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**Article**

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## **A Perspective for Supply Chain Management: Building a Conceptual Framework**

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### ***Abstract***

Supply chain relationships play a significant role in supply chain management to respond to dynamic export market changes. If the dyadic exporter-producer relationships are still weak, they impede the emergence of a high performance supply chain within an export market. This paper develops a conceptual framework for understanding how exporter-producer relationships include not only the relationship system but also network and transaction systems; and thus introduces a more integrated way of looking at supply chain management based on information sharing as a key process between exporters and producers. To achieve this aim, supply chain relationships are reviewed from the perspectives of relationship marketing theory, network theory and transaction cost theory. Findings from previous research are discussed to provide a better understanding of how these relationships have evolved. A conceptual framework is built by offering a central proposition that specific dimensions of relationships, networks and transactions are the key antecedents of information sharing, which in turn influences export performance in supply chain management.

**Keywords:** supply chain management, marketing, exporter-producer relationship, information sharing

## **1 INTRODUCTION**

To date, there have been a number of studies that have tended to concentrate on the background and phenomena of supply chain management as well as the supply chain relationships. However, conceptually the management of supply chains is not particularly fully understood, and many authors have highlighted the necessity of clear concepts and conceptual frameworks on supply chain management (e.g. Harland, 1996; Wilson, 1996; Croom et al., 2000; Svensson, 2002; Williamson, 2008). Most of the discussions were about supply chain relationships, information and product flow, networks and transactions (e.g. Anderson et al., 1994; Ritter 1999; Toften and Olsen, 2003; Parker et al., 2006; Hsu et al., 2008). Little research (e.g. Harland, 1996; Croom et al, 2000) has claimed and confirmed that buyer-seller relationships, networks and transactions are highly related to supply chain management. Some studies (e.g. Wilson, 1996; Moberg et al., 2002; Hsu et al., 2008) have suggested that information sharing is one of the most important aspects of supply chain management for better understanding of supply chain relationships and performance.

Nevertheless, the impact of relationship, network and transaction perspectives on supply chain management has not been examined in any depth. There has been a lack of conceptual and empirical research on information sharing, which limits the understanding of the dyadic business relationship and there has been no theoretical framework analysing export supply chain relationships. Thus, this paper attempts to present a review of the existing approaches to supply chain management that is associated with business involving export markets. This is with the purpose of identifying important issues and research gaps for further research and providing an initial conceptual framework. To do so, this research identifies four perspectives: supply chain management (e.g. Harland, 1996; Croom et al, 2000; Lambert and Cooper, 2000) relationship marketing theory (e.g. Wilson, 1995; Veludo et al., 2004; Eiriz and Wilson, 2006), network theory (e.g. Anderson et al., 1994; Lazzarini, 2001; Ritter, 2004) and transaction cost theory (e.g. Riordan and Williamson, 1985; Williamson, 2008). Amongst these perspectives, the researcher argues that supply chain management is used as the main theoretical background and thus has an ability to accommodate the three other perspectives.

The paper is structured as follows: the importance of supply chain management is explained, key theoretical perspectives (relationship, network, and transaction theories) and export performance in the literature are reviewed and propositions are formed; the methodology is illustrated, a discussion of the results follows; and the final section concludes.

## **2 SUPPLY CHAIN MANAGEMENT**

Supply chain management can be defined as the management of upstream and downstream relationships with buyers and sellers in order to create value in the final market at less cost to the supply chain as a whole (Christopher, 1998). Most of the studies on supply chain management (Croom *et al.*, 2000; Lazzarini, 2001; Svensson, 2002) have concluded that the lack of a universal definition of supply chain management is in part due to the approach of different researchers in developing the concept of supply chains. Such a multidisciplinary origin is reflected in the lack of holistic conceptual frameworks for the development of a perspective on supply chain management (Harland, 1996; Leonidou *et al.*, 2006). As a consequence, the schemes of interpretation of supply chain management are mostly partial with relatively poor findings that empirically validate the framework explaining the key themes and form of supply chain management, its buyer-seller relationships and its information sharing.

