Understanding how opportunism and resource capability affect performance in exporter-LSP outsourcing relationships

Yasmine El Meladi
Arab Academy for Science, Technology and Maritime Transport, Egypt

Richard Glavee-Geo*
(Email: rigl@ntnu.no)
NTNU-Norwegian University of Science and Technology, Norway

Arnt Buvik
Molde University College, Specialized University in Logistics, Norway

* Corresponding author

Abstract

Logistics service providers (LSPs) play strategic roles in contemporary global supply chains. The resources and capabilities at the disposal of LSPs make them easily adaptable to the needs and exigencies of their clients. Though opportunism is a threat to business relationships, the LSP-Client relationship studied here shows opportunism can be both a threat and an opportunity in resource and capability utilisation. This paper finds opportunism not only as a threat but also as an *incentive* in enhancing LSPs resource capability. Opportunism has a *double-edged* dual effect demonstrated by the curvilinear relationship between opportunism and resource capability in relation to performance. The paper highlights implications for theory and management and future research directions.

Keywords: Capabilities, opportunism, outsourcing, polynomial regressions, textile and clothing exporters, Egypt.

Comprendre comment l'opportunisme et la capacité de ressources affectent la performance des relations entre l'exportateur et le LSP.

Résumé

Les fournisseurs de services de logistique (*Logistics service providers* (LSP)) jouent des rôles stratégiques dans les chaînes mondiales contemporaines d'approvisionnement. Les ressources et les capacités à la disposition des LSP les rendent facilement adaptables aux besoins et aux exigences de leurs clients. Quoique l'opportunisme soit une menace pour les relations d'affaires, la relation du LSP et du client étudié ici montre que l'opportunisme peut être à la fois une menace et une occasion quant à l'utilisation des capacités et des ressources. Ce papier trouve l'opportunisme non seulement comme étant une menace, mais aussi comme étant une motivation dans l'amélioration de la capacité de ressources du LSP. L'opportunisme a un effet double et à *double tranchant* démontré par la relation curviligne entre l'opportunisme et la capacité de ressources par rapport à la performance. Le papier met en évidence des implications pour la théorie, la gestion et les directions de recherches futures.

Mots-clés

Capacités, opportunisme, externalisation, régressions polynômiales, exportateurs de textiles et de vêtements, Égypte.

Introduction

Logistics service providers (LSPs) play a strategic role in a global supply chain as they have the experience, resources and capabilities for handling the globalised physical flows of goods efficiently and promptly (Lambourdiere et al., 2013). Competence in logistics activities allows manufacturers to respond more efficiently to special requests from customers and effectively provide a differentiated set of services to meet customers' distinct needs (Fawcett and Clinton, 1996). There is a trend for business companies to use LSPs to fulfill their increasing need for logistics services (Lai, 2004). The integration of logistics capabilities with global manufacturing is very important for business success in international operations (Lu and Yang, 2010). Hertz and Alfredsson (2003, p.140) clarify that LSPs ″are external providers who manage, control, and deliver logistics activities on behalf of their shippers″.

LSPs are intermediaries involved in the transfer of services and are uniquely positioned to deliver services on behalf of their clients (Saglietto, 2017). LSPs have the competence to perform logistics activities effectively and efficiently. Previous research categorised logistics services into various categories indicating their core competence and resource capabilities. These categories are based on several criteria such as asset and non-asset based; service or solution providers; service capabilities and performance results (based on RBV theory); relationship structure and the complexity of the supply, and level of outsourcing (Saglietto, 2013). LSPs classification criteria can also be based on the type of relationship structure; levels (the firm, dyad, network); LSPs' role; type of service provided and the distinction between execution and planning & control activities in operations management.

The role of LSPs has evolved from providing simple activities such as transportation and warehousing, to higher value-added operations such as light assembly and distribution management of finished products, an integrated package of services, and management of the customer's entire supply chain (Sohail and Sohal, 2003; Sum and Teo, 1999). Hertz and Alfredsson (2003) categorise LSPs into four groups regarding their abilities in general problem solving (co-ordination), and the extent to which they can adapt to the client's needs. First, standard providers: performing basics activities such as pick and pack, transportation, warehousing, and distribution. Second, service developers: offering their customers advanced value-added services such as tracking and tracing, cross-docking, specific packaging, providing unique security, and IT solutions. Third, the customer adapters: providing services

at the request of the customer. Fourth, the customer developers: integrating with the customer and taking over their entire logistics function.

Exporters and importers depend on LSPs' logistics capabilities to support their international supply chains (Stank and Maltz, 1996) and improve their logistics performance. According to Holcomb and Hitt (2007), logistics outsourcing provides a potential pathway for firms to access specialised capabilities that can enhance their value creation and allow producers, exporters and importers to benefit from market opportunities. LSPs have resources, economies of scope and scale, and experience that allow them to deliver logistics activities more efficiently and effectively than exporters can do in-house (Yang, 2014). In this regard, the competencies of LSPs are complementary to their customers' core competencies (Halldorsson and Skjott-Larsen, 2004).

The ability of LSPs to provide reliable and consistent services, short delivery lead-time, lower costs, expertise, and flexibility in accommodating changes, is essential for realising logistics outsourcing performance. Therefore, logistics service providers must become more agile regarding reliability and quick response to changes especially when firms are operating in an uncertain, complex and turbulent environment. Scholars claim that there have been few theoretical explanations and applications of logistics capabilities in logistics outsourcing relationships (Selviaridis and Spring,2007) and much remains unknown about the mutual benefits of the LSP-client relationship (Wallenburg et al., 2010). Similarly, Deepen et al. (2008) affirm the importance of understanding the factors that drive successful logistics outsourcing arrangements, which in turn improve performance. Consistent with previous studies, there is a need for more research to understand the drivers that lead to successful LSP-client relationships. It is equally important to study the barriers that can hinder successful LSP client relationship such as opportunism. In the literature, very little is known of how opportunism limits the full potential of the resource capability of logistics service providers.

The literature (e.g. Handley and Benton, 2012; Knemeyer and Murphy, 2004) states that opportunism is detrimental to any logistics outsourcing relationship. LSPs are considered opportunistic when they seek their own unilateral gains and interests at the expense of their customers, especially when such behavior is possible, profitable and difficult to be detected (John, 1984; Rokkan et al., 2003). The purpose of this paper is to investigate how opportunism in the LSP-client outsourcing relationship affects LSPs' resource capabilities and performance. Hence, the research questions of the study are as follows:

RQ1: How does opportunism interact with the resource capability in influencing logistics outsourcing performance?

RQ 2: What are the implications of the impact of opportunism in relation to resource capability of LSPs?

The rest of the paper is organized as follows: we review the relevant theory and literature, and present the conceptual model and the hypotheses. This is followed by the research method, analysis, results, discussion and implications. We then conclude with the limitations and future research directions.

Theory, literature review and hypotheses

Resource-based view theory

Resource-based view (RBV) is based on the work of Penrose (1959), who described firms as a collection of productive resources and in which resources comprise of a bundle of services. RBV started with Wernerfelt (1984) and other notable contributors such as Amit and Schomaker (1993); Barney (1991); Dierickx and Cool (1989); Grant (1991); Peteraf (1993) and Peteraf and Barney (2003). Wernerfelt (1984) viewed firms in terms of resources and developed an economic tool for analysing a firm's resource position and examining the relationship between resources and profitability. According to Amit and Schomaker (1993), a firm's specific resources and capabilities are crucial in explaining its performance.

A firm's resources and capabilities include all of the financial, physical, human and organisational assets used to develop, manufacture and deliver products or services to its customers (Barney, 1995). The strategic importance of capabilities lies in their significant contribution to gaining sustainable competitive advantage and achieving superior profitability (Day, 1994), as they are the main source of a firm's competitive advantage (Grant, 1991). Amit and Schomaker (1993, p.35) referred to capability as *the firm's capacity to develop and deploy resources that can improve productivity of its resources using organisational process.* According to Amit and Schomaker (1993), the strategic value of a firm's resources and capabilities is improved when these resources are scarce, durable, not easily traded, difficult to imitate and not substituted, as they can enable a firm to earn more economic rent and generate performance.

