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Impact of Inter-Organizational Relational Mechanism on Firm Performance: Some Exploratory Findings in Australian Agri-Food Industry Supply Chain

1. Mohammad Nasir Uddin, PhD Student, Graduate School of Business, Curtin University of Technology, Western Australia

2. Mohammed Quaddus, Professor, Graduate School of Business, Curtin University of Technology, Western Australia

3. Nazrul Islam, Senior Economist & Adjunct Associate Professor, Department of Agriculture & Food, WA & Curtin University of Technology

ABSTRACT

Drawing on the issues of declining performance of Australian agri-food industry, this study applies the insight of organizational theories and institutional economics to explore how the structural and economic issues of organizing inter-firm relationship are influencing the performance and competitiveness of the industry. A qualitative field study was conducted on eight Australian agri-food companies to collect data. The findings demonstrate the requirement of more coordination and integration from the downstream

industries to include upstream producers as one of the integral parts of supply chain, not been as price takers but by sharing the risk and benefit equally in the chain. The study result would be of extremely important information for producers, processors, and retailers, other stakeholders and government

agencies and may enable them to do appropriate planning and benchmarking to improve performance of

the Australian food industry.

Keywords: Supply Chain Management, Relational Mechanism, Agri-food Industry

INTRODUCTION

Business transactions are conducted in an interaction and communication process between two partners,

seller and buyer, and their decision upon the continuation of the transaction process (Sto"Izle, 1999).

Therefore, a large part of Supply Chain Management (SCM) literature consists of managing competent

inter-firm or inter-organizational relationships such as alliances or partnerships in supply chain (SC) to

gain competitive advantage and firm performance. Studies argued that lack of emphasis on supply chain

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relations may decline competitiveness in marketplace (Maloni and Benton, 2000) while vertical

coordination, cooperative planning, and information sharing in SC relationship may lead the entire chain

as a source of strategic competitive advantage (Arndt, 1979; Kannan and Tan, 2003; Lee et al. 2007).

Studies also argued that a 'long-term relationships lead to reduced political, social or economic risk,

reduced transaction costs, and access to economies of scale by by-passing traditional market

arrangements' (Loader, 1997 p. 24) which is, as Arndt noted, is crucial to compete in the marketplace with

greater profit margin and performance.

Based on the above issues, the current approach combines the cumulative influence of organizational

theories and the new institutional economics, to investigate how the structural, economic and behavioral

factors of a SC relationship influence firm performance. Organizational theory such as Resource based

view (Barney, 1991; Wernerfelt, 1984) of firm provides a potential strategy framework to develop SC

relationship as an intangible asset that are difficult to imitate, that will provide a source of sustained

competitive advantage in SC. While the new institutional economics focus on Transaction cost theory

(Coase, 1937; Williamson, 1975,1985) to identify most efficient structure of transaction in a buyer-seller

relationship emphasizing the issues of minimizing inter-firm transaction cost. Thus, the main objective of

our study is to empirically explore the impact of structural, economic and behavioral issues of relationship

on firm performance, given that they can serve as strategic resource and can be crucial to create value in

the whole SC process. Despite a lot of research on relationship issues in agribusiness SC, there is a

paucity of empirical evidence showing important antecedents of relationships on firm performance in the

context of Australia. There is a lack of identification and operationalization of related concepts such as

governance structure, power, mutual understanding, and symmetry of the relationships on firm

performance. Since, SC outcome and firm performance are increasingly intertwined (Hult et al. 2006),

this study-thus can contribute to the facts-why-some-supply-chain outperform others.

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The next section provides the research context followed by background theories. The research model and

methodologies are then discussed. After that, a detail analysis of the findings is presented. Finally, the

study concludes with the implications of the result.

RESEARCH CONTEXT

Australia is an exporter of wheat, meat, wool and other agricultural products where food industry is a

major component of the Australian Economy generating export income of around \$ 24 billion (Glyde,

2006). But the contribution from the Agri-food industry to Australian GDP has been declining over the

last century as compared to the proportionate growth of other sectors in Australian economy. It has fallen

to approximately 3.3 percent of GDP with an export income of only around 20 percent (DAFF, 2005)

compared to 70 percent in the first half of 19th century. The major factors dentified as export

competitiveness and market development issues (INSTATE, 2000) such as operational inadequacies, lack

of innovativeness of the smaller and local firm, failure of achieving cost competitiveness, and dominance

of spot market, among others (Johnson and Islam, 2003; O'Keeffe, 1998; Jackson et al. 2007).

Traditionally, Australian food supply chain has been dominated by the auction systems and regulated

markets, where transactions are conducted without prior commitments placed on producers, and with little

control over the commodities by buyers. From the spot market, the producers do not gain any insight of

their customers as they are isolated from rest of the food chain. Likewise, processors are also lacking

innovative initiatives to develop a product and the business with the producers while a low trust

environment between the two is often exist and causing companies failing in business performance

(O'Keeffe, 1998), for example, Simplot-Australia's manijamp potato processing plant failed primarily

due to the inadequate relationship mechanism with the growers and thus inadequate supply of raw

materials (Islam and Johnson, 2003). Drawing on the issues, this study was developed to identify the

significant supply chain relationship and performance factors in Australian agri-food industry. So that it

would enable the integration and consolidation of all the stages of supply chain, the dynamism in

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partnerships, alliances and networks from input suppliers, to farms, processors, and retailers for a

significant business performance and contribution to the national economy.

BACKGROUND THEORIES

Transaction cost economics (TCE) is the most widely used theoretical lens for analyzing the development

and impact of governance and relationship structure in food supply chain (den Ouden et al. 1996; Hobbs,

1996, 2000; Sculze et al. 2006). According to TCE, in buyer-supplier dyads, governance structure is

related to the choice of a particular transactional and relational mechanism such as a formal contract or

bilateral investment that influence the inter-firm exchange process (Bijman 2006; Liu et al. 2009). The

process always involves with some common cost such as i) costs of searching information on potential

buyers or sellers, product prices, etc.; ii) costs of negotiating physical act of transaction such as writing

contracts, hiring lawyers, investment in machineries, intermediary auctioneers, etc.; and iii) costs of

monitoring or enforcing pre-agreed terms of transaction such as ensuring quality of goods, behavior of the

parties, etc. These costs may increase depending on the information asymmetry, bounded rationality

(decision making under partial information) and opportunistic behavior between partners in transactional

relationship. Cost can also be affected by relation specific investment, uncertainty, and frequency in the

transaction. For example, a sunk cost, arise for a broken contract can be very high if the relation specific

investment is high, although, formal contract can be a major tool to protect specific investment and

safeguard the cost of opportunism.TCE posits that governance structure and relational mechanism are

derived from economic rationality such as when transaction costs of using spot or open market system

rise, it is efficient to carry out the transaction by a strategic alliance through contracting or by vertically

integrating the firms (Williamson, 1979, Hobbs, 1996).

Based on the work of Williamson, studies-suggest that the method of making inter-firm transactional

relationship may range from spot market, specification contracts, relation-based alliances, equity-based

alliances, and vertical integration. Some authors also focused informal arrangement such as trust and