The academic literature underlines a more varied rationale as several studies link supply chain management to key perspectives such as relationship marketing theory (e.g. Wilson, 1995; Veludo *et al.*, 2004; Eiriz and Wilson, 2006), network theory (e.g. Anderson *et al.*, 1994; Lazzarini, 2001; Ritter, 2004), and transaction cost theory (e.g. Riordan and Williamson, 1985; Williamson, 2008). The literature suggests that the concept of supply chain management brings different focuses (e.g. Harland, 1996; Croom *et al.*, 2000; Lazzarini, 2001; Eiriz and Wilson, 2006). For example, researchers may think of the relationship framework, which is built based on the dyadic relationship as the main unit to manage the flow of products and information. Others may link business relationships to networks. This issue refers to the set of relationships where a single relationship cannot work alone without connecting with other relationships. Another important notion is the focus on the transactions of the relationship that are grouped in one supply chain. Wilson (1996) argues that information sharing is one of the important aspects of supply chains for increasing profits and reducing costs, and must be investigated in more detail. Consequently, there is a demand for building a strong buyer-seller relationship to encourage the improvement of modern chains (Duffy *et al.*, 2008).

Supply chain management framework has become an important approach within management in developed countries since the 1990s. In the mid-1980s, transactions depended on arms-length agreements, whereas agreements in chain relationships were built on cooperation and information sharing in the 1990s (Hoyt and Huq, 2000). Consequently, the monetary value gained from the export of fresh fruit and vegetables to the European Union by developing countries increased by 24% between 2001 and 2005 (Jaffee, 2005). This is

indicative of how the export supply chain plays a key role in managing flows of produce and information between buyers and sellers who are concerned with information sharing. More importantly, information sharing is a key strategy (Piercy *et al.*, 1997; Leonidou *et al.*, 2006), helping its members to make better decisions about strategic issues for better performance (Huang *et al.*, 2003).

The main problem motivating this research is that developing countries (e.g. Jordan) supply very limited fruit and vegetable exports to the European Union, where there are high profits and business continuities. The Jordanian exporter-producer relationships are unable to manage a high performance export chain. Retrospectively, there is a need to recommend and inform private and government sectors working in the export industry of fresh fruit and vegetables by understanding this issue from a holistic viewpoint. The novel focus is on an understanding of information sharing between the exporters and the producers in their relationships in order to improve the supply chain management from Jordan to the European Union.

In developing countries, the producers and exporters realise the importance of information sharing in supplying fresh fruit and vegetables to the European Union successfully. Modern fresh food-export supply chains can motivate the producers and the exporters to organise themselves in marketing groups. This is in order to develop sufficient volume for the necessary quality based on production, logistics and marketing information and connections with markets to access export markets with high profits. The researcher argues that supply chain management for export is built on the objectives of delivering products and services to the right customer, in the right quantity and at the right time in the export chain. Therefore, the researcher defines the concept of supply chain management as follows:

*Supply chain management is a framework for creating relationships among the chain members, mainly the exporters and producers, who consider information sharing at the three levels of relationship, network and transaction dimensions, to reach the right customer, in the right quantity, and at the right time for better export performance.*

Having discussed the above, however, previous research has not covered all the issues related to supply chain management, its concept and its export supply chain relationships, and information sharing has not been explored in detail. The previous research has not provided a holistic integration between relationships, networks and transaction in order to show supply chain management as a major approach. The previous research has not focused on agri-food export supply chain in detail. Therefore, this paper focuses on studying the exporter-producer relationship including key dimensions, along with exploring information sharing as being the main dimension. The main theoretical perspectives identified are the relationship, network and transaction perspectives, which are associated with information sharing in the context of export supply chain relationships in the fresh fruit and vegetable industry.

### **3 RELATIONSHIP MARKETING THEORY**

Relationship marketing theory is a useful perspective offering explanations of several processes or dimensions (e.g. commitment and cooperation) that are significant in studying the interrelationships between certain phenomena of the buyer-seller relationship (Wilson, 1995), such as information sharing in supply chain management (Toften and Olsen, 2003). This theory can explain the exporter-producer relationship and its information sharing, offering explanations for the several streams in relationships, the dimensions in relationships, such as the rationale for, process of and structure of relationships.

Conceptual and empirical models often focus on different components of the relationship but use similar key theoretical dimensions to explain relationships (Wilson, 1995; Dash *et al.*, 2007). These dimensions include trust, commitment, communication, cooperation, collaboration, and information sharing. Tomkins (2001) explains that trust leads to increased information between firms in business. Trust and information sharing have a functional association that is more likely to be characterised over the life cycle of a positive relationship (Tomkins, 2001). Wilson (1995) defines commitment as the desire to continue the relationship. Commitment is developed in the more mature stage of relationships after trust is developed in the early stage (Wilson, 1995).