Resource-based view in the logistics context

RBV has the potential to be applied as a theoretical foundation in logistics and supply chain management studies (Olavarrieta and Ellinger, 1997). It has been increasingly used to examine logistics-related capability, competitiveness, and performance (Lai, 2004; Lai et al., 2008; Liu et al., 2010; Sinkovies and Roath, 2004). Flexibility is one of the critical capabilities that reflect the ability of a firm to respond to changing market demands (Håkansson and Persson, 2004) and is considered an essential value-creation initiative (Hammervoll and Toften, 2010). Flexibility capability refers to adaptability in unexpected circumstances (Liu and Luo, 2012). The LSP's flexibility is considered a key selection criterion (Stank and Daugherty, 1997). Daugherty et al. (1992) emphasise that one crucial dimension of performance is the ability of the logistics system to adapt service levels to specific markets or customers. LSPs create value for their customers by being flexible towards their customers' requests and recommending alternative actions when unforeseen circumstances arise (Lai, 2004). According to Sinkovies and Roath (2004), accommodating daily or operational adjustments contribute significantly to a higher level of logistics and market performance.

The capability of service providers to support their customers with their experience and knowledge is one of the most critical drivers in logistics outsourcing (Razzaque and Sheng, 1998). The notion of value creation in the buyer-supplier relationship is reflected in the interaction between exchange parties, which produces value that they would not achieve independently (Hammervoll and Toften, 2010). In this respect, LSPs have a logistics expertise that their customers could not acquire individually (Håkansson and Persson, 2004). LSPs who acquire logistics expertise and are knowledgeable about their customers' industries are considered competent service providers (Sink et al., 1996). When customers value the services offered differently, greater effort and expertise is required on the part of LSPs to understand and fulfill their customers' requirements.

Expertise capability in this paper reflects the LSPs' knowledge, experience and skills in their customers' businesses that are necessary when handling customers' logistics operations adequately concerning products and outsourced logistics activities. Through LSPs' use of their effective communication skills, they can fulfill customers' requirements. According to Anderson et al. (2011), professionalism is among the key qualities in the selection process of LSPs. Professionalism can be clarified in terms of the knowledge of the LSP in the logistics industry and the knowledge related to the industry of the customer are imperative. Several studies confirm that the expertise and knowledge of LSPs in the logistics industry and of their customers' businesses are considered to be key to successful outsourcing

relationship arrangments (Anderson et al., 2011; Hartmann and De Grahl, 2011; Wong and Karia, 2010).

Transaction cost analysis (TCA) theory

Although logistics outsourcing is a tool for adding value and reducing costs, there are transaction costs associated with a decision to outsource. Transaction costs include the direct costs of managing relationships (such as costs in crafting safeguards, negotiation, coordination, communication, screening, selection, enforcement, and measurement), and the possible opportunity costs of making inferior governance decisions such as failure to invest in a productive asset, maladaptation costs or failure to select an appropriate partner (Rindfleisch and Heide, 1997; Williamson, 1975:1985). The decision to outsource as opposed to that of internalisation depends on the transaction costs associated with each governance mechanism (Williamson, 1981). Market, hybrid and hierarchy are alternative governance mechanisms for organising transactions where each governance form employs its own coordination and control system (Williamson, 1985).

The transaction cost theory rests on two basic behavioural presumptions about the transaction partners involved. The first assumption is bounded rationality, which results from insufficient information and a limitation in management perception. This will lead to the second assumption which is opportunism, defined by Williamson (1985, p.47) as "self-interest seeking with guile", which includes behaviour such as an incomplete or distorted disclosure of information with the intent to mislead and confuse.

Opportunistic behaviour takes place when such behaviour is feasible and profitable (John, 1984). Shirking or failing to fulfil promises and obligations are examples of opportunistic behaviour (Jap and Anderson, 2003). Transaction cost analysis distinguishes between ex-ante and ex-post opportunism. According to Barney and Ouchi (1988) and Berthon et al. (2003), three types of opportunism are identified, which in turn raises three problems: a)Adverse selection problem (Bergen et al., 1992; Eisenhardt, 1989), that occurs pre-contract, where opportunism exists ex-ante in terms of exploiting asymmetric information about future performance; b)Moral hazard problem (Bergen et al.,1992; Eisenhardt, 1989), which exists post-contract, where opportunism exists ex-post by exploiting asymmetric information about current performance; c)Lock-in situation problem (Rokkan et al., 2003), due to the presence of a specific asset investment that stimulates opportunism because specific investment will be of less value outside this specific relationship.

According to Heide and Miner (1992), interactions in dyadic relationships over time can be a signal for commitment. In contrast, the potential for opportunistic behaviour on the LSP side represents a threat for sustaining a long-term mutual relationship and collaboration with the clients. According to TCA, supplier opportunism is at its highest when the buyer firm cannot specify or does not know what it wants and cannot appropriately verify whether the supplier is keeping its commitments (Ellram et al., 2008). In a logistics outsourcing context, opportunism may occur where LSPs can exploit the interpretation of the delivery contract, shirking obligations, withdrawing commitment, breaching the contract, not performing as promised, misrepresenting facts, and distorting information to increase their revenues (John1984; Lai et al., 2012; Tsai et al., 2012). TCA does not assume that all social actors are opportunistically inclined, only that some actors behave opportunistically and not all (or most of) the time. Because it is difficult and costly to differentiate opportunists, who may be a minority from non-opportunists ex-ante, the assumption of opportunism is necessary (Rindfleisch and Heide, 1997). Therefore, this paper does not assume that all LSPs are opportunistic, but that some of them at times behave in an opportunistic way that is difficult to detect.

Similarly, an agency relationship is present in this study where the principal (exporter) depends on the agent (LSP) to undertake some action (logistics activities) on the principal's behalf. LSP's opportunism is commonly known as a principal risk in an outsourcing arrangement. Agency theory is concerned with resolving two problems that can arise in agency relationships. First, when the principal and his agent have conflicting goals and desires and second when it is difficult or costly for the principal to verify what the agent is actually doing (Eisenhardt, 1989). From this concern, LSPs can behave opportunistically due to hidden information and hidden actions.

Conceptual Framework

Logistics outsourcing performance

If companies cannot measure the performance of their outsourced activities, they will not be able to manage and assess their relationship with LSPs (Fawcett & Cooper, 1998). Identifying the objectives to be achieved by outsourcing logistics services is essential for measuring performance (Sanchis-Pedregosa et al., 2011). According to Stank et al. (2003), logistics service performance evaluates the provider's ability to deliver products within the requested delivery time in a cost-efficient manner. Knemeyer and Murphy (2004, p. 39) refer to

outsourcing performance as the *perceived performance improvements that logistics outsourcing relationship has provided the user*. Deepen et al. (2008) also, refer to the outsourcing performance arrangement as the perceived performance of the outsourced logistics activities and the associated responsibilities that have been delegated to an LSP. It is worth noting that several scholars postulate that logistics outsourcing performance is complex. Hence, it would be inadequate to measure logistics outsourcing performance as a single construct (Deepen, 2007; Deepen et al., 2008; Karia & Wong, 2013; Knemeyer & Murphy, 2004; Stank et al., 2003). Consequently, logistics outsourcing performance is conceptualised as a multi-dimensional construct in various studies.

Several scholars (e.g. Deepen, 2007; Deepen et al., 2008; Wallenburg et al., 2010) use two dimensions for measuring the logistics outsourcing performance: goal achievement and goal exceedance. Deepen (2007) proposes the goal achievement dimension to measure the achievement of goals that have been set forth between LSPs and their customers. The other dimension is goal exceedance, which refers to services that significantly exceed the expected goals. Deepen et al. (2008) demonstrate that goal achievement assesses the accomplishment of the operational excellence that comprises the quality and the cost of the service. However, due to changing environments and customer needs, an LSP can exceed the expectation of the customer by delivering more added value regarding service improvement, cost reduction and innovative solutions. These authors assert that goal exceedance is an important performance dimension that takes account of the dynamic changes of customer requirements, which should be considered when measuring logistics outsourcing performance. This study follows the call by Deepen et al. (2008) for researchers to use the bi-dimensional logistics outsourcing performance conceptualisation to improve the understanding of the outsourcing function.

A research model is presented in Figure (1) to examine the contingent effect of opportunism on the relationship between LSPs' capabilities (flexibility and expertise) and logistics outsourcing performance. Three control variables; logistics activities, export intensity and relationship duration are included in the model. These variables are from the perspective of buyers of the logistics services (textile and clothing exporting companies).

-----Insert Figure 1about here--------

These control variables may affect the logistics outsourcing performance. Control variables strengthen the test of the postulated relationships by accounting for other alternative

explanations (Cannon et al.2000). These selected control variables are important contextual variables to be included in the conceptual model.

