, 2011), which helps coordinate inter-organizational relationships. Nevertheless, TCT also acknowledges that contractual governance may not be as effective due to bounded rationality and opportunism (Williamson, 1985). First, incomplete contracts (e.g., lack of specific clauses) may not only create room for opportunistic behavior (Luo, 2002) but also constrain the flexibility of the inter-organizational partnership (Briody et al., 2004) due to its ineffectiveness in regulating both parties' behavior in unanticipated conditions. Second, contracts indicate a dearth of trust, which is damaging to cooperation (Ghoshal & Moran, 1996; Poppo & Zenger, 2002). Finally, the strict use of contracts may cause disputes and corrosion of inter-organizational trust (Cao et al., 2013), degrading the cooperation between the parties (Cao & Lumineau, 2015).

2.2. Relational governance

Relational exchange theory (henceforth, RET) offers an alternative theoretical lens to TCT. RET underlines the importance of relational norms in the scrutiny of the actions that are likely in inter-organizational relationships (Palmatier et al., 2007). According to RET, relational requirements like adaptability, knowledge sharing, and solidarity remind cooperating partners that their relationship is complete and that they should act in accordance with mutual relational norms (e.g., Heide & John; Gencturk & Aulakh, 2007). Relational governance, as opposed to

contractual governance, which depends on official composition and third-party implementation, relies on informal structure and self-enforcement by every single partner (e.g., Malhorta & Munighan, 2002). The extant literature considers trust (i.e., belief in the other person's honesty, reliability, and goodness in an uncertain exchange) and relational norms (i.e., mutually shared expectations as predictors of future actions of the collaborating parties (Cannon et al., 2000; Heide & John, 1992). RET assumes that strong mutual inter-organizational trust ascertains that the parties will act in the expected ways. As a result, trust and relational rules are viewed as crucial governance mechanisms limiting opportunism (Liu et al., 2009; Poppo & Zenger, 2002). Nevertheless, risks do exist, as trust has limits; it cannot be taken for granted and is susceptible to erosion (Dasgupta, 1988). RET suggests that in relationally governed inter-organizational relationships, both parties have faith that the other will not take advantage of unfavorable circumstances (Barney & Hansen, 1994). That is because relational norms and trust reduce opportunistic inclinations as they lay the foundation of references to guide the firms in collaboration (Liu et al., 2009). Nevertheless, given that when the incentives are right, even a trustworthy party may defect (Dasgupta, 1988), relational governance is also jeopardized by opportunism due to its ambitious nature (Cannon et al., 2000; Dyer & Singh, 1998; Uzzi, 1997).

2.3. Contractual governance, supplier dependence, and supplier integration

In the transaction cost framework, dependence creates an opportunism potential in the buyer-supplier relationship that the dependent party faces in exchanges (Eckerd & Sweeney, 2018; Joshi & Arnold, 1997). In manufacturer-supplier relationships specifically, supplier dependence refers to the manufacturer's need to maintain a connection with a specified supplier to achieve its objectives (Frazier, 1983). In such relationships, the balance of power within the exchange is skewed towards the supplier (Emerson, 1962), which may lead to the use of less cooperative means and the problem of opportunism (Williamson, 1985), hence weaker integration with the supplier. According to TCE, using contractual governance to manage operations and minimize supplier opportunism where the manufacturer is dependent on the supplier may help both parties attain reciprocal objectives (Dwyer et al., 1987; Poppo & Zenger, 2002; Wu et al., 2007). Contractual governance, which refers to the design, application, and enforcement of the contractual clauses (Faems et al., 2008; Zhou & Xu, 2012), ascertains and identifies the parties' roles, obligations, and responsibilities prior to the exchange (Luo, 2002; Wuyts & Geyskens, 2005). We acknowledge that manufacturer-supplier exchange may lead to mutual adaptation where actors develop trust and a long-lasting relationship (Nooteboom, 1996). Nevertheless, trust is not unbounded and cannot be taken for granted, especially when the manufacturer is dependent on the supplier to secure vital resources. Given that when the incentives are right, even a trustworthy party may defect (Dasgupta, 1988), contractual governance may be used as a coping mechanism in exchanges where there exists a buyer dependency where the supplier may be tempted to take advantage of its stronger position (Steinle, Schiele, & Ernst, 2014).

A manufacturer may become reliant on a supplier once the supplier has mastered crucial resources for dealing with environmental dynamics and uncertainties (Zhao, Pan, & Song, 2018). Manufacturers pursue a supplier integration strategy to secure critical resources and learn, transfer, and apply the knowledge that may be obtained from the suppliers. Nevertheless, we believe that contractual governance may be leveraged to minimize the costs of running the system (Coase, 1937) and stimulate familiarity, trust, and mutual goal establishments in the manufacturer-supplier relationship (Gulati, 1995). Considering that the balance of power is skewed towards the supplier in exchanges where the manufacturer is dependent, the supplier party may seek to terminate the relationship and/or engage in opportunistic behavior (Poppo & Zenger, 2002). Accordingly, we believe that managers may use contracts to avoid such obstructionist behavior. Contracts outline needed not only tasks and conditions of the contractual breach but also a framework for resolving unforeseen disagreements, promoting the length of partnerships, and enabling easier supplier integration for dependent manufacturers. Accordingly, we hypothesize the following:

H1: *Supplier dependence positively moderates the relationship between contractual governance and supplier integration*

2.4. Relational governance, supplier dependence, and supplier integration

Prior research has connected the significance of supply chain integration to competitive advantage, performance, and low transaction costs (Lee & Billington, 1992; Frohlich & Westbrook, 2001; Zhao et al., 2008). Although some empirical investigations have failed to find a link between supplier integration and performance consequences (Swink, Narasimhan, & Wang 2007; Flynn, Huo, & Zhao 2010; Lai et al. 2012; Zhao et al. 2013), a developing stream of research demonstrates that supplier integration causes more probable advantages (Frohlich & Westbrook 2001; Huo 2012; Alfalla-Luque, Medina-Lopez, & Dey 2013; Moyano-Fuentes, Sacristán-Daz, & Garrido-Vega 2016).

The resource dependence theory (RDT) is that organizations are immersed in a network of exchanges and rely on other corporations to survive (Kim & Zhu, 2018; Li et al., 2018; Pfeffer & Salancik, 1978). The criticality of the resources, the size of the purchases, the accessibility of substitute partners, and the cost of switching can all impact an organization's dependence (Gelderman & van Weele, 2004). As such, manufacturers interact swiftly and efficiently with their suppliers to supply customized goods to their clients promptly and may rely on a supplier for essential tangible and intangible resources (Zhan & Huo, 2013). This setting necessitates a considerable adjustment in mindset for businesses, where the supplier is viewed as a collaborator rather than a competitor (Stock et al., 2010). A company can integrate with suppliers by proactively engaging with suppliers and cooperatively managing inter-organizational processes (Flynn, Huo, & Zhao 2010).

Supplier integration relates to the relationship between a company and its primary supplier that entails information sharing, collaboration in planning, and cooperative production development in order to overcome inter-organizational barriers. It allows companies to collaborate more successfully with just a few key suppliers willing to take responsibility for the product performance. Supplier integration seamlessly integrates buyers' and suppliers' key competencies and abilities to create greater service offerings at lower costs. As a result, supplier integration refers to the level of cooperation between suppliers and manufacturers in managing inventories, planning, forecasting, replenishment, and physical resource flows. (Wong et al., 2011).

Supplier integration allows for outsourcing and external acquisitions, reducing the internal complexity of product development or allowing the producer to concentrate on the subset of project tasks where they can use their key competencies, skills, and information, greatly reducing the project schedule and accelerating the process (Tessarolo, 2007; Richey, Roath, Whipple & Fawcett, 2010). Supplier integration also strives to increase the efficacy and efficiency of information and material exchanges between a firm and its suppliers, resulting in seamless operations and cohesive supply networks that are difficult for competitors to match (Yeung et al. 2009; Lai et al. 2012; Zhao et al. 2013).