Cooperation is a key dimension to forming partnerships in order to ensure that both parties can gain benefits (Wilson, 1995). Cooperative ways enable both parties to supply fruit and vegetables in the required quantities and of the required quality to the target markets (Shaw and Gibbs, 1995). Collaboration is when two or more chain members work together to create a competitive advantage (Simatupang and Sridharan, 2002). Communication is a necessary human activity, which supports relationships between parties (Veludo *et al.*, 2004;) for creating rich knowledge. Information sharing encourages commitment and cooperation and helps the buyer and seller through the adaptation of processes (Kalafatis, 2000; Andersen, 2006). Furthermore, providing the right information between chain parties gives them the opportunity to review the credibility of the other party (Dash *et al.*, 2007).

Generally, most of the studies' authors (e.g. Wilson 1995; Piercy *et al.*, 1997; Eiriz and Wilson, 2006; Hsu *et al.*, 2008) use these dimensions to form different views on the relationship perspective. In most of the studies, the definitions explain a relationship as a link of benefits and processes for both individuals and firms engaging in several streams such as networks, exchange, governance, exporting and supply chain management to improve relationships and performance. These dimensions are processes in the relationship, which work as conditions to create better achievements and sharing of information for the firms. Based on the explanations above, the business relationship is considered as a key unit in the export supply chain. Therefore, the researcher defines the relationship concept as the following:

*A relationship is a set of processes (e.g. commitment and information sharing) between an exporter and a producer who share a rationale for the relationship and networks in order to improve export performance in the transactional export supply chain.*

Table 1 summarises previous studies that have applied the relationship perspective. The previous research has not covered all the issues related to relationships, and information sharing has not been explored in detail. A few studies (e.g. Kwon and Suh, 2004; Leonidou *et al.*, 2006) have explored important dimensions such as information sharing in the supply chain relationship but these studies have also failed to empirically contribute to examining information sharing in an advanced way. Most of the empirical studies (e.g. Dorsch *et al.*, 1998; Wu *et al.*, 2004) have provided key findings that contribute to understanding how the different dimensions affect each other but few of them have examined the impact of these dimensions on export performance. A few studies (e.g. Parker *et al.*, 2006; Hsu *et al.*, 2008) have investigated the association between the different relationship dimensions, information sharing and export performance to understand the supply chain relationship in the context of supply chain management. However, these studies have not empirically provided a holistic view related to information sharing and the interrelationships were indirect in the association. Most of the previous research has analysed one side of the dyadic supply chain relationships, which limited the full-understanding of relationship research. A few of the studies (e.g. Parker *et al.*, 2006) have examined both sides but they have not provided detailed empirical work related to relationships.

In fact, the above discussion on buyer-seller relationships leads to a key research question: "How do key relationship dimensions have impacts on information sharing in the export supply chain relationship?" This research attempts to provide insights into the high-order dimensions (e.g. trust and commitment), focusing on information sharing. Therefore, the researcher suggests the following proposition:

**Proposition 1:** Relationship dimensions (e.g. trust, commitment, cooperation, collaboration and communication) between the dyadic actors (exporter and producer) have an impact on information sharing in the exporter-producer relationship.

**Table 1: Key Previous Research Related to Relationship Marketing Theory**

Author	Type of Research	Key Factors (Dimensions) and Concepts	Key findings
Wilson (1995)	Conceptual research	Trust, commitment, bonds, cooperation, quality, mutual goals, satisfaction and technology adoption.	A relationship concept definition was improved and operationalized and the study described development processes.
Toften & Olsen (2003)	Conceptual research	Export information, export performance, and business success.	Export information use and export performance are influenced by knowledge and learning factors. Information use has positive impact on firm success.
Wu et al. (2004)	Empirical research	Trust, commitment, power, investment, dependence, continuity, and chain integration	The level of investment, dependence, trust, power and continuity to supply chain partners will enhance commitment and, consequently, the integration of the supply chain management.
Lages et al. (2005)	Empirical research	Relationship quality, long-term relationship, information sharing, commitment, satisfaction, and export performance.	A better relationship quality results in a greater amount of information sharing, commitment, orientation, and satisfaction with the exporter-importer relationship in the UK.
Parker et al. (2006)	Empirical research	Information sharing, commitment application, quality, and decision-making.	Perceived equality, continuous supply, quality, control and commitment are benefits in dealing directly in relationships. Information sharing importance for decision making in fresh products.