Logistics activities

The ultimate goal of logistics operations is to handle a firm's goods and services efficiently and effectively with a higher level of customer service (Bourlakis and Melewar, 2011). Logistics operations encompass different logistical activities such as transportation, warehousing, inventory management, logistics coordination, carrier selection, reverse logistics, freight forwarding, rate negotiation, electronic funds transfer, product assembly, customer spare parts, marketing services, distribution, customer clearance, project management, and logistics information systems. These logistics activities represent the greater part of the service component of a firm's product/service package (Fawcett and Clinton, 1996).

Export intensity

Export sales are an indication of a firm's growth potential (Cooper and Kleinschmidt, 1985). It is among the most common objective measures for assessing export behaviour (Bonaccorsi, 1992) and performance (Cooper and Kleinschmidt, 1985; Rock and Ahmed, 2014). An increase in export intensity reflects an increase in exporting that creates strong demand for outsourcing logistics activities. Therefore, an increase in exports raise the need for more logistics services to facilitate the exporting companies' access to international markets and support them in fulfilling their final customers' requirements. This is an incentive for LSPs to achieve the agreed outcome, and even to exceed the goals and expectations that are agreed upon in the outsourcing arrangement to gain a high market share.

Relationship duration

Relationship duration is among the antecedents that influence relationship magnitude regarding relationship strength and closeness (Golici and Mentzer, 2005). De Vita et al. (2010) affirm that relationship length has a positive effect on relationship outsourcing performance. Similarly, Prajogo and Olhager (2012) affirm that long-term supplier relationships have both direct and indirect significant effects on performance.

Research Hypotheses

Flexibility, Logistics outsourcing performance and Opportunism

Flexibility is a key characteristic in any relationship; it is believed to be one of the crucial requirements for firms to survive and flourish in unstable and volatile environments (Dreyer and Grønhaug, 2004). The LSP's flexibility capability is an external resource, which helps clients to adapt to changes and gain access to opportunities arising from unpredictable markets. Recent studies (e.g. El Meladi, Glavee-Geo, and Buvik, 2017) emphasise the positive effect of flexibility on logistics outsourcing performance.

Similarly, flexibility has a pivotal role in increasing export performance, as flexibility enhances the required coordination between the trading partners (Bello and Gilliland, 1997). Flexibility is central to a cooperative export partnership. The LSP's flexibility capability is essential for customers when accommodating sudden changes. According to RBV, the LSP's flexibility creates value for the LSP-client relationship by adjusting the ongoing relationship in accordance with changing circumstances. A supplier's flexibility can have an influence in reducing customers' costs by absorbing the environmental shocks that face customers (Cannon and Homburg, 2001). Heide and John (1992, p.35) assert that "flexibility represents insurance that the relationship will be subject to good-faith modification if a particular practice proves detrimental in the light of changed circumstance".

Nevertheless, it can be challenging for an LSP to remain flexible in a focal relationship because assuring the availability of required resources can be a complex and costly task (Han et al., 2014; Ivens, 2005). In the short term, responding to a customer's request for adjustments may create value for the customer while reducing value for the LSP if it has a negative impact on the LSP's operational efficiency or effectiveness (Ivens, 2005). However, in the long-term, the LSP's response will be considered as a signal of commitment, reliability and assurance of its capacity to be flexible and adaptable. In some cases, LSPs are afraid of not being rewarded for the extraordinary efforts they make to meet customers' new requirements that are caused by new market conditions (Logan, 2000). Based on the agency theory, when the principal and agent have different goals, they will be motivated to act differently, striving to maximise their utility (Eisenhardt, 1989; Jensen and Meckling, 1976; Lassar and Kerr, 1996).

Therefore, when LSPs and their customers have goal conflicts and or incompatible goals; the LSPs may behave opportunistically and show a lack of flexibility to reduce their costs by failing to make the required efforts to respond to ex-post adjustments requested by customers. Especially, if the LSP's benefit is less than the cost required to carry out the necessary adjustment for the customer. Based on TCA, refusal to adapt to a customer's

changing needs will lead to an adaptation problem that raises costs regarding communication, and renegotiation costs, as well as coordination costs. Also, there will be opportunity costs for failure to adapt (Rindfleisch and Heide, 1997). Masten (1988) and Wathne and Heide (2000) assert that both parties would lose revenues due to maladaptation. Hence, lack of flexibility leads to the risk of losing the value of an LSP-client relationship, as well as increasing the risk of terminating the relationship (Ivens, 2005). Opportunistic behaviour regarding displaying lack of flexibility will negatively affect the performance outcome (Han et al., 2014). Therefore, increasing the level of opportunism can weaken the positive effect of flexibility on logistics outsourcing performance regarding goal achievement and goal exceedance. Based on the above arguments, we propose the following refutable hypotheses:

H1a: Opportunism moderates the relationship between an LSP's flexibility and perceived goal achievement.

H1b: Opportunism moderates the relationship between an LSP's flexibility and perceived goal exceedance.

Expertise, logistics outsourcing performance and opportunism

In a service supply chain, human resources represent a significant component of the value delivery process (Sengupta et al., 2006). Logistics services involve people who often take orders, deliver products, implement procedures for placing orders and handle problems (Mentzer et al., 2001). Human resources include the experience, skill and knowledge of an employee (Barney, 1991). According to Wright et al. (1994), human resources hold the potential for being a source of sustainable competitive advantage. Chen et al. (2010, p.283) define an LSP's expertise "as a 3PL contact person's knowledge/experience, attitude, and communication skills related to a particular logistics outsourcing relationship". LSPs have the expertise and resources to undertake logistics activities more efficiently and effectively than a firm can do so in-house (Razzaque and Sheng, 1998; Yeung, 2006).

In a logistics outsourcing arrangement, customers may be afraid that due to their lack of expertise and relative dependence on their providers, they might be exposed to opportunism from their LSPs (Logan, 2000). As LSPs are often have more knowledge of the details of the task than their customers, this situation creates knowledge and information asymmetries (Sharma, 1997). Consequently, LSPs may have the motive and opportunity to maximise their interests at the expense of their customers' interests (Lassar and Kerr, 1996). When interests are

biased and the goals become incompatible, the information may be hidden and information asymmetry is created (Tate et al., 2010). Several scholars assert that agency problems arise from information asymmetry when it is difficult or costly for the principal to measure the actual performance of the agent because of the division of labor, goal conflict among parties, and differences in the risk preference of the two parties (Eisenhardt, 1989; Jensen and Meckling, 1976; Lassar and Kerr, 1996; Logan, 2000).

According to the literature (Sharma, 1997, p.768), "professionals have power overlay principals by virtue of their expertise, functional indispensability and intrinsic ambiguity associated with the services they provide". Hence, LSPs can take advantage of knowledge asymmetry for their own interest by providing inaccurate information about the status of customers' orders, demonstrating insincerity and shirking obligations. "Recipients of expert services are not themselves adequately knowledgeable to solve the problem or to assess the service received", and they are unable to avoid "incompetence, carelessness and exploitation" (Freidson, 1983, p. 41). Based on TCA logic, the inability to monitor an exchange partner's actions (behavioural uncertainty) creates the potential for engaging in opportunistic behaviour. The LSP's expertise is considered tacit knowledge that is embedded in the LSP's firm and is difficult to imitate or transfer without cost (Wong and Karia, 2010). This tacit knowledge is gained through the LSP's technical skills developed through years of experience versus explicit knowledge that is easily expressed and transferred.

Opportunism might be promising for the opportunistic party *when the returns from opportunism in a given time period outweigh the discounted present value of future cooperation* (Hill, 1990, p.510). Opportunism can sometimes be more profitable than showing loyalty (Boissinot and Paché, 2011). Therefore, when the LSP has expertise capability and at the same time is inclined to engage in an opportunistic behaviour, the positive effect of expertise on the logistics outsourcing performance regarding goal achievement and goal exceedance will be reduced. Based on this reasoning, we propose the following refutable hypotheses:

H2a: Opportunism moderates the relationship between an LSP's expertise and perceived goal achievement.

H2b: Opportunism moderates the relationship between an LSP's expertise and perceived goal exceedance.

Research method

Research setting, questionnaire development and data collection

The textile and clothing industry is one of the leading sectors in Egypt. We focused on a single industry based on the following considerations. First, the textile and clothing industry is strategically important to Egypt regarding its contribution to employment, value added, and foreign exchange earnings (El-Haddad, 2012). Second, the textile and clothing industry is a consumer-driven industry with product demands (e.g., fibers, yarns, and garments), being determined mostly by the demands of the final consumers (Moon et al., 2012). This demand results in considering LSP's logistics capabilities as an important factor for exporters in the textile and clothing sector to facilitate their access to international markets and support them in fulfilling their final customers' requirements.