According to RDT, asymmetric dependence creates uncertainty for the more reliant firm. Besides, in manufacturer-supplier partnerships, relational governance has little impact on curbing opportunism. Relational governance's collaborative planning behaviors do, in fact, give opportunistic behaviors more leeway, and appropriate information sharing between partners in enterprises is necessary for cooperative planning behaviors, which subsequently provides possibilities for partners to participate in opportunistic behaviors (Dong, Ma, & Zhou, 2017).

Suppliers might be considered key resources since firms need information and knowledge from supply chain partners to not only improve their capabilities but also gain a competitive advantage (Pires, Dean & Rehman, 2015; Swink, Narasimhan & Wang, 2007). It is difficult for a manufacturer to get vital resources from its suppliers by building an arm's length partnership if the degree of dependence on a supplier is high (Zhang & Huo, 2013). In this instance, the manufacturer may be better off creating secure and long-term ties (Swink, Narasimhan & Wang, 2007). On the contrary, when the degree of reliance on suppliers is less significant, the manufacturer is less likely to form long-term partnerships with its suppliers. Suppliers may engage in opportunistic behaviors detrimental to the relationship on this occasion (Yeung, Selen, Zhang & Huo, 2009; Chae, Choi & Hur, 2017). As a result, the manufacturer will be hesitant to form long-term partnerships with its suppliers. In conclusion, if a company is reliant on its suppliers, it is more likely to involve them in cooperative problem-solving efforts.

Organizational dependence degrees in a particular reciprocal trade relation frequently vary in extent, resulting in asymmetry (Emerson, 1962). As a result,

the party that is more reliant on the relationship is advised to implement balancing measures in order to lessen the asymmetry in their dependency, such as finding a new partner and limiting the number of transactions with the dominant enterprise (Emerson, 1962). In addition, regulating supplier behavior through personal interactions (i.e., relational governance) necessitates the allocation of a significant amount of initial resources (Shi et al., 2014), which SMEs simply do not possess. In such relationships where the balance of power within the exchange is skewed towards the supplier (Emerson, 1962), the benefits obtained outweigh the cost of development and cultivation of supplier integration via relational governance. Consequently, we offer the following hypothesis:

H2: *Supplier dependence negatively moderates the relationship between relational governance and supplier integration*

2.5. Supplier integration, supplier-specific investment and new product performance

The new product development process involves a chain of intra-firm operations and a network of inter-firm processes due to its information and resource requirements (Mele, Spena, & Colurcio, 2010). This necessitates manufacturers to integrate externally with suppliers (Hartley, Zirger, & Kamath, 1997; Petersen, Handfield, & Ragatz, 2003), which enables the restructuring of inter-organizational strategies, procedures, and actions into synchronized collaborations to create value that may not have been possible otherwise (Das, Narasimhan & Talluri, 2006; He, Lai, Sun, & Chen, 2014; Jayaram & Tan, 2010). Supplier integration, which refers to the coordination of choices connected to inventory management, concerted forecasting, renewal, and the flow of resources (Wong, Boon-Itt, & Wong, 2011), allows the manufacturers to access external talent and capabilities, which may be leveraged to establish a significant advantage in new product development (Peterson, Handfield, & Ragatz, 2003; Tessarolo, 2007). In addition to opportunities that it provides to manufacturers to learn, transfer and apply external knowledge, supplier integration also benefits the manufacturers in lowering costs through economies of scale and scope through volume consolidation (Das, Narashiman, & Talluri, 2006) and lower product and process development and administrative costs (Handield & Ragatz, 1999), which results in improved new product performance (Flynn et al., 2010; Koufteros et al., 2005).

To improve new product performance, manufacturers may choose to engage in idiosyncratic investments that are specialized in their relationship with their suppliers. These relationship / supplier-specific investments, which are not easily recoverable (Ganesan, 1994), are exclusively devoted to a particular supplier and do not carry much worth out of this relationship (Bensaou & Anderson, 1999). The rationale behind these investments is that they indicate dedication and intent to invest in an extended relationship, which encourages the supplier to pledge to the affiliation and return the buyer's investment as the investment may stimulate

the supplier to prioritize the investing manufacturer over the others. Considering that the performance of a firm is chiefly reliant on its suppliers' performance, knowledge-sharing procedures and supplier development systems are customary (Dyer & Hatch, 2006; Mesquita, Anand, & Brush, 2008). As a result, suppliers compare the relational value of buyers using supplier-specific investment as a criterion to assess the value acquired in alternate relationships (Steensma & Lyles, 2000). In such circumstances, the investing manufacturer is perceived as preferable and therefore prioritized by the supplier. As a result, the supplier-specific investment may improve supplier resource allocation and ensure performance benefits which would not be possible at lower supplier-specific investment levels (Pulles, Ellegaard & Veldman, 2022).

Supplier-specific investments act as incentives to have suppliers' priority and underline the positive performance consequences of relational/supplier-specific investments (Dyer & Singh, 1998). For instance, long-term-oriented buyers that invest in their specific suppliers to keep a close relationship may receive the supplier's newest technologies, efforts, and ideas, which are critical for a successful collaboration and increased new product performance (Dyer, 1997). Nevertheless, the relational view also alludes to possible adverse implications of supplier-specific investment (Dyer, Singh, & Hesterly, 2018). For instance, a contrasting dark-side view of supplier-specific investment suggests that such investments may lead to an embeddedness problem which may impair knowledge sharing for innovation (Noordhoff et al., 2011). That is because such partnerships may lead to increased competition in the form of a learning race as their resources and thinking converge (Anderson & Jap, 2005; Moorman, Zaltman & Deshpande, 1992; Dyer et al., 2018) due to the nearness trap that the parties in collaboration may find themselves in at high levels of supplier-specific investment (Ahuja & Morris Lampert, 2001). Also, we believe that a high level of supplier-specific investment may have a detrimental effect on both buyer's and supplier's connection with the market in general. That is because both parties will search for ideas for innovation in the locality of the knowledge, skills and resources they already have (Zahra, Yavuz, & Ucbasaran, 2006), limiting their market orientation, which is an essential factor of new product success (Wei & Morgan, 2004). Accordingly, we hypothesize the following:

H3: *Supplier-specific investment negatively moderates the relationship between supplier integration and new product performance.*

2.6. Mediating role of supplier integration

Integrating with important suppliers gives businesses access to outside talent and resources, which they can use to gain a significant competitive advantage in new product development (Peterson, Handfield, & Ragatz, 2003; Tessarolo, 2007). Nevertheless, this makes it increasing difficulty for manufacturers to reinstate the implicit expertise and social capital developed in partnership (Monczka et

al., 2000; Peteresen, Handfield & Ragatz, 2003), since the supplier would have been "designed into" the product, which enhances the comparative reliance of the buyer on the supplier (Petersen, Handfield, Lawson & Cousins, 2008). In such situations, the buyer will seek a closer relationship with the supplier and ideally incorporate them into the company to safeguard stability. Nevertheless, the more powerful supplier will often feel under-compensated or short-changed (Kumar et al., 1995) and will use less cooperative means (Williamson, 1985).

RDT states that limitations imposed on an organization by its environment can be reduced by making the environment steady when one actor (i.e., buyer/manufacturer) cannot fully control all the conditions (i.e., dependency of the buyer) required for the accomplishment of an action or a preferred result (i.e., supplier integration) (Pfeffer and Salancik 1978; Pfeffer 1981). In an attempt to achieve the desired outcome, the manufacturer will work closely with the supplier forming formal strategic partnerships (Peterson et al., 2008) while simultaneously engaging in the development of mutual trust, information sharing, and respect (Peterson et al., 2008). The extant literature suggests that to control any potential deviations and opportunistic actions that may occur during integration efforts (Williamson, 1985), buyers can use relational and/or contractual governance. To that end, prior research used social exchange, relational exchange, and transactional cost theories as distinct and/or matching theories to scrutinize the antecedents and success of supplier integration (e.g., Poppo & Zenger, 2002; Reuer & Arino, 2007; Lumineau & Henderson, 2012; Cao & Lumineau, 2015).