#### 4 NETWORK THEORY

Network theory provides a useful framework for analysis of a business situation, and it adds a new level of complexity to understanding the relationship perspective (Jarillo, 1988; Möller and Halinen, 1999; Croom *et al.*, 2000). Network relations create information sharing that enables buyers and sellers to have access to resources and knowledge beyond their abilities, leading to long-term relationships (Mikkola, 2008). This approach is a structure formed by the main dimensions (e.g. activities, resources and actors) that connect a set of relationships. Therefore, alongside information sharing, the network perspective will also be studied as it enables the analysis of export chain relationships. A business network is a set of relationships that are connected, showing firms' identity, process and functions that contribute to explaining a dyadic relationship (Anderson *et al.*, 1994; Ritter, 2004).

Actors is an essential function within relationships that are required to form meaningful network structures, in which the network must have activities and the resources required to carry out those activities (McLoughlin and Horan, 2002). In the export business, actors connect with each other socially to bring various beneficial types of producers, retailers and consumers together within regional fruit and vegetable networks (Lazzarini *et al.*, 2001; Koops *et al.*, 2002) and establish a network position (Turnbull *et al.*, 1996). Activities and resources are two strategic relationship functions in a network (Anderson *et al.*, 1994). These functions are meaningful in the conceptualisation of the marketing network, which is an important value in analysing a business (Möller and Halinen, 1999). However, actors control activities that are built by relationships with other parties in the network and are influenced by resources, which are exchanged to coordinate chain activities.

Anderson *et al.* (1994) state that functions carried out within relationships must be viewed as part of a network. They also state that relationships are connected to establish networks, which have direct and indirect connections with other relationships. Most of the previous studies state that relationship functions such as activities, resources and processes must be managed in a network in order to establish interactions for better benefits and long-term relationships. This is where networks are a set of relationships among constellations of actors (Jarillo, 1988; Bardach, 1994; Jarzo, 2000; Ritter, 2004) and these relationships make connections with each other to provide the functions of benefits and exchange processes of their business and others' for better performance. The researcher provides a definition of the network concept:

*A network is a set of relationships among firms aiming to establish connections based on relationship functions (e.g. activities, resources and actors) to support information sharing for better performance in the export supply chain.*

Table 2 summarises the previous studies that have applied the network perspective. Most of the studies have not covered all the issues related to networks' impact on dyadic relationships, and information sharing has not been explored as an important concept. A few studies (e.g. Halinen *et al.*, 1999) have examined information sharing in the supply chain relationship, but their empirical work was not in-depth. Most of the empirical studies (e.g. Ritter, 1999; Wilkinson and Young, 2002) have provided findings that contribute to understanding how the network dimensions affect each other but few of them have investigated the dimensions' impact on export performance. Most of the previous research has not examined the two sides of the relationship in network research, which limits the full understanding of the relationship work in the network. Consequently, this paper highlights a research question, which is "How do key network dimensions have impacts on information sharing in the dyadic relationship?" The researcher seeks to examine the effects of networks in business relationships and identifies the factors (e.g. activities, resources and actor position) that influence the relationships, focusing on information sharing.

**Proposition 2:** Network dimensions (e.g. activities, resources and actors) between the dyadic actors (exporter and producer) and the network actors have an impact on information sharing in the exporter-producer relationship.

**Table 2: Key Previous Research Related to Network Theory**

Author	Type of Research	Key Factors (Dimensions) and Concepts	Key findings
Ritter (1999)	Empirical research	Network competences, resource availability, human resource management, activities, communication structure and culture	Network competence is embedded within the whole company. Resource availability is a precondition for the development of competence. Network orientation of human resources, communication structure and corporate culture are positively associated with competence.
Möller & Halinen (1999)	Empirical research	Network, actor and buyer-seller relationship.	A network theory provides well-developed conceptual tools for analyzing the networks and network management issues.
Koops et al. (2002)	Empirical research	Resources, change processes, strategic changes and collaboration.	Resources have an effect on the product and process in food industry. Supplier and customer collaboration were not found to have any moderating effects.
Wilkinson & Young (2002)	Empirical research	Network, actor, firm performance, complexity, planning and strategies.	A network perspective leads to the identification of additional causal factors explaining firm and relationship behaviour and performance.
Mikkola (2008)	Empirical research	Market relations, power, economic activities, actors, network relations, and coordination.	A coordinative structural mode of socially overlaid networks is identified for fresh product chains.

