Choosing the right multiple channel system to minimize transaction costs

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ABSTRACT

This paper proposes that firms can use a transaction cost approach to make multiple channel system design related decisions. The author differentiates between two types of multiple channel systems and hypothesizes that transaction asset specificity, behavioral uncertainty and environmental uncertainty lead manufacturers to adopt either a dual channel system or a multiple independent channel system. Furthermore, the author proposes that when all three transaction cost variables match with the type of multiple channel system used, firms can minimize their transaction costs and eventually increase their channel system performance in terms of contribution to firm profitability. The author tests the hypotheses with survey data collected from 229 firms. The results support that the fit between the type of multiple channel mix and the three transaction-cost theory variables results in lower transaction costs and higher contribution to profit. The author presents theoretical and managerial implications.

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As predicted by various researchers (e.g. Frazier, 1999; Moriarty & Moran, 1990), multiple channel systems[1] have become a dominant channel design in numerous industries. Today many firms distribute their products and reach their customers simultaneously through integrated and independent channels (e.g. Dutta, Bergen, Heide, & John, 1995). In many industries, adopting such multiple forms has become a necessity rather than a choice. Firms use multiple channels to minimize their costs, reach different customer segments and remain competitive (Moriarty & Moran, 1990). Also, a well-crafted multiple channel systems could give companies a competitive advantage in the form of increased entry barriers against new entrants (Porter, 1979). Such multiple channel systems may take many forms. For instance, a vertically integrated channel and an independent channel may be used simultaneously or different types of independent channels are adopted to reach customers (John & Weitz, 1988; Moriarty & Moran, 1990).

Multiple channel systems have remained relatively under researched and been excluded from earlier empirical studies despite their growing importance and apparent popularity. Recently an increasing number of studies (e.g. Sharma & Mehrotra, 2007; Webb & Lambe, 2007; Wilson & Daniel, 2007) have been undertaken to understand different aspects of multiple channel systems. Sharma and Mehrotra (2007) demonstrate how multi-channel strategies allow firms

to reach customers in multiple ways and propose a framework that will allow firms to develop optimal multichannel strategies. Webb and Lambe (2007) discuss potential conflict internal to the supplier firm among the groups and individuals responsible for managing the various channels. Wilson and Daniel (2007) investigate the shifting combinations of channels being offered to the customer in the search for competitive advantage. Even though they provide further understanding of why firms use multiple channels, and how firms can design multi-channel strategies to reach their customers, these studies remain limited in an important way. They do not offer guidelines for when to adopt a specific type of a multiple channel system. Those studies do not distinguish between alternative multiple channel systems even though such alternatives are possible. Since it is not the number of channels but the channel mix quality that determines the success of multi-channel strategies (Coelho, Easingwood, & Coelho, 2003), obtaining the right channel mix is critical for firms pursuing multi-channel strategies (Rosenbloom, 2007). However, synchronizing multiple channels and designing optimal channel mix are still underrepresented research topics in need of further study (Bolton, 2003; Rosenbloom, 2007).

The main proposition of this paper is that firms can use a transaction cost approach to make multiple channel system design related decisions. Even though transaction cost theory has been a prevalent theoretical approach in channels literature, its application in multiple channels context has been limited. Dutta et al. (1995) studied the adoption of various channels by manufacturers with the Williamsonian version of transaction cost economies to contend that transaction cost theory could in fact be applied to understanding these dual systems. In a similar vein, Mols (2000) used a transaction cost framework to understand multiple channels of distribution and offered a set of propositions delimiting when such distribution channels are efficient. However, those studies have studied the decision to switch from single

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[1] Various terms such as multi-channel marketing, dual distribution have been used in the marketing literature to refer to these complex channel systems. I will use the term "**multiple channel system**" broadly to refer to a "multichannel arrangement characterized by the sharing of various distribution tasks performed by a combination of distinct channels, indirect and/or direct" (Webb and Didow, 1997, p. 40).

to multiple channels. They have not distinguished between different types of multiple channel systems. While firms may use different mixes of integrated and independent channels simultaneously, they can also adopt a combination of various independent-only systems or integrated-only channel systems as well. Furthermore, those transaction cost studies have not measured transaction costs in multiple channel systems nor have they directly linked the adoption of a specific multiple channel system to transaction costs. Based on transaction cost theory this paper proposes that firms can choose between two different multiple channel system alternatives to minimize the transaction costs created in the management of their distribution channels: They can adopt either *dual channels* composed of both integrated and independent channels or *multiple independent channels* composed of various multiple independent channels.