To add to the extant literature on managing supplier relationships via relational and contractual governance, we introduce supplier dependence as the intervening variable that moderates the relationship between relational and contractual governance and integration, as shown in the conceptual model depicted in Figure 1. In H1, we argue a positive moderation effect of supplier dependence on the relationship between contractual governance and supplier integration. In H2, we projected a negative moderation effect of supplier dependence on the relationship between relational governance and supplier integration. In addition, in H3, we argue that supplier-specific investment negatively moderates the relationship between supplier integration and new product performance. The conceptual framework and the hypotheses that we develop in this study points toward a conditional mediating effect of supplier integration. That is, the indirect effect of supplier dependence on new product performance will be dependent on relational governance, contractual governance, and supplier-specific investment. Accordingly, we offer the following hypothesis:

H4: *The indirect effect of supplier dependence on new product performance will be conditional on relational governance, contractual governance, and supplier-specific investment.*

3. Methods

3.1. Sample

To examine the previously illustrated conceptual model in Figure 1, we used a dyadic research design to capture both the manufacturer and the supplier perspectives. One dyad consists of one logistics manager in a manufacturing firm and one product manager in the main supplier matched by a numerical code in the respective questionnaire. To collect this matched, multi-source, and multi-respondent data set; first, we randomly chose 3420 manufacturing SMEs in Turkey from a list of manufacturers prepared by the Union of Chambers and Commodity Exchanges of Turkey. The list included the email and telephone information of all listed SMEs in the country. Second, we contacted 842 of all listed manufacturing firms and had 132 companies opt to take part in our study. Next, to prevent any potential single-source bias problems, we asked the manufacturing firms that opted in to identify their main suppliers and asked those suppliers to take part in our study. As a result, we obtained 125 usable dyads, which consist of a manufacturing firm and its main supplier. The data collection was approved by the internal review board of the American University of Sharjah in the 24th of May, 2018, and with the document number EFRG18-AAB-SBA-80.[3]

The size of the companies varied from 25 to 250 fulltime employees with an average size of 60. Out of 125 suppliers, 50 supplied consumer goods parts and materials, while 75 supplied parts and materials of industrial goods. The average supplier age was around 12 years, with the youngest supplier as young as one year and the oldest supplier was 20 years. In addition, the suppliers worked with an average number of 9 manufacturers, with a maximum of 15 and a minimum of 5. The manufacturer-supplier dyads worked on an average number of 14 products, with a maximum of 21 and a minimum of 1. The statistics are provided in Table 1 below.

Table 1. Correlation matrix and summary statistics

Variable	Rel-gov	Supplier-dep	Sup-pIntr	Supin-vest	NewP-erf	Cont-gov	Firm size	Firm age	# of prod
Relgov	1.00								
Suppdep	0.66*	1.00							
SuppIntr	0.65*	0.68*	1.00						
Supin-vest	-0.34*	-0.40*	-0.40*	1.00					
NewPerf	0.68*	0.77*	0.73*	-0.39*	1.00				
Contgov	0.65*	0.73*	0.69*	-0.36*	0.80*	1.00			

3 EFRG18-AAB-SBA-80: Internal review board, American University of Sharjah, 24/05/2018

Firm size	0.66*	0.66*	0.66*	-0.40*	0.73*	0.76*	1.00		
FirmaAge	0.68*	0.72*	0.69*	-0.38*	0.77*	0.77*	0.79*	1.00	
# of prod	-0.33*	-0.30*	-0.29*	0.09	-0.27*	-0.32*	-0.31*	-0.39*	1.00
Mean	3.98	4.36	4.09	3.77	3.66	3.69	3.04	2.19	3.66
Std. Dev.	.973	.647	.876	1.08	.861	.800	1.15	1.52	1.62

* shows significance at the .05 level
Relcont: Relational governance; Suppdep: supplier dependence; SuppIntr: Supplier integration; Supinvest: Supplier-specific investment; NewPerf: New product performance; Contgov: Contractual governance; # of prod: Number of products comanaged.

By contacting the companies that consented to contribute in the study, we were able to determine if the responders were part of the desired target group. The survey instruments were then administered. The survey tools were translated from English to Turkish by a native Turkish speaker who is also a fluent English speaker. The survey was then translated into English by a separate bilingual speaker. Following that, we made the appropriate revisions based on previous domain research (Yeniaras, Di Benedetto & Dayan, 2021). First, as part of the pre-tests, we had nine randomly selected managers to assess the survey items' substance and meaning. Following that, we communicated with four specialists in relevant fields to confirm the appropriateness of the scale items used in our investigation. We made changes to the items based on comments from both practitioners and scholars.

3.2. Measures

In this study, we employed the previously used scale in the relevant literature. We assessed all measures with a five-point Likert scale. We measured new product performance by asking the participants to assess their firm's new product performance compared to their main competitors' performance with respect to sales, market share, profitability, and ROI during the past three years (1=much worse and 5=much better) (Joshi & Sharma, 2004; Yeniaras & Unver, 2016). This enabled us to capture the efficiency and effectiveness dimensions simultaneously in the assessment of new product performance (Im & Workman, 2004).

We measured relational governance, which refers to regulating partner behavior through information sharing, joint problem solving, and participatory decision making (Uzzi, 1997; Xie, Liang & Zhou, 2016) via a 4-item 5-point Likert type scale adopted from (Wuyts & Geyskens, 2005; Xie et al. 2016). To measure contractual governance, which refers to regulating partner behavior through thorough agreements and specified clauses (Williamson, 1985), we used a 4-item, 5-point Likert-type scale adopted from (Jap & Ganesan, 2000; Wuyts & Geyskens, 2005; Xie et al. 2016). Supplier dependence, which refers to the unavailability of equivalent or better supplier alternatives (Jap & Ganesan, 2000), was measured via a 4-item, 5-point Likert type scale (1=strongly

disagree and 5=strongly agree) (Carr, Kaynak, Hartley & Ross, 2008). Supplier integration was measured via a 4-item, 5-point Likert-type scale (1=strongly disagree and 5=strongly agree) (Flynn, Huo & Zhao, 2010; Wong, Boon, Itt & Wong, 2011). We assessed supplier-specific investment relates to the dedicated specific investment of the manufacturer via a 4-item, 5-point Likert scale adopted from Rokkan, Heide & Wathne (2003). Finally, in our measure of new product performance, we used the effectiveness and efficiency dimensions from t (Joshi & Sharma, 2004).

3.3. Control variables

Several organizational characteristics have been identified as correlates of new product performance and supplier integration in the relevant literature (i.e., firm size, firm age, number of co-manufactured products, and industry effects). We controlled supplier integration and new product performance for firm size. This allowed us to minimize any potential presence of economies and diseconomies of sale (Bain, 1968). Similarly, we controlled supplier integration and new product performance for firm age. To partial out the industry effects (Lee, 2006), we asked the manufacturer to identify the product type that they procure (i.e., industrial vs. consumer) and controlled supplier integration and new product performance for it.

3.4. Measurement mode

We evaluated the validity and reliability via confirmatory factor analysis (CFA) for all multi-item constructs. The results did not provide any empirical evidence regarding the need to remove any items because of low factor loadings (<.40) (except one item in contractual governance, one item in relational governance, one item in supplier dependence, one item in supplier-specific investment and one item in supplier integration), high residuals (normalized residuals >2.58) or modification indices (>3.84). Overall, CFA provided acceptable fir for the sample [χ^2 (155) = 1455, goodness of fit index (GFI) = .854, comparative index fit (CFI) = .928, root mean square error of approximation (RMSEA) = .061, PCLOSE = .158]. Also, we provide additional evidence for the validity of the scales that were used in this study (t>2.0). The evidence of convergent validity was assured via the calculation of composite reliability score (CR>0.60) and average variance extracted (AVE>0.40) as depicted in Table 2. The square of the intercorrelations between two constructs, ϕ, was smaller than AVE estimates of the two constructs for all pairs of constructs (Fornell & Larcker, 1981), providing evidence of discriminant validity.