The unit of analysis of this research is one specific relationship between the textile and clothing exporting company and its most important LSP. The data source is a survey of textile and clothing exporting firms based in Egypt. To develop better measurement through generating items that capture the domain of the research constructs as specified by Churchill (1979), a preliminary explorative study was carried out. We conducted seven in-depth semi-structured interviews with export managers of textile and clothing companies that have dealings with LSPs. The purpose of the interviews was to gain practical insight into different outsourced activities and explore the relationship between textile and clothing exporting companies and their most important LSPs. Through these interviews, the researchers gained information about the factors that the textile and clothing exporting companies focus on during the selection process of their LSPs such as services reliability, on-time delivery, ability to adapt to unforeseen changes and short notice requests, knowledge and communication skills, continuous improvement and trustworthiness. These interviews helped the researchers to investigate the focal research problem and indicate the most important logistics capabilities that need to be considered in the study as drivers of the logistics outsourcing performance and the barriers that may hinder this relationship. Based on the preliminary interviews, we selected flexibility and expertise as the important drivers of logistics outsourcing performance and opportunistic behavior as an obstacle requiring further investigation.

Subsequently, the lead researcher conducted a pilot study among thirty export/logistics managers in both local and multinational exporting textile companies, who outsource some or all of their logistics activities to their most important LSPs in Egypt's two largest cities, Cairo and Alexandria. Based on the face-to-face interviews the key informants were asked to assess the different aspects of the questionnaire, such as its form, content, wording, sequence, and

difficulty. The questionnaire was revised and refined according to the feedback received. A few items were dropped due to repetition in the meaning; four items were revised for practical relevance.

The questionnaire was initially developed in English and reviewed by a specialist in the English language, and then translated into Arabic. To assure the translation equivalence, the Arabic questionnaire after being reviewed was back-translated into English by bilingual expert to ensure that the meaning was not lost in translation. Also, the questionnaire has been reviewed by academic experts in Transport and Logistics, as well as by colleagues, with the aim of reducing wording ambiguity and possible confusion in each question. Moreover, four logistics managers in top LSPs companies in Egypt also reviewed the questionnaire to ensure that all the questions were clear (i.e. neither ambiguous nor confusing). These procedures ensured that the questionnaire possesses face validity. We used the key informant approach for collecting primary data following Campbell's (1955) selection criteria of key informants.

To guarantee that the informants are knowledgeable about the topic of the survey, it was addressed only to people who are directly associated with export, logistics, and operations within the companies. From an initial census of 307 interviews that formed the sample size, only 166 interviews were conducted during the period from mid-January to May 2013, which represents a response rate of 54%. Compared to other studies on the textile and clothing industry in Egypt, this response rate is considered as acceptable. Thirteen questionnaires were not usable, so the final number of usable questionnaires was 153, which is considered a representative sample using a Chi-square test. Table 1 shows the sample characteristics. Most of the key informants have worked in logistics, operations, export or similar work functions that require dealing with LSPs in managing outsourcing relationships. Among the key informants, 60% were export managers, 21% logistics managers, 7% operation managers, 6% account managers, 3% directors and 2% held other positions. The LSPs that the key informants dealt with varied in size. More than 50 percent of the LSPs have more than 600 employees. The majority of the exporting companies in the sample have the greatest percentage of export sales, whereas 94 companies have export sales of more than 80% (as shown in Table1). This reflects the high percentage of targeted companies who enjoy a high level of exports.

-----Insert Table 1 about here--------

Table 1: Sample characteristics

Measurement Scale

All the latent constructs were measured on an ordinal seven-point Likert scale, (where value 1 indicates strongly disagree and value 7 indicates strongly agree), with the exception of the opportunism construct where the scale was reversed (value 1 indicates strongly agree and value 7 indicates strongly disagree), and the dependent variable goal exceedance (where value 1 indicates much below expectations and value 7 indicates much above expectations). Relationship duration is a continuous variable that is transformed using a logarithm (base 10), export intensity is a continuous variable measured on a ratio scale and the logistics activities is used as dummy variable. All items are drawn from previous studies with minor adjustments in wording to suit the context this study. The six items for goal achievement were drawn from Deepen et al. (2008) and Mentzer et al. (2001). The three items for goal exceedance were drawn from Deepen (2007) and Deepen et al. (2008). The scale of LSP's flexibility capability is composed of five items that were drawn from Cannon and Homburg, (2001) and Ivens (2005). The five items of expertise were drawn from Chen et al. (2010) and Bello et al. (2003). The five items of opportunism were drawn from relevant previous studies (Knemeyer and Murphy, 2005and Rokkan et al., 2003).

Analysis

We assessed the measurement model by conducting a confirmatory factor analysis (CFA). The results of the CFA showed that all the constructs adequately measured the concepts we aimed at measuring. All the constructs had satisfactory model fit as shown in Table 2 except goal exceedance with the trivial model fit (hence not reported). However, all the three-factor loadings of goal exceedance were all significantly loaded on the construct and had high reliability above 0.7 (Nunnally, 1978).

-----Insert Table 2 about here--------

Table 2: Individual constructs and validity measures

The measurement model demonstrates high convergent validity and discriminant validity as all standardised factor loadings were significant (p< .001) with values higher than 0.6. Average variance extracted (AVE) criterion by Fornell and Larcker (1981) shows AVEs of all constructs greater than 0.5 (Hair et al., 2010). Discriminant validity was attained whereby all items loaded on their designated constructs with no cross-loadings. As shown in Table 3, a matrix of squared multiple correlations and AVE values for all constructs are shown, whereby the constructs' AVE is greater than the squared correlation estimate between constructs, which further supports discriminant validity.

-----Insert Table 3 about here--------

Table 3: Correlation matrix

Because the data for all the model variables came from the same respondents at a point in time, common method variance (CMV) might influence the findings of the study (Podsakoff et al., 2003; Podsakoff& Organ, 1986). We used both procedural and statistical approaches to control for the effect of CMV. The procedural way involved a cautious construction of question items, the use of validated scales adapted for the study with high psychometric properties, the avoidance of ambiguous question items. The use of very knowledgeable key informants (see sample characteristics of informants in Table 1) also ensured CMV had limited influence in this study. Further use of statistical control, where we modelled all observed items as indicators of a single factor showed poor model fit.

Results

The analytic technique of choice is polynomial regressions and response surface analysis (Edwards, 2002; Shanock et al., 2010). Conventional regression analyses of interactions provide a two-dimensional view of the relationship between combinations of two predictor variables and an outcome variable. The response surface methodology, however, allows for a three-dimensional evaluation (Shanock et al., 2010, p.550). Response surface analysis provides much more information about the way in which combinations of any two variables affect a dependent variable. First, we assessed the need for using polynomial regressions and response surface analysis for each pair of independent variables and found it was worth progressing with the analysis since more than 10% (Shanock et al., 2010) of discrepancies occurred. The polynomial regression results are presented in Table 4.

-----Insert Table 4 about here--------

Table 4: Regression results on Logistics outsourcing performance (n=153)

The results show consistency in the effect of flexibility and expertise on logistics outsourcing performance regarding goal achievement and exceedance (El Meladi, Glavee-Geo, and Buvik, 2017). Flexibility has a significant positive effect on goal achievement (β=.42, p<0.001, t=4.49) but a weaker effect on goal exceedance (β=.35, p<0.05, t=1.93, one-tailed test), while expertise has a significant positive effect on goal achievement (β=.47, p<0.001, t=3.96) and goal exceedance (β=.37, p<0.05, t=2.43). Also, the negative effect of opportunism on logistics outsourcing performance is supported. Opportunism has a significant negative effect on goal achievement (β=-.36, p<0.001, t=4.06 model 1; β=-.23, p<0.05, t=2.34 model 2) and on goal exceedance (β=-.38, p<0.01, t=3.00).

Hypothesis (H1a) states that opportunism moderates the relationship between an LSP's flexibility and perceived goal achievement. The results show support for H1a (β=.21, p<0.001, t=3.92) and no support for H1b, which states that opportunism moderates the relationship between an LSP's flexibility and perceived goal exceedance (β=.11, p>0.05, t=1.55). Similarly, no support was found for the moderating role of opportunism between expertise and goal achievement (H2a: β=.01, p>.05, t=.23) and between expertise and goal exceedance (H2b: β=-.13, p>.05, t=1.67). However, the study finds the relationship between opportunism and goal achievement to be curvilinear (β=.07, p<.05, t=2.00). A further test of the slopes and curves based on the response surface analysis (Shanock et al., 2010) are shown in Table 5.