## 5 TRANSACTION COST THEORY

Transaction cost theory's basic premise is that the cost of doing transactions could be too high under certain conditions (Grover and Malhotra, 2003). Transaction cost theory is an economic approach (Williamson, 2008) and reflects different types of transaction costs (e.g. coordination, contracting deals and information sharing) (Eiriz and Wilson, 2006). Thus, this economic perspective needs to take into account the economic rationality of supply chain relationships. This perspective provides explanations for transaction dimensions (e.g. asset specificity, uncertainty and frequency) between firms and their relationships (Williamson, 1995; Spraakman, 1997). Transaction cost theory explains how information advantage in a relationship is enjoyable and beneficial for firms (Williamson, 1995) and information sharing in business is a transaction cost (Eiriz and Wilson, 2006). Transaction cost theory contributes to the study of supply chain relationships and networks, and the efficiency of economic activities.

In transaction cost theory, the unit of analysis is the transaction used to describe the economic activity and the governance structures in business relationships (Riordan and Williamson, 1985). Transaction cost theory explains that transaction costs include coordination, monitoring, contracting deals, opportunistic behaviour risk and information sharing (Williamson, 1995). Williamson (1988b) defines a transaction as a basic unit of analysis in organisational structure rather than production, one where the main dimensions of transaction cost theory are asset specificity, uncertainty and frequency. The behavioural assumptions are bounded rationality and opportunism, which forces firms to make self-enforcing promises to behave responsibly in terms of increasing their profit (Williamson, 1995). Bounded rationality is accepting the limits of the human ability to process information comprehensively (Williamson, 1988b). Transaction cost theory views bounded rationality as a problem under conditions of uncertainty, which make it difficult to fully specify the conditions surrounding an exchange, thereby causing an economic problem (Grover and Malhotra, 2003). Opportunism is defined as "*self-interest seeking with guile*" by a human actor in business relationships (Williamson, 1985, 255). "*This does not imply that all those involved in transactions act opportunistically all of the time, rather, it recognizes that the risk of opportunism is often present*" (Hobbs, 1996, p.17). In his subsequent work, Williamson (1985, p. 47) describes guile as "*lying, stealing, cheating, and calculated efforts to mislead, distort, disguise, obfuscate, or otherwise confuse.*"

Three dimensions describe a transaction: asset specificity, uncertainty and frequency (Williamson, 1985). Asset specificity is a basic unit of analysis, which is the most important dimension in the transaction (Riordan and Williamson, 1985). "*Asset specificity arises when one partner to an exchange of a firm has invested resources specific to that exchange which have little or no value in an alternative use*" (Hobbs, 1996, p.17). This dimension is a transactional factor of special interest (Williamson, 1981) and refers to the transferability of assets that support a given transaction cost, which are mainly in the form of human specificity (e.g. employee training) or physical specificity (e.g. investment in equipment) (Williamson 1985). Williamson (1985) describes two other types of asset specificity: site specificity (parties' relationships to minimise transportation and

inventory costs), and dedicated assets (referring to substantial investments that would not have been made outside a particular transaction).

Uncertainty is linked to economic reasons and transacting behaviour are the two reasons related to uncertainty and both result in extra costs between parties (Bourlakis and Bourlakis, 2005). The existence of uncertainty makes writing and contracts complicated since the environment shifts in unforeseen ways (Sprackman, 1997). In the food supply chain, the transaction costs are because of uncertainty due to limited information, opportunism, frequency of transactions and incompleteness of contracts (Poole *et al.*, 1998). Under conditions of uncertainty, information cannot be derived regarding future states, where probabilistically generated information and interpretive ambiguity will exist in business.

Frequency could be called large-scale production, and setup costs and reputation effects are two aspects of frequency (Williamson, 2008). Only when the potential demand is large is it worthwhile to invest in specialised assets and have frequent transactions. If markets were small, such investments would not be worthwhile. According to Bourlakis and Bourlakis (2005), this relates to the frequency with which transactions between the firms occur, and whether high asset specificity firms should contract out.