Table 2. Factor loadings, validity and reliability statistics

Constructs	Factor Loadings
Relational governance (CR = .81; AVE = .59)	
Reliance on the partner to keep promises	.593
Participatory decision-making	.955
Joint problem-solving	.711
Fine-grained information exchange	*Deleted*
Contractual governance (CR = .86; AVE = .68)	
A detailed defined work standard in the contract	.786
A clear statement of responsibility and role in the contract	.990
Adherence to formal contracts	.653
Formal monitoring	*Deleted*
Supplier dependence (CR = .80; AVE = .58)	
If our relationship with this supplier had been discontinued, we would have had difficulty achieving our goals	.775
It would have been difficult for us to replace this supplier	.853
We were quite dependent on this supplier	.635
We did not have a good alternative to this supplier	*Deleted*
Supplier integration (CR = .85; AVE = .42)	
Share information to our major suppliers through information technologies	.510
Have a high degree of strategic partnership with suppliers	.663
Have a high degree of joint planning to obtain rapid response ordering process (inbound) with suppliers	.662
Our suppliers provide information to us in the production and procurement processes	.685
Our suppliers are involved in our product development processes	*Deleted*
Supplier specific investment (CR = .85; AVE = .65)	
We have made significant investments in equipment dedicated to our relationship with this supplier	.683
We have made extensive internal adjustments in order to deal effectively with this supplier	.904
Training our people to deal with this supplier has involved substantial commitments of time and money	.841
Our logistics systems have been tailored to meet the requirements of dealing with this supplier	*Deleted*
New product performance (CR = .85; AVE = .55)	
Financial performance of new product development	.743
Speed of new product development	.896
Creativity of new product development	.788
Satisfaction of new product development	.669
Quality of new product development	.552

3.5. Method of analysis

We tested our hypotheses via moderate hierarchical regression analysis. To reduce the risk of multicollinearity, we mean-cantered the variables where the interactions were used (Aiken & West, 1991). We examined the collinearity by evaluating the variance inflation factor (VIF) for each of the regression coefficients. To estimate the indirect relation of relational and contractual governance to new product performance through supplier integration conditional to supplier dependence and supplier-specific investment, we used Preacher & Hayes' (2004) bootstrapping method. This strategy, which is used to get around the power problems caused by asymmetries and other types of nonnormality in the sample distribution (Shrout and Bolger, 2002), requires no assumptions on the shape of the distribution of the variables (Efron and Tibshirani, 1994).

4. Results

Table 3 (Model 4) shows that contractual governance ($b = .217, p < .01$), relational governance ($b = .247, p < .05$), and supplier dependence ($b = .247, p <$ .05) positively relate to supplier integration. In H1, we hypothesized that supplier dependence would positively moderate the relationship between contractual governance and supplier integration. In that vein, empirical evidence indicates that the interaction effect between contractual governance and supplier dependence on supplier integration is positive ($b= .527, p< .01$), supporting H1. In H2, we hypothesized a negative moderation effect of supplier dependence on the relationship between relational governance and supplier integration. Results show that the interaction effect between relational governance and supplier dependence on supplier integration is negative ($b = -.511, p< .01$) as hypothesized, providing empirical evidence to support H2. These results showed that in buyer-seller (i.e., manufacturer-supplier) relationships where the manufacturer is dependent on the supplier for the procurement of vital resources, contractual governance appears to be a better dependence-coping mechanism and helps manufacturers to better integrate with their main suppliers.

Next, we examine the interaction effect of supplier dependence on the relationship between relational/contractual governance and supplier integration. The results show that both relational and contractual governance positively and significantly relates to supplier integration and low and medium levels of supplier dependence. One important finding is that the magnitude of the positive effect in contractual governance – supplier integration and relational governance – supplier integration relationships is that the relationship between contractual governance and supplier integration is stronger at all levels of supplier dependence. The results are shown in Table 4.

Table 3. Hypothesis testing-H1&H2

Dependent variable:	**Model 1**		**Model 2**		**Model 3**		**Model 4**	
Supplier Integration	***b***	***SE***	***b***	***SE***	***b***	***SE***	***b***	***SE***
Constant	3.374**	.280	3.338**	.263	3.382**	.266	3.496**	262
Control variables								
Firm age	.047	.052	.002	.048	.009	.048	.029	.047
Firm size	.166*	.068	.155*	.063	.142*	.064	.106	.063
No. of products	.027	.048	.066	.045	.061	.045	.043	.044
Industry control 1	.080	.289	.336	.269	.337	.268	.387	.259
Industry control 2	.475	.514	.590	.467	.583	.467	.517	.451
Main effects								
Relational governance (RG)			.195**	.083	.189*	.083	.247 **	.083
Contractual governance (CG)			.338**	.099	.325**	.099	.217*	.101
Moderators								
Supplier dependence (SD)					.131	.112	.247*	.115
Interaction effects								
RGxSD							-.511**	.159
CGxSD							.527**	.198
R^2	.076		.251		.259		.325	
F-model	1.944*		5.590**		5.075**		5.494**	
Δ F-model			13.669**		1.356		5.572**	
ΔR^2	-		.175		.009		.066	

Table 4. Effects of relational/contractual governance on supplier integration

IV: RG		**DV: SIntr**			**IV: CG**		**DV: SIntr**		
IV	**Level**	**SD**	***Effect***	***SE***	***IV***	**Level**	**SD**	***Effect***	***SE***
RG	**High**	-.647	.600**	.140	CG	**High**	-.647	.665**	.140
RG	Medium	.000	.250**	.084	CG	Medium	.000	.428**	.095
RG	**Low**	.647	-.096	.123	CG	**Low**	.647	.190	.118

As part of our study, we also examine the relationship between supplier integration and new product performance as well as the moderating effect of supplier-specific investment on the said relationship. For that, in H3, we hypothesized a negative moderation effect of supplier-specific investment on the relationship between supplier integration and new product performance. The results depicted in Table 5 (Model 4) show that the relationship between supplier integration and new product performance is significant and positive (*b = .476, p< .01*). We also find a negative, though insignificant, the relationship between supplier-specific investment and new product performance (*b = .086, p> .05*). In H3, we hypothesize a negative moderation effect of supplier-specific investment (*b = -.198, p< .01*) on the relationship between supplier integration and new product performance, providing empirical support for H3.

Table 5. Hypothesis testing, H3

Dependent variable:	**Model 1**		**Model 2**		**Model 3**		**Model 4**	
New product performance	***b***	***SE***	***b***	***SE***	***b***	***SE***	**b**	***SE***
Constant	2.964**	.277	3.279**	.255	3.392 **	.262	3.415 **	.256
Control variables								
Firm age	.074	.051	.053	.046	.056	.046	.074	.045
Firm size	.112	.069	.041	.063	.015	.065	-.020	.065
No. of products	.050	.048	.037	.043	.026	.043	.025	.042
Industry control 1	.049	.285	.012	.256	.017	.254	.004	.248
Industry control 2	.479	.626	.180	.564	.285	.563	.404	.552
Main effects								
Supplier integration (SIntr)			.445**	.081	.419**	.082	.476**	.083
Moderators								
Supplier investment (SI)					-.112	.067	-.086	.067
Interaction effects								
SIntr x SI							-.198 **	.077
R^2	.066		.257		.274		.313	
F-model	1.672**		6.735**		6.251**		6.556**	
Δ F-model			29.999**		2.741*		.039**	
ΔR^2	-		.191**		.017*		.039**	

Next, we assess the indirect effects of contractual and relational governance on new product performance through supplier integration at different levels of supplier dependence and supplier-specific investment, as shown in Table 6. Findings provide empirical evidence to support H4, which hypothesized indirect relations of relational/contractual governance to new product performance. Nevertheless,

there exist differences in conditional indirect relationships. For instance, the indirect relation of contractual governance to new product performance through supplier integration conditional to supplier dependence and supplier-specific investment is at its highest when supplier dependence is at high levels of supplier dependence and low levels of supplier-specific investment ($b = .343, p < .01$). The indirect relation of relational governance to new product performance through supplier integration conditional to supplier dependence and supplier-specific investment, however, is at its highest at low levels of supplier dependence and supplier-specific investment ($b = .408, p < .01$). These results, while providing empirical evidence to support H4, also act as indicators to suggest that contractual governance may be a better dependence-coping mechanism.