-----Insert Table 5 about here--------

Table 5: Testing slopes and curves

A 3-dimensional graphical representation of the effect of opportunism and flexibility on goal achievement is shown in Figure2 (recall Table 4 and Table 5, model 1). Thus, the discrepancy between opportunism and flexibility in relation to goal achievement is linear. Therefore, goal achievement is high at high levels of flexibility and low levels of opportunism; however, goal achievement decreases as flexibility reduces at the expense of high opportunism. In addition, high opportunism in combination with high flexibility leads to high goal achievement.

-----Insert Figure 2 about here--------

Figure 2: Goal achievement as predicted by opportunism and flexibility

Figure 3 (and Table 5 model 2) shows the significant linear relationship between opportunism and expertise with regard to goal achievement. Goal achievement is highest at high levels of expertise and low levels of opportunism; however, as the level expertise decreases at the expense of more opportunism, goal achievement also decreases significantly.

-----Insert Figure 3 about here--------

Figure 3: Goal achievement as predicted by opportunism and expertise

-----Insert Figure 4 about here--------

Figure 4: Goal exceedance as predicted by opportunism and expertise

-----Insert Figure 5 about here--------

Figure 5: Goal exceedance as predicted by opportunism and flexibility

Figure 4 shows the effect of expertise and opportunism in relation to goal exceedance. The results (Table 5, model 3) show a significant curvilinear relationship between equal levels of expertise and opportunism on goal exceedance. At minimum levels of opportunism and expertise, goal exceedance is the lowest; however, 'asymmetry' between opportunism and expertise (equal levels) at an increasing rate leads to increasing levels of goal exceedance up to a point and then it falls. Figure 5 also shows that high opportunism in combination with high flexibility leads to high goal exceedance.

On the other hand, the discrepancy between expertise and level of opportunism (high expertise, low opportunism) is linearly related to goal exceedance (see Table 5). Similarly, the discrepancy between flexibility and opportunism in relation to goal exceedance is significantly linear. Thus, high levels of flexibility positively influence goal exceedance; however, as flexibility falls and opportunism increases, goal exceedance decreases. In summary, Table 5 results show significant relationships between discrepancy between opportunism and LSPs' capabilities in relation to performance, showing that while capability

enhances performance, opportunism reduces performance and hence creates a barrier (consistent with the literature). However, the results also show that in achieving or exceeding performance goals, the need for flexibility (synonymous with adaptability and agility) provides a conducive *environment* for opportunistic behaviour. Moreover, the effect of opportunism on performance is attenuated at low levels of resource capability. In other words, opportunistic behaviour enhances logistics outsourcing performance at high levels of resource capability. The incentive to be opportunistic is higher when there is the need to achieve or exceed a certain level of performance as required by the outsourcer; this is key especially when the outsourcee has the competence that the other party is lacking.

Discussion

The purpose of this paper was to investigate how opportunism in LSP-Client outsourcing relationships affects LSPs' resource capabilities and performance. We sought to provide answers to the questions: How does opportunism interact with the resource capability in influencing logistics outsourcing performance? Moreover, what are the implications of the impact of opportunism in relation to resource capability of LSPs? LSPs' flexibility competence is reflected in their abilities to adjust according to their clients' changing needs, such as by accommodating customer delivery requirements at an agreed place and by an agreed mode of delivery (Rajesh et al., 2011). When a supplier presents greater flexibility, a customer's acquisition and operating costs are expected to be reduced (Cannon and Homburg, 2001). Our study confirms that the LSP's flexibility capability is considered a key driver of the logistics outsourcing performance supported by the positive and significant result. Also, the empirical analyses support the positive and significant relationship between the LSP's expertise and logistics outsourcing performance. Subsequently, the findings in the current study are in line with the premise that human resources are "centric" in the logistics process (Myers et al., 2004), and considered to be a critical external resource commitment (Chen et al., 2010) that improves the logistics outsourcing performance.

Furthermore, the empirical results affirm the negative relationship between opportunism and logistics outsourcing performance. Therefore, when LSPs seek their own unilateral gains and act opportunistically by not keeping all their promises, distorting information, exploiting their customers' lack of knowledge or breaching agreements, the level of the logistics outsourcing performance will decrease. These results are consistent with several scholars' findings that demonstrate a negative relationship between opportunism and

relationship performance (Crosno and Dahlstrom, 2008, Hawkins et al., 2008; Lui et al., 2009; Wang and Yang, 2013). The empirical result confirms that opportunism moderates the relationship between an LSP's flexibility and perceived goal achievement.

According to the empirical findings, when opportunism increases, it strengthens the positive effect of flexibility on the logistic outsourcing performance. However, these results might indicate that when the buyer needs some adaptation and/or customized services in order to respond to unexpected events or problems, the LSP might engage in opportunistic behavior by demanding a higher price and/or other concessions in order to take advantage of the buyer's need for such service customization and/or adaptation. At the same time, this situation creates interfirm-dependence that needs strong coordination for adaptation (Williamson, 1991). Therefore, the LSP is forced to adapt and be flexible, which will improve the logistics outsourcing performance. On the other hand, the statistical results do not support the contingent effect of opportunism on the relationship between an LSP's expertise and perceived performance. However, a 3-dimensional graphical representation of the impact of opportunism and expertise on goal achievement shows that when opportunism is low, increased logistics expertise capability enhances logistics outsourcing performance.

Following Bendapudi and Berry (1997), expertise can be a valuable but vulnerable capability. This study reveals that LSPs'expertise capability can be a value with regard to using their expertise to manage logistics operations effectively according to their customers' requirements. On the other hand, when information asymmetry exists, the potential for engaging in opportunistic behaviour becomes greater per TCA reasoning, and hence LSPs' expertise capability becomes vulnerable. Concerning control variables, the analysis reveals that export intensity has a significant influence on goal achievement performance. Consistently, the present findings are in line with Dhanaraj and Beamish's (2003) study that supports the notion of a reciprocal causal link between performance enhancement and increased internationalisation. Besides, some of the outsourced logistics activities (distribution and payment) significantly influence goal exceedance.

Through distribution activity, LSPs add value to the company's products as an end-product is placed in the hands of the ultimate consumer. By outsourcing the distribution activity, textile companies can save capital investment on logistics assets, such as physical distribution centres thus reducing financial risks. Also, under distribution activity, the LSP will manage the fleet effectively and efficiently. Therefore, outsourcing of the distribution activity has a positive influence on goal exceedance. Also, freight payment is one of the most

essential outsourced logistics activities for customers because the service provider pays on behalf of their customers. After a certain period, the LSP takes their money back, which reduces the immediate financial stress on exporting companies. Besides, freight payment by the LSP reduces cost, time and complexity of administrative procedures. Most LSPs use technology that is more robust, enabling them to manage costs more effectively than their customers. Therefore, outsourcing freight payment activity has a positive influence on goal exceedance.

These two activities facilitate the movement of goods and assure the reliability of the supply chain, which is highly associated with logistics performance. Also, documentation and airfreight activities influence goal achievement negatively, and this is because of the time taken to finish documentation might be lengthy. Likewise, airfreight is expensive which might affect goal achievement negatively.

Implications

Theoretical contributions and perspectives

Logistics outsourcing literature lacks the development of theory-driven models and hypotheses testing (Maloni and Carter, 2006). This study is based on utilising RBV and TCA as a theoretical framework for examining logistics outsourcing performance. A firm's specific resources and capabilities play a vital role in explaining its performance in line with RBV perspective (Amit & Schomaker, 1993; Bharadwaj, 2000; Daugherty et al., 2009). Furthermore, Deepen et al. (2008) postulate that there is a lack of empirical studies on logistics outsourcing performance, and call for further empirical research on the logistics outsourcing performance drivers. Therefore, this study contributes to the existing knowledge of logistics outsourcing performance empirical studies by examining the drivers and barriers of logistics outsourcing performance.

The empirical findings of this study provide support for RBV reasoning and find positive relationships between the LSP's capabilities (expertise and flexibility) and logistics outsourcing performance in LSP-client relationships. These findings affirm that these capabilities are critical drivers for logistics outsourcing performance. Moreover, the empirical results confirm a negative relationship between LSPs' opportunism and the logistics outsourcing performance, which are consistent with TCA reasoning that opportunism has detrimental effects on performance. The empirical findings further show that the effect of

LSPs' flexibility on logistics outsourcing performance is enforced when the perceived level of opportunism on the LSPs' side increases.