This perspective works, depending on its basic unit of analysis, with the following features (Williamson, 1985, 1995): a) the basic unit of analysis is the transaction, b) asset specificity, uncertainty and frequency are the critical dimensions of transaction cost theory, which are essential for transactions, and c) the governance structure, such as relationships and the market that each structure has, differs for both cost and competence. The importance of the transaction role is shown in various studies, and it becomes more important when it is studied for business transactions of a business relationship in a network for better information sharing and achievement. Thus, the researcher defines the transaction concept as:

*A transaction is a basic unit of analysis in a relationship, whose dimensions (e.g. asset specificity, uncertainty and frequency) affect actors' relationships, changing costs and information sharing for better export performance in their export supply chain.*

In Table 3, there is much previous research related to the transaction perspective that is important to understand the transaction between the chain members. In the previous research, most of the studies have been theoretical or conceptual research and few studies (e.g. Williamson, 1988a; Ruben *et al.*, 2007) have considered empirical work. In the present research, there is a need to understand this perspective in more depth in order to describe transactions between firms and their relationships, and the dimensions that affect transactions, including information sharing and export performance. The researcher argues in favour of studying transaction cost theory as a complementary perspective to the other two perspectives above. This is an attempt to explore the supply chain relationship from different approaches whose dimensions can have important influences on the buyers and the sellers sharing different benefits and information. In fact, there have been conceptual overlaps between the different dimensions of the three perspectives and previous research has not linked these dimensions to their perspectives. Therefore, this paper raises a third question, which is "How do key transaction dimensions have impacts on information sharing in the export supply chain relationship?" Hence, the following proposition is suggested:

**Proposition 3:** Transaction dimensions (e.g. asset specificity, uncertainty and frequency) in the export supply chain have an impact on information sharing in the exporter-producer relationship.



**Table 3: Key Previous Research Related to Transaction Cost Theory**

Research	Method	Key Factors (Dimensions) and Concepts	Key findings
Williamson (1971)	Theoretical research	Vertical integration, contract, information exchange and risks	Integration requires powers of internal organization. Firms resort to internalization because of economies of information exchange.
Williamson (1988a)	Empirical research	Contracts, opportunism, bonds, asset specificity, uncertainty, frequency, organization process and analysis, and innovation.	The transaction is the basic unit of analysis. The critical dimensions are asset specificity, uncertainty and frequency with respect to which transactions differ.
Poole et al. (1998)	Empirical research	Marketing orientation, transaction costs, contracts, uncertainty and information sources.	Producers can be grouped according to their marketing orientation. -Marketing factors and the negotiated price are determinants of the terms of the transaction. Information sources are very important to fresh product suppliers.
Schmitz (2006)	Empirical research	Symmetric information and information gathering.	Parties always agree on collaboration if symmetric information is available. information gathering is not always a purely strategic activity.
Williamson (2008)	Conceptual research	Contracting; transaction costs, human actors, outsourcing, organization and supply chain management	The study describes the contract approach to economic organization, the operationalization of transaction perspective, outsourcing levels, and qualifications to the foregoing.

## 6 EXPORT PERFORMANCE

Considerable attention has been paid to the export performance (e.g. Aksoy and Kaynak, 1993; Katsikeas *et al.*, 2000; Katsikeas *et al.*, 2008). However, despite the previous research efforts in understanding the importance of export performance, this paper is characterised by helping in developing a new approach to supply chain management for export. It is an attempt to link supply and demand sides based on the influence of information sharing on export performance. As a result, this research claims that export performance is a process by which it is possible to evaluate the overall business of both the buyer and the seller in their relationship. A variety of financial and non-financial criteria are important in providing the information necessary for decision makers to plan, control and direct the activities of the firm (Cousins *et al.*, 2008).

Exporting fresh fruit and vegetables with a successful supply export chain is important for the exporter-producer relationships in Jordan, where only a few exporters are able to implement high quality standards and delivery requirements to the European Union. According to Cousins *et al.* (2008, p.242), “*the buyer-seller relationship must be evaluated, not just the dimensions of performance, but financial dimensions as well*”. The following table illustrates two types of performance criteria that are indicated in the literature:

**Table 4: Performance Criteria of Buyer-Seller Relationship**

Criteria	Representative Research
<b>Financial Performance</b>	
-Profitability	-Styles & Ambler (1994); Dyer (1996); Zou & Stan (1998); Katsikeas et al. (2008)
-Costs	- Dyer (1996); Hsu et al. (2008); Trienekens et al. (2008)
-Sales growth	-Ambler et al. (1999); Matanda & Schroder (2002); Trienekens et al. (2008)
-Market share	-Styles & Ambler (1994); Robertson & Chetty (2000); Hsu et al. (2008)
-Return on investment	-Trienekens et al. (2008); Hsu et al. (2008)
<b>Non-Financial Performance</b>	
-Satisfaction	-Wilson (1995); Batt (2003); Leonidou et al. (2006); Dash et al. (2007).
-Relationship quality	-Dyer (1996); Dorsch et al. (1998); Roy et al. (2004); Trienekens et al. (2008); Hsu et al. (2008)
-Continuation	-Fontenot & Wilson (1997); Lages et al. (2005); Trienekens et al. (2008); Hsu et al. (2008)
-Market diversification	-Aksoy & Kaynak (1993); Robertson & Chetty (2000)