Table 6. Indirect effects of relational (RG) and contractual governance (CG) to new product performance through supplier integration (SIntr) at different levels of supplier dependence (SD) and supplier-specific investments (SI)

IV: RG		***DV: NPP***		***M: SIntr***			***IV: CG***		***DV: NPP***		***M: SIntr***		
IV	**Levels**	**SD**	**Levels**	**SI**	***Effect***	***SE***	***IV***	**Levels**	**SD**	**Levels**	**SI**	***Effect***	***SE***
RG	Low	-.647	Low	-1.093	.408**	.13	CG	Low	-.647	Low	-1.093	-.015	.13
RG	Low	-.647	Med	.000	.261**	.08	CG	Low	-.647	Med	.000	-.009	.08
RG	Low	-.647	High	1.093	.114	.07	CG	Low	-.647	High	1.093	-.004	.04
RG	Med	.000	Low	-1.093	.170**	.07	CG	Med	.000	Low	-1.093	.164**	.08
RG	Med	.000	Med	.000	.109**	.04	CG	Med	.000	Med	.000	.106**	.05
RG	Med	.000	High	1.093	.047	.03	CG	Med	.000	High	1.093	.047	.03
RG	High	.647	Low	-1.093	-.065	.08	CG	High	.647	Low	-1.093	343**	.12
RG	High	.647	Med	.000	-.042	.05	CG	High	.647	Med	.000	.220**	.07
RG	High	.647	High	1.093	-.018	.02	CG	High	.647	High	1.093	.098	.06

supplier-specific investments (SI)

5. Discussion and conclusions

5.1. Theoretical implications

Our study validates the present literature, which identifies supplier integration as a dependence-coping mechanism (e.g., Carey et al., 2011; Kull & Ellis, 2016; Lumineau & Quelin, 2012; Tangpong et al., 2010) that enhances new product performance (e.g., Flynn et al., 2010; Koufteros et al., 2005). We also offer empirical support to the important role that governance may play in promoting cooperation and mitigating risks in buyer-supplier relationships as underlined in the literature (e.g., Griffith & Myers, 2005; Heide & John, 1992; Poppo & Zenger, 2002; Reuer & Arino, 2007; Zhang et al., 2003). Nevertheless, the dissected role

that contractual and relational governance may play in relationships where the buyer is dependent on the supplier remains an underexplored study area with mixed results. With the empirical scrutiny of the model depicted in Figure 1, we aim to explore the dissected role of contractual and relational governance mechanisms in the buyer's pursuit of supplier integration in relationships where the suppliers are not equally willing to integrate due to their advantage in the power dynamics of the exchange. Accordingly, our study's main contribution lies in examining the mediating effect of supplier integration conditional to relational/contractual governance and supplier-specific investments.

We identify relational governance as an inhibiting factor in the relationship between supplier dependence and supplier integration. That is, the results show that buyers that depend on their suppliers for crucial supplies and that pursue a supplier integration strategy to create suppliers that simultaneously rely on the buyer for performance improvement may reconsider exerting relational governance. Conversely, we offer empirical support to suggest that contractual governance may result in stronger supplier integration in situations where the buyer is dependent on the supplier. Considering that SMEs have inadequate internal, and external capital equity (Schiffer & Weder, 2001; Yeniaras et al., 2021) and managerial talent (Hitt, Li & Worthington IV, 2005), they most often need to rely on interfirm integration (Yeniaras et al., 2020) to access external capital (Yildirim, Akci & Eksi, 2011). Our results, which underlie relational governance as an inhibitor and contractual governance as a catalyzer of supplier integration in conditions where the buyer is dependent on its main supplier, provide a toolbox to managers in their attempts to integrate with suppliers that they are dependent on.

Regarding the relationship between supplier integration and new product performance, our results align with the extant literature, which points towards the need to integrate externally with suppliers (Hartley et al., 1997; Petersen et al., 2003). Our contribution, however, lies in examining the moderating effect that supplier-specific investments have on the supplier integration – new product performance relationship. The literature is fragmented in the scrutiny of the said relationship, with some studies suggesting a positive (e.g., Dyer, 1997; Dyer & Singh, 1998) and some providing evidence of a negative (e.g., Anderson & Jap, 2005; Dyer et al., 2018; Moorman et al., 1992) relationship. The contradictory findings on the relationship between supplier-specific investments and firm performance indicated a theoretical gap in the said relationship where there may be more than a straightforward association. Our findings show that supplier-specific investments reverse the positive relationship between supplier integration and new product performance to a negative one. This provides empirical evidence to support previous studies, which argue that such investments may create an embeddedness problem (Dyer et al., 2018; Noordhoff et al., 2011), decreasing firm performance.

The starkest impact of this study concerns the conditional mediating effect of supplier integration on the relational governance – new product performance and contractual governance – new product performance relationships. We fill the gap in the literature by drawing from transaction cost, relational exchange, and resource dependence theories (Kwon & Suh, 2004; Kingshott, 2006; Hawkins et al., 2008; Tangpong et al., 2010) and introduce contractual and relational governance and supplier-specific investments that the supplier dependence – supplier integration – new product performance relationships are dependent on. In that respect, we find that the indirect relationship between relational governance and new product performance is at its highest at low levels of supplier dependence. Also, we did not discover any significant indirect relationship between relational governance and new product performance at high levels of supplier dependence. This shows that relational governance does not enhance new product performance when the balance of power within the exchange is skewed toward the supplier. However, conversely, we find that the indirect relationship between contractual governance and new product performance is at its highest when supplier dependence is at its highest. This finding shows that buyers dependent on their main suppliers should rely on formal and legal contracts (Cao & Lumineau, 2015) to minimize opportunism and ascertain long-term collaborations (Williamson, 1985) to enhance new product performance. Contractual governance mechanisms only result in higher new product performance when supplier dependence is relatively low.

5.2. Managerial implications

This finding also has noteworthy organizational consequences. First, although previous research highlights the importance of governance mechanisms in supplier integration efforts (e.g., Lumineau & Quélin, 2012; Tangpong et al., 2010), the results are mixed. Our study shows that new product performance via the adoption of a supplier integration strategy of supplier-dependent emerging economy manufacturing SMEs may be more effective if the buyer uses a contractual governance approach with low to medium levels of supplier-specific investments. More importantly, supplier integration seems to be a strategy that may only be adopted via contractual governance in situations where supplier dependence exists. Therefore, we advise those managers to manage inter-organizational relationships with their suppliers that they depend on for vital resources using contractual governance. These results show that the right combination of contractual governance and supplier-specific investments are of critical importance for SME buyers in an emerging economy context. Accordingly, we suggest that these said firms should limit their resource allocations to relational governance and work on developing better legal contracts, which specify responsibilities, requirements, and expectations (Cao & Lumineau, 2015) to minimize opportunism and ascertain long-term collaborations (Williamson, 1985) in their efforts of supplier integration to foster their new product performances.

6. Limitations and further research

The findings presented in this research should be evaluated and interpreted with caution because it has several limitations. First, in this study, we identify contractual and relational governance as strategic tools that may link supplier dependence, supplier integration, and new product performance. Nevertheless, other resources/capabilities/tools may link supplier dependence to new product performance. Second, the moderating effects of contractual/relational governance and supplier-specific investment on the relationships between supplier dependence, supplier integration, and new product performance may be delayed. Third, the use of objective performance measures may improve empirical robustness. Fourth, while emerging economies are similar in terms of market and institutional backgrounds (Peng, 2000; Yeniaras, Di Benedetto & Dayan, 2021), the distinct cultural factors in Turkey could vary and result in different pros and cons of contractual and relational governance. An industry analysis of the effect of contractual governance, relational governance, and supplier dependence on supplier integration and new product performance is critical. In this study, because of resource and data limitations, we were not able to come to such conclusions. Non-response bias is also an issue. We were unable to follow up with employees who did not answer right away due to resource limitations. Nevertheless, our study offers chances for subsequent research to re-test and enhance our conclusions. Finally, even though emerging economies have similar institutional and market characteristics (Peng, 2000), individual cultural factors may have had a different impact on the connections between contractual governance, relational governance, supplier dependence, supplier integration, supplier-specific investment, and new product performance. Accordingly, we advise further studies to be mindful of such factors and treat them as control variables.