When the logistics service provider is flexible in its response to the changing customer needs and makes the necessary adaptation and or customises certain services, this will lead to improved logistics outsourcing performance, but at the same time, the LSP might be inclined to behave opportunistically. From this perspective, substantial opportunism might indicate a stronger logistics outsourcing performance due to stronger service customisation and adaptations to the buyer. Therefore, the influence of an LSP's flexibility capability on logistics outsourcing performance is contingent on different levels of opportunism that generate different levels of performance. The analysis confirms that opportunism and flexibility in relation to goal achievement is significantly nonlinear and that Opportunism has a double-edged dual effect. Thus, including opportunism as a moderator variable enhances the explanatory power of the logistics outsourcing performance model as variation in logistics outsourcing performance can be better explained by the interaction effect between LSPs' capabilities and LSPs' opportunistic behaviour.

Managerial implications and perspectives

This paper makes a significant contribution to practice on logistics outsourcing performance by providing insights that show that the relationship between LSPs' logistics capabilities and perceived logistics outsourcing performance is dependent on the different levels of opportunism. It identifies the importance of the logistics service capabilities in enhancing the logistics outsourcing performance. Opportunism provides an incentive to achieve or exceed a goal. However, this is at sub-optimal as performance falls short of expectation. Performance is it at its highest when the discrepancy between expertise and self-interest is in favour of expertise. Therefore, it is imperative for the service users to screen potential service providers to evaluate the capability and the motivation of their LSPs before entering the relationship to avoid information asymmetry and reduce exploitation of opportunism by their LSPs.

From agency theory perspective, Bergen et al. (1992) assert that the principal can reduce and avoid adverse selection problem-ex-ante information asymmetry through screening, signalling, and providing opportunities for self-selection to appropriately identify the agent's ability to perform the anticipated task in the pre-contract phase. However, selection and incentive design ex-ante control mechanism are considered incomplete and must be complemented by monitoring systems as an ex-post control mechanism (Stump and Heide, 1996). Frequently buyers monitor their suppliers' compliance with well-known standards for

quality, delivery time, order accuracy or other key performance indicators (Stump and Heide, 1996). The more effort invested by the buyer to monitor the performance of the supplier, the more control is required to reduce opportunistic behaviour. Hence, exporters might adopt these controlling mechanisms to ensure that they had selected the proper LSPs who have the required capabilities to perform tasks as agreed upon, or even to exceed them.

Consistent with Halldorsson et al. (2007), logistics outsourcing arrangements should include safeguards and credible commitments to discourage LSPs' opportunism. Similarly, LSPs can achieve high logistics outsourcing performance by concentrating their efforts, resources, and capabilities on delivering value-added services to their customers. The manner in which LSPs develop, manage, and leverage their resources and capabilities influences their strategic importance in the market (Hertz and Alfredsson, 2003). Thus, an important managerial implication is that LSPs should endeavour to help improve the competence of their staff. Logistics competence gained from LSPs' resource capabilities supports exporting companies to respond more effectively to the needs of their customers so that LSPs can become an integral extension of export companies. This is critical as the LSP-exporter relationship represents an interdependency between two partners based on co-specialized human capital provided by each of them, such that one human-capital intensive firm (i.e. the LSP) extends its boundaries and creates more value which enriches the relationship (Cezanne and Saglietto, 2015; El Meladi, Glavee-Geo and Buvik, 2017).

Limitations and future research

This study is not without some shortcomings. The data is based on the perspective of buyers of logistics services and can be considered as a more credible evaluation of the performance of the LSPs. However, the perspective of the LSPs is also important. Thus, a study integrating the perspectives of both buyers and suppliers of logistics services could provide added insight into the issues discussed in this paper. In addition, the cross-sectional correlational nature of the survey makes it difficult to infer causality.

Regarding the scope of this study, the research is limited to exporters in the textile and clothing sector in Egypt, which leads to two limitations concerning using a single industry in a single country. First, examination of the research model in a single industry limits the ability to generalise the results and obtain high external validity of the findings. Hence, future studies from multiple industries should ensure external validity and examine whether there are differences in the perceived logistics outsourcing performance in different industries. Second, there may be potential cultural differences that influence the effects of the key drivers on the

logistics outsourcing performance. Therefore, it is desirable to conduct further research in different countries with a focus on the cross-cultural effects on the drivers and barriers of the logistics outsourcing performance.

Though the aim of the paper is not to generalise, the findings of the study provide insight into the intricate relationship between LSPs and their clients regarding LSPs' resource capability and opportunism. Further studies on this phenomenon can help in establishing solid relationships between the constructs. For example, more studies are needed to establish the curvilinear relationship between opportunism and goal achievement decisively, and between opportunism and goal exceedance since the current research did not find support for the latter relationship. Although the study has examined a limited number of logistics capabilities to explain the logistics outsourcing performance, it would be valuable for future research to examine a research model incorporating other capabilities: such as reputation, information technology (IT) and relational capabilities. Concerning the operationalisation of the logistics outsourcing performance as a bi-dimensional construct (goal achievement and goal exceedance), this study does not explicitly capture cost performance. The study suggests adding cost performance as the third dimension in further research.

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Tables and Figures

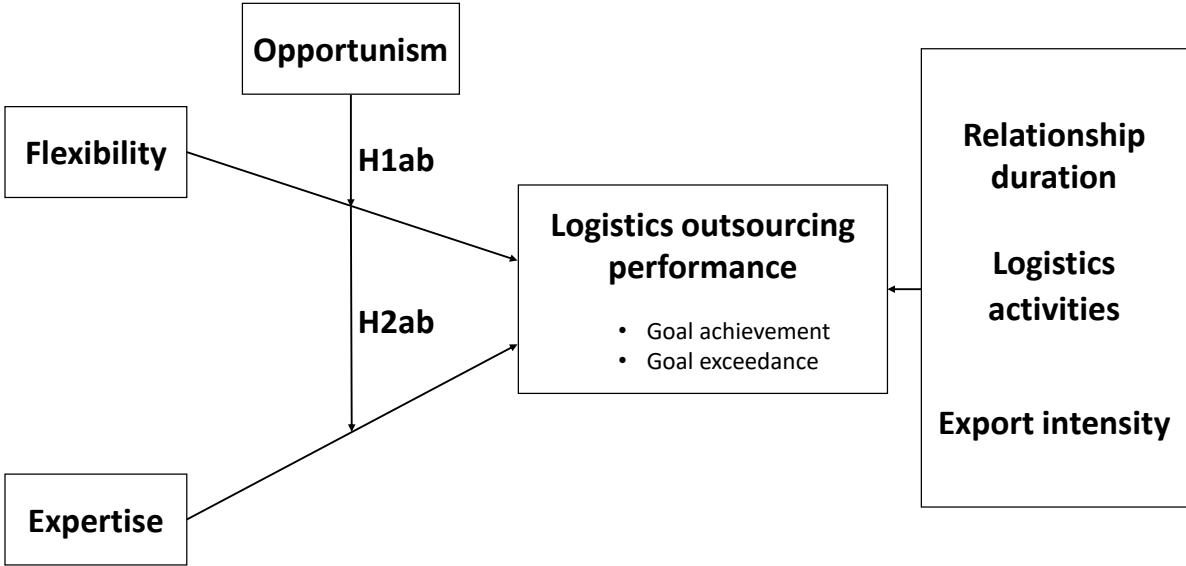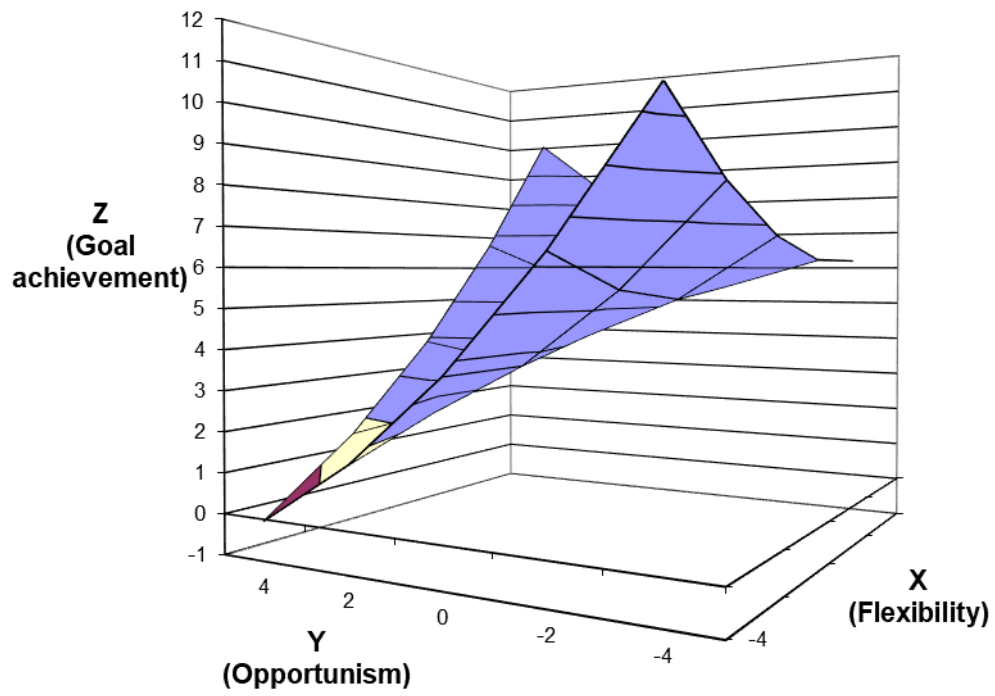Figure 1 Conceptual model