Financial criteria of performance are export sales growth, export profitability, export sales intensity and market share (Styles and Ambler, 1994; Ambler *et al.*, 1999; Katsikeas *et al.*, 2008) in addition to costs (Dyer, 1996; Hsu *et al.*, 2008). Robertson and Chetty (2000) suggest that export intensity, growth and profitability are

three economic factors that measure performance. Trienekens *et al.* (2008) argue that the economic measures of performance for the fresh products business are efficiency (profitability and logistics costs), return on investment, return on sales. Zou and Stan (1998) argue that export sales and profits are probably the most frequently used financial factor.

Non-financial criteria of performance are: satisfaction (Wilson, 1995; Fontenot and Wilson, 1997; Batt, 2003; Dash *et al.*, 2007), relationship continuation (Lages *et al.*, 2005), relationship quality (Roy *et al.*, 2004; Lages *et al.*, 2005), market diversification (Robertson and Chetty, 2000) and the rate of new product introduction. Robertson and Chetty (2000) also include non-financial measures such as the firm's perception of overall performance derived from past and current events and future projected progression.

Having discussed the export performance, this research provides some scope for supply chain relationship associated information sharing in order to explore and understand the possible association between information sharing and export performance in detail. The financial and non-financial performance criteria identified are general factors and basis and they need to be refined further in future research. This leads to a research question that should be considered in this research. This question is "How does information sharing have an impact on export performance in the export supply chain relationship?" Therefore, the researcher proposes the following:

**Proposition 4:** Information sharing in the exporter-producer relationship has an impact on export performance of the dyadic actors in the export supply chain.

## 7 METHODOLOGY

This research follows a phenomenological approach to conceptual framework building. The use of this approach depends on analyzing theories and combining their dimensions to build up the highlighted conceptual framework. This is based on the rationale that supply chain relationships include not only relationship theory but also network and transaction theories; it thus offers a more integrated way of looking at the research problem (e.g. Harland, 1996; Croom *et al.*, 2000; Lazzarini, 2001; Moberg *et al.*, 2002; Eiriz and Wilson, 2006; Duffy *et al.*, 2008). This contribution will offer a distinctive and valuable understanding of the dyadic exporter-producer relationships with a holistic view and analysis.

The review and analysis of existing literature resulted in a conceptual framework to model the dyadic producer-exporter relationship. The researcher addresses the key gaps identified in the previous research and the key propositions suggested in the sections above for this research. The gaps are expressed as broad and open research issues (Yin, 1994, p. 21), and the propositions reflecting these gaps will be used as a guide in the data collection and analysis, focusing on the research phenomenon (Perry, 1998, p.791). The main focus is on identifying these gaps, and therefore future research will attempt to contribute to solving them.

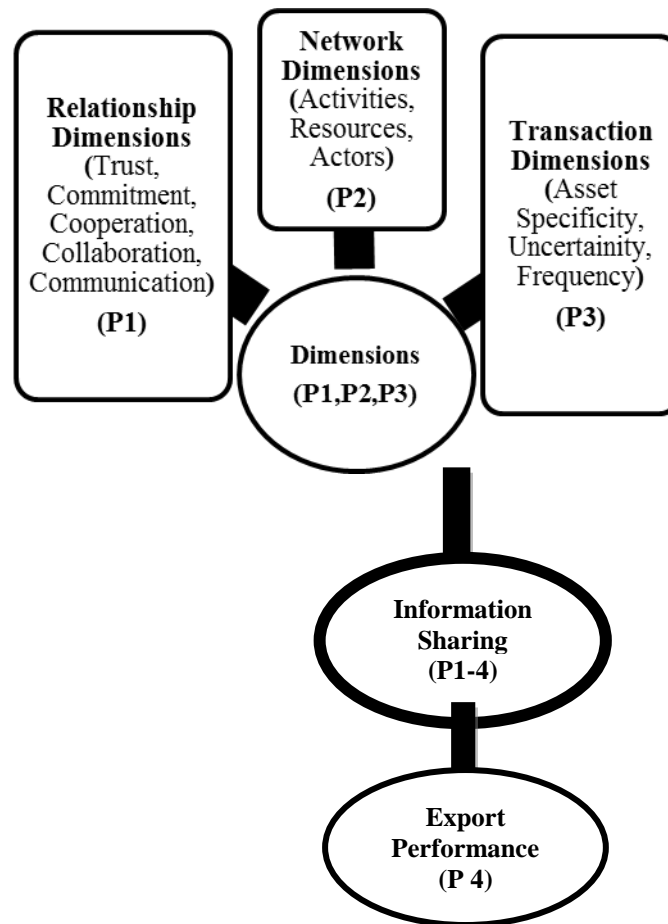
In summary, there has been a lack of conceptual and empirical research on information sharing, which limits the understanding of the dyadic business relationship, and offers no conceptual framework. In contrast, for phenomenon-driven research questions, the researcher has to frame the study in terms of the importance of the phenomenon and the lack of plausible existing theory (Eisenhardt and Graebner, 2007, p.26).