References

Achrol, R. S., & Gundlach, G. T. (1999). Legal and social safeguards against opportunism in exchange. *Journal of Retailing*, *75*(1), 107-124.

Ahuja, G., & Morris Lampert, C. (2001). Entrepreneurship in the large corporation: A longitudinal study of how established firms create breakthrough inventions. *Strategic Management Journal*, *22*(6-7), 521-543.

Aiken, L. S., West, S. G., & Reno, R. R. (1991). *Multiple regression: Testing and interpreting interactions*. Sage.

Alfalla-Luque, R., Medina-Lopez, C., & Dey, P. K. (2013). Supply chain integration framework using literature review. *Production Planning & Control*, *24*(8-9), 800-817.

Anderson, E., & Jap, S. D. (2005). The dark side of close relationships. *MIT Sloan Management Review*, *46*(3), 75.

Bain, J. S. (1968). *Industrial organization*. New York: Wiley.

Barney, J. B., & Hansen, M. H. (1994). Trustworthiness as a source of competitive advantage. *Strategic Management Journal*, *15*(S1), 175-190.

Bensaou, M., & Anderson, E. (1999). Buyer-supplier relations in industrial markets: when do buyers risk making idiosyncratic investments?. *Organization Science*, *10*(4), 460-481.

Bresnen, M. (1996). An organizational perspective on changing buyer-supplier relations: a critical review of the evidence. *Organization*, *3*(1), 121-146.

Briody, E. K., Cavusgil, S. T., & Miller, S. R. (2004). Turning three sides into a delta at General Motors: enhancing partnership integration on corporate ventures. *Long Range Planning*, *37*(5), 421-434.

Buchanan, L. (1992). Vertical trade relationships: the role of dependence and symmetry in attaining organizational goals. *Journal of Marketing Research*, *29*(1), 65-75.

Cai, J., Cheng, J., Shi, H., & Feng, T. (2022). The impact of organisational conflict on green supplier integration: the moderating role of governance mechanism. *International Journal of Logistics Research and Applications*, *25*(2), 143-160.

Cai, S., & Yang, Z. (2008). Development of cooperative norms in the buyer-supplier relationship: the Chinese experience. *Journal of Supply Chain Management*, *44*(1), 55-70.

Cannon, J. P., Achrol, R. S., & Gundlach, G. T. (2000). Contracts, norms, and plural form governance. *Journal of the Academy of Marketing Science*, *28*(2), 180-194.

Cao, Z., & Lumineau, F. (2015). Revisiting the interplay between contractual and relational governance: A qualitative and meta-analytic investigation. *Journal of Operations Management*, *33*, 15-42.

Carey, S., Lawson, B., & Krause, D. R. (2011). Social capital configuration, legal bonds and performance in buyer–supplier relationships. *Journal of Operations Management*, *29*(4), 277-288.

Carr, A. S., Kaynak, H., Hartley, J. L., & Ross, A. (2008). Supplier dependence: impact on supplier's participation and performance. *International Journal of Operations & Production Management*, 28(9), 899-916.

Chae, S., Choi, T. Y., & Hur, D. (2017). Buyer power and supplier relationship commitment: A cognitive evaluation theory perspective. *Journal of Supply Chain Management*, *53*(2), 39-60.

Coase, R. H. (1937). The nature of the firm. *Economica*, *4*(16), 386-405.

Das, A., Narasimhan, R., & Talluri, S. (2006). Supplier integration—finding an optimal configuration. *Journal of Operations Management*, *24*(5), 563-582.

Dong, W., Ma, Z., & Zhou, X. (2017). Relational governance in supplier-buyer relationships: The mediating effects of boundary spanners' interpersonal guanxi in China's B2B market. *Journal of Business Research*, *78*, 332-340.

Dwyer, F. R., Schurr, P. H., & Oh, S. (1987). Developing buyer-seller relationships. *Journal of Marketing*, *51*(2), 11-27.

Dyer, J. H., & Hatch, N. W. (2006). Relation-specific capabilities and barriers to knowledge transfers: creating advantage through network relationships. *Strategic Management Journal*, *27*(8), 701-719.

Dyer, J. H., & Singh, H. (1998). The relational view: Cooperative strategy and sources of interorganizational competitive advantage. *Academy of Management Review*, *23*(4), 660-679.

Dyer, J. H., Singh, H., & Hesterly, W. S. (2018). The relational view revisited: A dynamic perspective on value creation and value capture. *Strategic Management Journal*, *39*(12), 3140-3162.

Eckerd, S., & Sweeney, K. (2018). The role of dependence and information sharing on governance decisions regarding conflict. *The International Journal of Logistics Management*, 29(1), 409-439.

Efron, B., & Tibshirani, R. J. (1994). *An introduction to the bootstrap*. CRC press.

Emerson, R. M. (2019). Power-dependence relations. In *Power in modern societies* (pp. 48-58). Routledge.

Faems, D., Janssens, M., Madhok, A., & Looy, B. V. (2008). Toward an integrative perspective on alliance governance: Connecting contract design, trust dynamics, and contract application. *Academy of Management Journal*, *51*(6), 1053-1078.

Flynn, B. B., Huo, B., & Zhao, X. (2010). The impact of supply chain integration on performance: A contingency and configuration approach. *Journal of Operations Management*, *28*(1), 58-71.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39-50.

Frazier, G. L. (1983). On the measurement of interfirm power in channels of distribution. *Journal of Marketing Research*, *20*(2), 158-166.

Freije, I., de la Calle, A., & Ugarte, J. V. (2022). Role of supply chain integration in the product innovation capability of servitized manufacturing companies. *Technovation*, *118*, 102216.

Frohlich, M. T., & Westbrook, R. (2001). Arcs of integration: an international study of supply chain strategies. *Journal of Operations Management*, *19*(2), 185-200.

Ganesan, S. (1994). Determinants of long-term orientation in buyer-seller relationships. *Journal of Marketing*, *58*(2), 1-19.

Gelderman, C. J., & Van Weele, A. J. (2004, April). Determinants of dependence in dyadic buyer-supplier relationships. In *13th International IPSERA Conference, Catania, Italy*.

Gençtürk, E. F., & Aulakh, P. S. (2007). Norms-and control-based governance of international manufacturer–distributor relational exchanges. *Journal of International Marketing*, *15*(1), 92-126.

Ghoshal, S., & Moran, P. (1996). Bad for practice: A critique of the transaction cost theory. *Academy of Management Review*, *21*(1), 13-47.

Griffith, D. A., & Myers, M. B. (2005). The performance implications of strategic fit of relational norm governance strategies in global supply chain relationships. *Journal of International Business Studies*, *36*(3), 254-269.

Gundlach, G. T., & Cadotte, E. R. (1994). Exchange interdependence and interfirm interaction: Research in a simulated channel setting. *Journal of Marketing Research*, *31*(4), 516-532.

Handfield, R. B., Ragatz, G. L., Petersen, K. J., & Monczka, R. M. (1999). Involving suppliers in new product development. *California Management Review*, *42*(1), 59-82.

Hartley, J. L., Zirger, B. J., & Kamath, R. R. (1997). Managing the buyer-supplier interface for on-time performance in product development. *Journal of Operations Management*, *15*(1), 57-70.

Hawkins, T. G., Wittmann, C. M., & Beyerlein, M. M. (2008). Antecedents and consequences of opportunism in buyer–supplier relations: Research synthesis and new frontiers. *Industrial Marketing Management*, *37*(8), 895-909.

He, Y., Lai, K. K., Sun, H., & Chen, Y. (2014). The impact of supplier integration on customer integration and new product performance: The mediating role of manufacturing flexibility under trust theory. *International Journal of Production Economics*, *147*, 260-270.

Heide, J. B., & John, G. (1992). Do norms matter in marketing relationships?. *Journal of Marketing*, *56*(2), 32-44.

Helper, S. R., & Sako, M. (1995). Supplier relations in Japan and the United States: are they converging?. *MIT Sloan Management Review*, *36*(3), 77-84.