Figure 2: Goal achievement as predicted by opportunism and flexibility
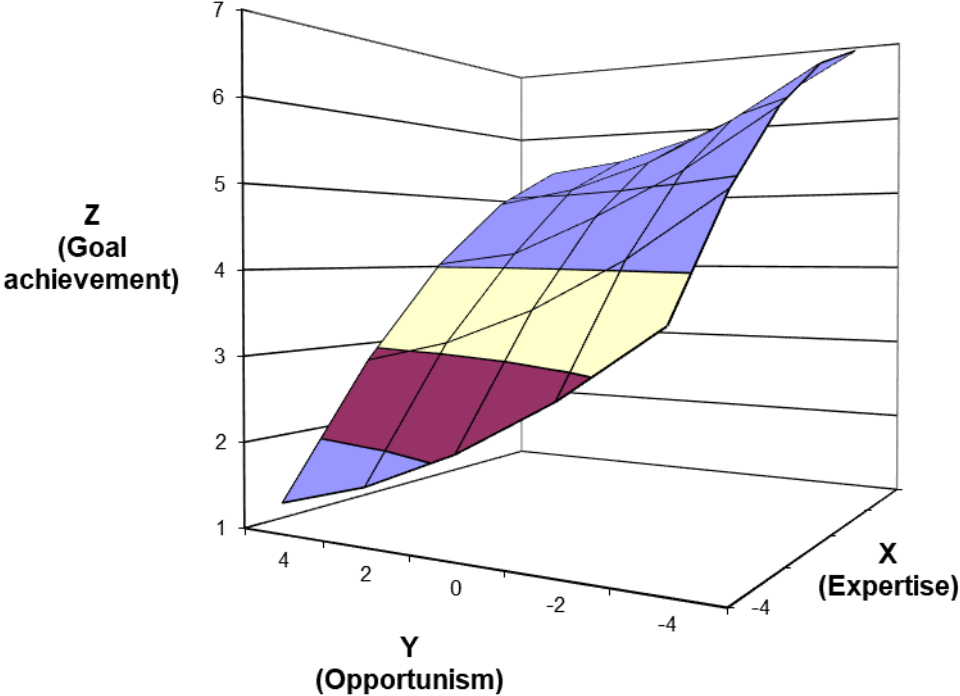
Figure 3: Goal achievement as predicted by opportunism and expertise
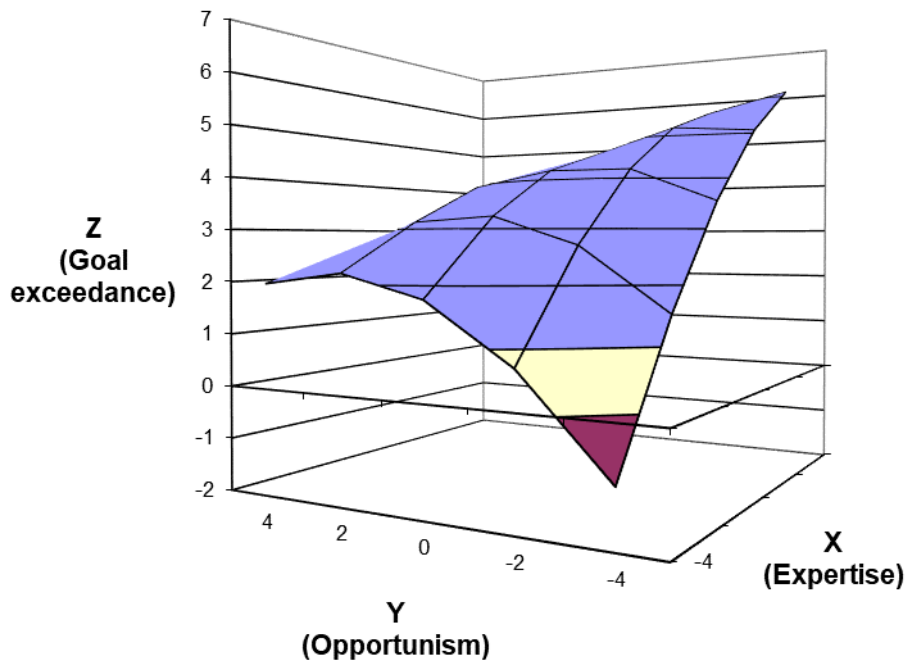
Figure 4: Goal exceedance as predicted by opportunism and expertise
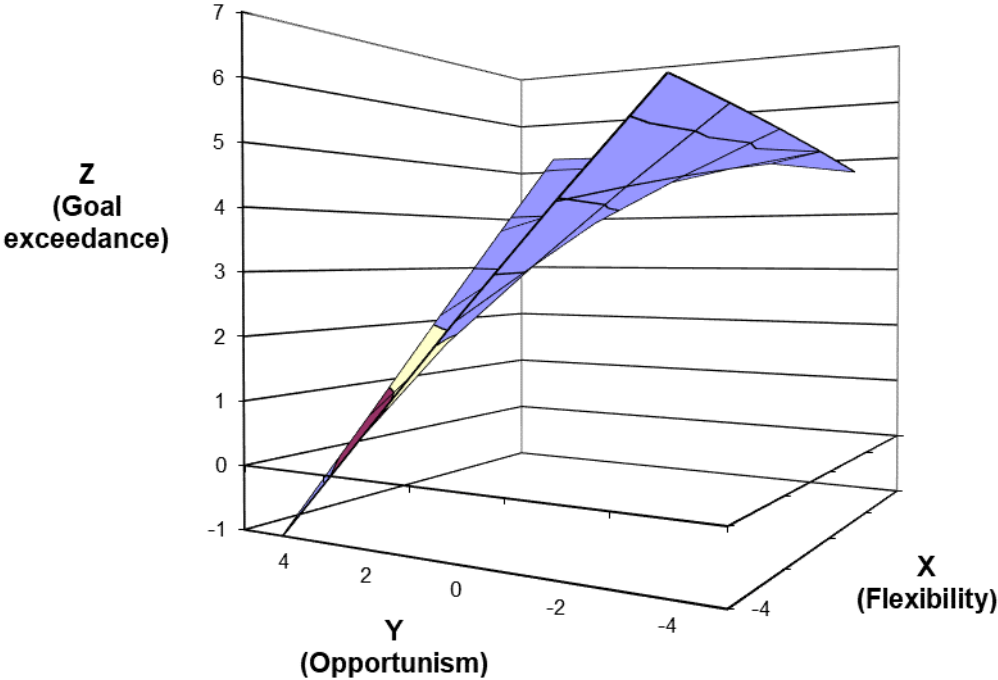
Figure 5: Goal exceedance as predicted by opportunism and flexibility

Table 1: Sample characteristics (n=153)

Characteristics	Category	Frequency	Percent
Key informant position	Director	4	2.6
	Logistics manager	32	20.9
	Export manager	92	60.1
	Operations manager	11	7.2
	Account manager	9	5.9
	Others	5	3.3
Company size (number of employees)	<100	9	5.9
	100-200	24	15.7
	201-300	14	9.2
	301-400	14	9.2
	401-500	7	4.7
	501-600	7	4.6
	>600	78	51
Nationality of LSP	Local	78	51.0
	Multinational	75	49.0
Percentage of sales from export	<20	7	4.6
	20-40	12	7.8
	40.1-60	15	9.8
	60.1-80	25	16.3
	80.1-100	94	61.4