## 8 TOWARDS A CONCEPTUAL FRAMEWORK

Drawing on the different arguments and discussion above, the current research provides the initial conceptual framework of supply chain management and links it to the propositions (Figure 1). This is in order to support the data collection and analysis in future research. Whilst higher level dimensions have been given great consideration within the context of the supply chain, there are many other factors that influence the exporter-producer relationship, the most important of which is information sharing. This paper presents a possible association of these factors for both sides of the export-producer relationship in the supply chain management and identifies factors that could be important in distinguishing the best relationships.

Therefore, a number of substantive, theoretical and methodological issues are still opportunities that remain for future research. This paper highlights them for future research in order to attempt contributing to solving them. These propositions are suggested to bring a focus on future empirical work related to three themes: relationship, network and transaction dimensions; information sharing; and export performance. It is argued that there is a need to establish a theoretical link between the three themes. There was a conceptual overlap between many of the dimensions of the three relevant perspectives (relationship marketing theory, network theory and transaction cost theory), to be used in a unified empirical study. Because many factors have impacts on the determination of information sharing, attempts to identify associations with any single factor, such as the cooperation dimension, may not have been totally successful. Therefore, to avoid this problem and to establish possible credible links between the three themes, key dimensions of the three perspectives are newly combined to introduce antecedents for information sharing, which affects export performance in supply chain management.

**Figure 1: Conceptual Framework of Supply Chain Management**



## 9 CONCLUSION AND CONTRIBUTION

The paper has reviewed the key empirical studies related to the factors of the supply chain relationship within supply chain management. Previous research related to supply chain management and marketing research and relationships, networks and transactions has been reviewed and then classified based on the use of three theoretical perspectives. This is in order to have a pre-developed (initial) conceptual framework for supply chain management associated with the information sharing phenomenon to guide future research. The research needs to identify a set of key factors and attempts to clarify them in order to develop a unified empirical study.

Therefore, this paper has sought to establish possible credible links between the three themes: dimensions of the three perspectives; information sharing; export performance in supply chain management. The researcher argues that combining the three perspectives will allow the development of a theoretical framework for supply chain management as the main perspective, in order to understand the dyadic exporter-producer relationship. This framework can work as an appropriate approach for analysing the totality of the relationship. This is based on the rationale that supply chain relationships include not only the relationship system but also network and transaction systems; it thus makes possible a more integrated way of looking at research supply chain management (e.g. Harland, 1996; Fontenot & Wilson, 1997; Croom *et al.*, 2000; Lazzarini, 2001; Moberg *et al.*, 2002; Leonidou *et al.*, 2006; Eiriz & Wilson, 2006; Duffy *et al.*, 2008). This contribution will offer a distinctive understanding of the dyadic exporter-producer relationships with a holistic view. This research also encourages policy makers to be more aware of the importance of business relationships in export supply chain management. This paper provides policy makers with a unique conceptual framework that captures the processes needed to reach an improved export supply chain management based on a link between the different relationship, network and transaction dimensions; information sharing; and export performance as a strategic agri-food policy.

Present theory has been extended by offering a central proposition that specific dimensions of relationships, networks and transactions are the key antecedents of information sharing, which in turn influences export performance in supply chain management. Future research should attempt to answer three research questions. First, how do the relationship, network and transaction dimensions have an impact on information sharing? Second, how is information sharing evaluated in the dyadic relationship? Third, how does information sharing have an impact on export performance? It is the aim to examine and validate a conceptual framework for export supply chain management that can offer fruitful insights and contributions for supply chain management and its buyer-seller relationships.

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