Huo, B. (2012). The impact of supply chain integration on company performance: an organizational capability perspective. *Supply Chain Management: An International Journal*, 17(6), 596-610.

Huo, B., Ye, Y., Zhao, X., & Shou, Y. (2016). The impact of human capital on supply chain integration and competitive performance. *International Journal of Production Economics*, *178*, 132-143.

Im, S., & Workman Jr, J. P. (2004). Market orientation, creativity, and new product performance in high-technology firms. *Journal of Marketing*, *68*(2), 114-132.

Irvine, P. J., Park, S. S., & Yıldızhan, Ç. (2016). Customer-base concentration, profitability, and the relationship life cycle. *The Accounting Review*, *91*(3), 883-906.

Jap, S. D., & Ganesan, S. (2000). Control mechanisms and the relationship life cycle: Implications for safeguarding specific investments and developing commitment. *Journal of Marketing Research*, *37*(2), 227-245.

Jayaram, J., & Tan, K. C. (2010). Supply chain integration with third-party logistics providers. *International Journal of Production Economics*, *125*(2), 262-271.

Joshi, A. W., & Arnold, S. J. (1997). The impact of buyer dependence on buyer opportunism in buyer–supplier relationships: The moderating role of relational norms. *Psychology & Marketing*, *14*(8), 823-845.

Joshi, A. W., & Sharma, S. (2004). Customer knowledge development: antecedents and impact on new product performance. *Journal of Marketing*, *68*(4), 47-59.

Kim, D. Y., & Zhu, P. (2018). Supplier dependence and R&D intensity: The moderating role of network centrality and interconnectedness. *Journal of Operations Management*, *64*, 7-18.

Kingshott, R. P. (2006). The impact of psychological contracts upon trust and commitment within supplier–buyer relationships: A social exchange view. *Industrial Marketing Management*, *35*(6), 724-739.

Koufteros, X., Vonderembse, M., & Jayaram, J. (2005). Internal and external integration for product development: the contingency effects of uncertainty, equivocality, and platform strategy. *Decision Sciences*, *36*(1), 97-133.

Kouvelis, P., Chambers, C., & Wang, H. (2006). Supply chain management research and production and operations management: Review, trends, and opportunities. *Production and Operations Management*, *15*(3), 449-469.

Krause, D. R., & Scannell, T. V. (2002). Supplier development practices: Product-and service-based industry comparisons. *Journal of Supply Chain Management*, *38*(1), 13-21.

Kull, T. J., & Ellis, S. C. (2016). Coping with dependence: a logistics strategy based on interorganizational learning for managing buyer–supplier relations. *Journal of Business Logistics*, *37*(4), 346-363.

Kumar, N., Scheer, L. K., & Steenkamp, J. B. E. (1995). The effects of perceived interdependence on dealer attitudes. *Journal of Marketing Research*, *32*(3), 348-356.

Kwon, I. W. G., & Suh, T. (2004). Factors affecting the level of trust and commitment in supply chain relationships. *Journal of Supply Chain Management*, *40*(1), 4-14.

Lai, F., Zhang, M., Lee, D. M., & Zhao, X. (2012). The impact of supply chain integration on mass customization capability: an extended resource-based view. *IEEE Transactions on Engineering Management*, *59*(3), 443-456.

Lee, H. L., & Billington, C. (1992). Managing supply chain inventory: pitfalls and opportunities. *Sloan management review*, *33*(3), 65-73.

Loch, C., Stein, L., & Terwiesch, C. (1996). Measuring development performance in the electronics industry. *Journal of Product Innovation Management*, *13*(1), 3-20.

Lui, S. S., & Ngo, H. Y. (2004). The role of trust and contractual safeguards on cooperation in non-equity alliances. *Journal of Management*, *30*(4), 471-485.

Lumineau, F., & Henderson, J. E. (2012). The influence of relational experience and contractual governance on the negotiation strategy in buyer–supplier disputes. *Journal of Operations Management*, *30*(5), 382-395.

Lumineau, F., & Quélin, B. V. (2012). An empirical investigation of interorganizational opportunism and contracting mechanisms. *Strategic Organization*, *10*(1), 55-84.

Luo, Y. (2002). Contract, cooperation, and performance in international joint ventures. *Strategic Management Journal*, *23*(10), 903-919.

Lusch, R. F., & Brown, J. R. (1996). Interdependency, contracting, and relational behavior in marketing channels. *Journal of Marketing*, *60*(4), 19-38.

Macneil, I. R. (1980). Power, contract, and the economic model. *Journal of Economic Issues*, *14*(4), 909-923.

Malhotra, D., & Lumineau, F. (2011). Trust and collaboration in the aftermath of conflict: The effects of contract structure. *Academy of Management Journal*, *54*(5), 981-998.

Maltz, A. B., & Ellram, L. M. (1997). Total cost of relationship: an analytical framework for the logistics outsourcing decision. *Journal of Business Logistics*, *18*(1), 45-66.

Mele, C., Spena, T. R., & Colurcio, M. (2010). Co-creating value innovation through resource integration. *International Journal of Quality and Service Sciences*, 2(1), 60-78.

Memiş, S., & Korucuk, S. (2021). Tedarikçi Bağlılığını Etkileyen Faktörlerin Çok Kriterli Karar Verme Yöntemleriyle Belirlenmesine Yönelik Bir Araştırma: Giresun İli Örneği. *İşletme Araştırmaları Dergisi*, *13*(3), 2033-2041.

Mesquita, L. F., Anand, J., & Brush, T. H. (2008). Comparing the resource-based and relational views: knowledge transfer and spillover in vertical alliances. *Strategic Management Journal*, *29*(9), 913-941.

Monczka, R. M., Handfield, R. B., Giunipero, L. C., & Patterson, J. L. (2015). *Purchasing and supply chain management*. Cengage Learning.

Moorman, C., Zaltman, G., & Deshpande, R. (1992). Relationships between providers and users of market research: The dynamics of trust within and between organizations. *Journal of Marketing Research*, *29*(3), 314-328.

Moyano-Fuentes, J., Sacristán-Díaz, M., & Garrido-Vega, P. (2016). Improving supply chain responsiveness through advanced manufacturing technology: the mediating role of internal and external integration. *Production Planning & Control*, *27*(9), 686-697.

Noordhoff, C. S., Kyriakopoulos, K., Moorman, C., Pauwels, P., & Dellaert, B. G. (2011). The bright side and dark side of embedded ties in business-to-business innovation. *Journal of Marketing*, *75*(5), 34-52.

Nooteboom, B. (1996). Trust, opportunism and governance: A process and control model. *Organization Studies*, *17*(6), 985-1010.

O'Toole, T., & Donaldson, B. (2002). Relationship performance dimensions of buyer–supplier exchanges. *European Journal of Purchasing & Supply Management*, *8*(4), 197-207.

Palmatier, R. W., Dant, R. P., & Grewal, D. (2007). A comparative longitudinal analysis of theoretical perspectives of interorganizational relationship performance. *Journal of Marketing*, *71*(4), 172-194.

Petersen, K. J., Handfield, R. B., & Ragatz, G. L. (2003). A model of supplier integration into new product development. *Journal of Product Innovation Management*, *20*(4), 284-299.

Petersen, K. J., Handfield, R. B., Lawson, B., & Cousins, P. D. (2008). Buyer dependency and relational capital formation: the mediating effects of socialization processes and supplier integration. *Journal of Supply Chain Management*, *44*(4), 53-65.

Pires, G. D., Dean, A., & Rehman, M. (2015). Using service logic to redefine exchange in terms of customer and supplier participation. *Journal of Business Research*, *68*(5), 925-932.

Priem, R. L., & Swink, M. (2012). A demand-side perspective on supply chain management. *Journal of Supply Chain Management*, *48*(2), 7-13.

Provan, K. G., & Gassenheimer, J. B. (1994). Supplier commitment in relational contract exchanges with buyers: A study of interorganizational dependence and exercised power. *Journal of Management Studies*, *31*(1), 55-68.

Pulles, N. J., Ellegaard, C., & Veldman, J. (2022). The Interplay Between Supplier-Specific Investments and Supplier Dependence: Do Two Pluses Make a Minus?. *Journal of Management*, 01492063221087643.