Table 2: Individual constructs and validity measures

Constructs	Reliability CR (α)	The constructs' items measured on 7-Point Likert-type scales with endpoints indicating strongly disagree and strongly agree except for opportunism items where the value 1 indicates strongly agree and value 7 indicates strongly disagree [1]	M	SD	Loadings#
Flexibility FLEX: 5 items χ^2 =8.88, df=4 p=.06, χ^2/df=2.22, GFI=.98, TLI=.97 RMSEA=.09, 90%CI (.00,.17) SRMR=.02	.90 (.86)	FLEX1: Our LSP is open to the idea of making changes to accommodate our needs	5.47	.91	.638[a]
		FLEX2: Our LSP is ready to adjust its operation to meet sudden needs that might occur	5.39	1.08	.737***
		FLEX3: Our LSP is flexible in response to our short notice requests.	5.33	1.12	.885***
		FLRX4: Our LSP is flexible enough to handle changes	5.31	1.11	.810***
		FLEX5: Our LSP is open to modifying our agreement if unexpected events occur.	4.93	1.17	.653***
Expertise EXPE: 5 items χ^2 =11.48, df=4 p=.02, χ^2/df=2.87, GFI=.97, TLI=.96 RMSEA=.11, 90%CI (.04,.19) SRMR=.05	.92 (.88)	EXPE1: The chosen contact person of our LSP makes an effort to understand our business.	5.27	1.16	.595[a]
		EXPE2: The experience of our LSPs chosen contact person is adequate for handling our products.	5.49	.94	.715***
		EXPE3: Our LSP's chosen contact person's knowledge is very high in our business	5.12	1.08	.729***
		EXPE4: The chosen contact person of our LSP has strong communication skills.	5.41	.93	.906***
		EXPE5: The chosen contact person of our LSP is well trained to work with us effectively	5.29	1.00	.913***
Opportunism OPPO: 5 items χ^2 =9.41, df=4 p=.05, χ^2/df=2.35, GFI=.97, TLI=.95 RMSEA=.09, 90%CI (.00,.17) SRMR=.05	.89 (.84)	OPPO1: LSP sometimes provides inaccurate Information	2.69	1.37	.776[a]
		OPPO2: Sometimes our LSP fails to deliver our order on time as promised	2.93	1.34	.698***
		OPPO3: Sometimes our LSP exaggerates needs in order to get what it desires	2.86	1.39	.692***
		OPPO4: To a certain extent, LSP is not always sincere in its dealing	2.35	1.03	.781***
		OPPO5: Sometimes, our LSP breaches agreements for its own benefit	2.45	1.07	.720***
Goal achievement GOAC: 6 items χ^2 =13,62, df=7 p=.06, χ^2/df=1.95, GFI=.97, TLI=.98 RMSEA=.08, 90%CI (.00,.14) SRMR=.04	.89 (.85)	GOAC1: Our LSP always delivers services at required time.	5.40	.89	.613[a]
		GOAC2: Our LSP frequently delivers high-quality services.	5.22	.83	.851***
		GOAC3: Our LSP always handles order discrepancy very well	5.16	1.01	.611***
		GOAC4: Our LSP's lead-time is very short.	4.88	1.09	.601***
		GOAC5: We always experience high order accuracy from our LSP.	5.09	.84	.805***
		GOAC6: Relationship goals and expectations were fulfilled by our LSP averagely.	5.38	.84	.700***
Goal exceedance EXCE: 3 items Model fit trivial	.87 (.79)	EXCE1: LSP's service quality.	4.96	.91	.663***
		EXCE2: LSP's timeliness of services.	5.17	.93	.993***
		EXCE3: Our LSP fulfilled relationship goals and expectations above average.	4.97	.91	.602[a]

[a] fixed, #.*Significant at p<.001*, Cronbach's alpha (α), CR Composite reliability, M Mean, SD Standard deviation.

[1]Opportunism items have been reversed before the data analysis.

Table 3: Correlation matrix

	1	2	3	4	5
Flexibility (1)	1				
Expertise (2)	.43** (.19)	1			
Opportunism (3)	-.40** (.16)	-.46** (.21)	1		
Goal achievement (4)	.52** (.27)	.61** (.37)	-.58** (.34)	1	
Goal exceedance (5)	.41** (.17)	.49** (.24)	-.35** (.12)	.55** (.30)	1
Average variance extracted (AVE)	.65	.70	.62	.56	.70

Significant at p<0.01 (Two-tailed), values off-diagonal in brackets are squared correlations.

Table 4: Regression results on Logistics outsourcing performance (n=153)

	Model 1 Dependent: Goal achievement			Model 2 Goal achievement			Model 3 Goal exceedance			Model 4 Goal exceedance		
	β	se	t-value	β	se	t-value	β	se	t-value	β	se	t-value
Constant	4.20***	.39	10.59	4.64***	.40	11.63	4.22***	.51	8.24	3.79***	.56	6.79
Flexibility (FLEX)	.42***	.09	4.49							.35	.18	1.93
Expertise (EXPE)				.47***	.12	3.96	.37*	.15	2.43			
Opportunism (OPPO)	-.36***	.09	4.06	-.23*	.01	2.34	-.15	.13	1.18	-.38**	.12	3.00
FLEX*OPPO	.21***	.05	3.92							.11	.07	1.55
EXPE*OPPO				.01	.06	.23	-.13	.08	1.67			
$(FLEX)^2$	.07	.05	1.54							-.003	.06	.05
$(EXPE)^2$				-.04	.05	.84	-.06	.07	.89			
$(OPPO)^2$	.07*	.04	2.00	.02	.04	.53	-.08	.05	1.78	-.008	.05	.17
Export intensity[1]	.34*	.15	2.24	.25	.15	1.61	-.10	.19	.50	-.02	.21	.11
Relationship duration[1]	-.01	.06	.22	.04	.06	.78	-.02	.07	.32	-.06	.08	.81
Sea freight[2]	-.06	.37	.16	-.46	.38	1.22	.27	.48	.55	.63	.51	1.26
Air freight[2]	-.17	.09	1.80	-.18*	.09	1.97	-.15	.12	1.26	-.14	.13	1.11
Warehousing[2]	-.07	.12	.59	-.06	.12	.51	.16	.15	1.00	-.14	.17	.84
Cargo handling[2]	.19	.33	.57	-.04	.33	.11	-.83	.42	1.97	-.61	.44	1.38
Trucking[2]	.02	.09	.25	.02	.09	.18	.12	.12	1.02	.14	.12	1.10
Consolidation[2]	-.05	.11	.46	-.03	.12	.25	-.11	.15	.75	-.09	.15	.61
Distribution[2]	-.05	.27	.18	.23	.27	.87	.84*	.35	2.41	.59	.37	1.58
Freight payment[2]	.11	.10	1.11	.17	.10	1.81	.43***	.13	3.47	.37**	.13	2.74
Documentation[2]	-.22*	.09	2.22	-.18	.10	1.83	-.18	.13	1.41	-.22	.13	1.63
R^2	.56			.54			.39			.33		
R^2 adjusted	.50			.49			.31			.25		

β Unstandardized coefficient, se Standard error. [1]Export intensity transformed from percentages to a 1-5 scale where 1=less 20% 5=80% to 100%. Relationship duration range from 1 to 30 years transformed into logarithm natural logarithm. [2]Type of logistics outsourcing service purchased from an LSP by exporter are used as dummy variables with 1=yes, 0=no.

***p<0.001   **p<0.01   *p<0.05 (Two-tailed test)

Table 5: Testing slopes and curves

Effect	Model 1			Model 2			Model 3			Model 4		
	β	se	t-value	β	se	t-value	β	se	t-value	β	se	t-value
a1: Slope along x=y (as related to Z)	.06	.13	.44	.24	.15	1.60	.22	.23	.95	.03	.25	.12
a2: Curvature on x=y (as related to Z)	.35***	.10	3.39	-.01	.12	.09	-.27**	.10	2.71	.10	.14	.72
a3: Slope along x=-y (as related to Z)	.78***	.12	6.55	.70***	.08	8.68	.52**	.16	3.26	.73***	.18	4.16
a4: Curvature on x=-y (as related to Z)	-.07	.08	.86	-.03	.07	.40	-.01	.07	.14	-.12	.08	1.45

***p<0.001   **p<0.01 (Two-tailed test)