Reuer, J. J., & Ariño, A. (2007). Strategic alliance contracts: Dimensions and determinants of contractual complexity. *Strategic Management Journal*, *28*(3), 313-330.

Richey Jr, R. G., Roath, A. S., Whipple, J. M., & Fawcett, S. E. (2010). Exploring a governance theory of supply chain management: barriers and facilitators to integration. *Journal of Business Logistics*, *31*(1), 237-256.

Rokkan, A. I., Heide, J. B., & Wathne, K. H. (2003). Specific investments in marketing relationships: Expropriation and bonding effects. *Journal of Marketing Research*, *40*(2), 210-224.

Schiffer, M., & Weder, B. (2001). *Firm size and the business environment: Worldwide survey results* (Vol. 43). World Bank Publications.

Sheng, S., Zhou, K. Z., Li, J. J., & Guo, Z. (2018). Institutions and opportunism in buyer–supplier exchanges: The moderated mediating effects of contractual and relational governance. *Journal of the Academy of Marketing Science*, *46*(6), 1014-1031.

Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: new procedures and recommendations. *Psychological Methods*, *7*(4), 422.

Simpson, D., Meredith, J., Boyer, K., Dilts, D., Ellram, L. M., & Leong, G. K. (2015). Professional, research, and publishing trends in operations and supply chain management. *Journal of Supply Chain Management*, *51*(3), 87-100.

Stank, T. P., Davis, B. R., & Fugate, B. S. (2005). A strategic framework for supply chain oriented logistics. *Journal of Business Logistics*, *26*(2), 27-46.

Steensma, H. K., & Lyles, M. A. (2000). Explaining IJV survival in a transitional economy through social exchange and knowledge-based perspectives. *Strategic Management Journal*, *21*(8), 831-851.

Steinle, C., Schiele, H., & Ernst, T. (2014). Information asymmetries as antecedents of opportunism in buyer-supplier relationships: Testing principal-agent theory. *Journal of Business-to-Business Marketing*, *21*(2), 123-140.

Steinle, C., Schiele, H., & Ernst, T. (2014). Information asymmetries as antecedents of opportunism in buyer-supplier relationships: Testing principal-agent theory. *Journal of Business-to-Business Marketing*, *21*(2), 123-140.

Stock, J. R., Boyer, S. L., & Harmon, T. (2010). Research opportunities in supply chain management. *Journal of the Academy of Marketing Science*, *38*(1), 32-41.

Swink, M., Narasimhan, R., & Wang, C. (2007). Managing beyond the factory walls: effects of four types of strategic integration on manufacturing plant performance. *Journal of Operations Management, 25*(1), 148-164.

Tangpong, C., Hung, K. T., & Ro, Y. K. (2010). The interaction effect of relational norms and agent cooperativeness on opportunism in buyer–supplier relationships. *Journal of Operations Management*, *28*(5), 398-414.

Terpend, R., Tyler, B. B., Krause, D. R., & Handfield, R. B. (2008). Buyer–supplier relationships: Derived value over two decades. *Journal of Supply Chain Management*, *44*(2), 28-55.

Tessarolo, P. (2007). Is integration enough for fast product development? An empirical investigation of the contextual effects of product vision. *Journal of Product Innovation Management*, *24*(1), 69-82.

Thomas, E. (2013). Supplier integration in new product development: Computer mediated communication, knowledge exchange and buyer performance. *Industrial Marketing Management*, *42*(6), 890-899.

Uzzi, B. (1997). Social structure and competition in interfirm networks, *Administrative Science Quarterly*, *42*(1), 37-69.

Uzzi, B. (2018). Social structure and competition in interfirm networks: The paradox of embeddedness. In *The sociology of economic life* (pp. 213-241). Routledge.

Villena, V. H., & Craighead, C. W. (2017). On the same page? How asymmetric buyer–supplier relationships affect opportunism and performance. *Production and Operations Management*, *26*(3), 491-508.

Wang, Y., Wang, N., Jiang, L., Yang, Z., & Cui, V. (2016). Managing relationships with power advantage buyers: The role of supplier initiated bonding tactics in long-term buyer–supplier collaborations. *Journal of Business Research*, *69*(12), 5587-5596.

Ward, J. (1987), Keeping the Family Business Healthy, JosseyBass, San Francisco, CA.

Weber, L., & Mayer, K. J. (2011). Designing effective contracts: Exploring the influence of framing and expectations. *Academy of Management Review*, *36*(1), 53-75.

Wei, Y., & Morgan, N. A. (2004). Supportiveness of organizational climate, market orientation, and new product performance in Chinese firms. *Journal of Product Innovation Management*, *21*(6), 375-388.

Williamson, O. E. (1988). Technology and transaction cost economics: A reply. *Journal of Economic Behavior & Organization*, *10*(3), 355-363.

Womack, J. P., Jones, D. T., & Roos, D. (1990). The Machine that Changed the World. New York; Rawson Associates.

Wong, C. Y., Boon-Itt, S., & Wong, C. W. (2011). The contingency effects of environmental uncertainty on the relationship between supply chain integration and operational performance. *Journal of Operations Management*, *29*(6), 604-615.

Wuyts, S., & Geyskens, I. (2005). The formation of buyer–supplier relationships: detailed contract drafting and close partner selection. *Journal of Marketing*, *69*(4), 103-117.

Xie, E., Liang, J., & Zhou, K. Z. (2016). How to enhance supplier performance in China: An integrative view of partner selection and partner control. *Industrial Marketing Management*, *56*, 156-166.

Yeniaras, V., & Unver, S. (2016). Revisiting the mediating effect of entrepreneurial behaviour on proactiveness–performance relationship: The role of business ties and competitive intensity. *European Management Review*, *13*(4), 291-306.

Yeniaras, V., Di Benedetto, A., & Dayan, M. (2021). Effects of relational ties paradox on financial and non-financial consequences of servitization: Roles of organizational flexibility and improvisation. *Industrial Marketing Management*, *99*, 54-68.

Yeniaras, V., Di Benedetto, A., Kaya, I., & Dayan, M. (2021). Relational governance, organizational unlearning and learning: implications for performance. *Journal of Business & Industrial Marketing*, 36(3), 469-492.

Yeniaras, V., Kaya, I., & Dayan, M. (2020). Mixed effects of business and political ties in planning flexibility: Insights from Turkey. *Industrial Marketing Management*, *87*, 208-224.

Yeung, J. H. Y., Selen, W., Zhang, M., & Huo, B. (2009). The effects of trust and coercive power on supplier integration. *International Journal of Production Economics*, *120*(1), 66-78.

Yildirim, H. S., Akci, Y., & Eksi, I. H. (2013). The effect of firm characteristics in accessing credit for SMEs. *Journal of Financial Services Marketing*, *18*(1), 40-52.

Zahra, S. A., Yavuz, R. I., & Ucbasaran, D. (2006). How much do you trust me? The dark side of relational trust in new business creation in established companies. *Entrepreneurship Theory and Practice*, *30*(4), 541-559.

Zhang, Y., Hong, J., Li, X., & Shi, V. (2022). The impacts of quality system integration and relationship quality on quality performance in supply chains: an empirical investigation in China. *Emerging Markets Finance and Trade*, *58*(1), 116-133.

Zhao, L., Huo, B., Sun, L., & Zhao, X. (2013). The impact of supply chain risk on supply chain integration and company performance: a global investigation. *Supply Chain Management: An International Journal*, 18(2), 115-131.

Zhao, X., Pan, J., & Song, Y. (2018). Dependence on supplier, supplier trust and green supplier integration: The moderating role of contract management difficulty. *Sustainability*, *10*(5), 1673.

Zhou, K. Z., & Poppo, L. (2010). Exchange hazards, relational reliability, and contracts in China: The contingent role of legal enforceability. *Journal of International Business Studies*, *41*(5), 861-881.

Zhou, K. Z., & Xu, D. (2012). How foreign firms curtail local supplier opportunism in China: Detailed contracts, centralized control, and relational governance. *Journal of International Business Studies*, *43*(7), 677-692.