Transaction costs analysis treats market contracting, i.e. independent channels, as more efficient than vertically integrated channels *a priori* based on the benefits of competition (Williamson, 1979, 1981b). Therefore, following similar transaction cost studies (e.g. Dutta et al., 1995), this study will treat using independent channels as the "default option" and frame hypotheses as reasons to adopt a dual channel system or a multiple independent channel system. Specifically it will be hypothesized that high manufacturer's transaction asset specificity, high behavioral uncertainty and high environmental uncertainty lead manufacturers to adopt a dual channel system. However, when those variables are low, firms are more likely to adopt a multiple independent channel system. Furthermore, it will be proposed that when all of those three characteristics match with the type of multiple channel system, firms can minimize their transaction costs and eventually increase their channels' performance in terms of channels' contribution to firm profit. Finally, it will be empirically tested that a better match between the transaction cost variables and the type of multiple channel system results in better outcomes.

This paper has some important contributions. First, this study hopes to answer the call for channel design/mix oriented research by clarifying the conditions under which firms choose a specific type of multiple channel system. It suggests that transaction cost framework is still useful and applicable in making multiple channel mix design decisions. Secondly, only few studies have attempted to explicitly measure transactions costs and link them empirically to different variables of interest (Dyer, 1997; Williamson, 1985). To the author's best knowledge, this is the first study that directly links transaction costs to the use of a specific multiple channel system. It measures transaction costs and suggest that the adoption of a specific multiple channel system under specific conditions can help firms minimize their transaction costs. Finally, there are few insights into the performance implications of multiple channel systems (Srinivasan, 2006). As Heide (2003, p.27) notes, "the specific performance implications of plural systems remain unanswered. Establishing a link between a particular governance approaches and outcome variables seems an important research priority." This study links the use of a specific multiple channel system to that channel system's contribution to firm's profit. The findings present important implications for managers that aim to improve their business performance using their channels.

In the next section, transaction costs and problems that create those costs will be briefly explained. Then, a set of hypotheses that pertain to the choice of a specific multiple channel system to minimize transaction costs will be presented. Next, the details of the empirical study that tests these hypotheses will be described. Finally, the findings, managerial implications, and limitations will be discussed.

1. Transaction costs

Transaction costs are expenditures associated with an economic exchange that vary independently of competitive prices and products exchanged (Robins, 1987; Williamson, 1985). They refer to the "costs

of running the system" (Coase, 1937) and may arise in the form of direct costs of managing relationships and the possible opportunity costs of making inferior governance decisions (Williamson, 1975, 1985). Even though transaction costs can include *ex ante* costs such as search costs; after an initial agreement is established in an ongoing relationship, parties mostly face and try to manage *ex post* transaction costs in the form of bargaining, monitoring and enforcement, and maladaptation costs (Dahlstrom & Nygaard, 1999; Rindfleisch & Heide, 1997; Williamson, 1985).

Bargaining costs are expenditures associated with the negotiations between partners (Milgrom & Roberts, 1991). Parties to long-term agreements, i.e. a manufacturer and its channels, periodically negotiate to modify contractual terms and enhance contracts. *Monitoring and enforcement costs* refer to costs incurred to guarantee the fulfillment of contractual obligations to ensure that the parties act in the best interest of the entire partnership (Lal, 1990). *Maladaptation costs* are embodied in communication and coordination failures between parties to a contract (Reve, 1986). These costs accrue when the information is too voluminous or incomplete to be useful to the companies.

Transaction costs analysis (TCA) suggests that firms adopt different governance structures, ranging from hierarchy to market, to minimize their transaction costs (Williamson, 1985). The a priori assumption of the theory is that market governance (i.e. independent channels in channels context) is more efficient than vertical integration (i.e. integrated channels) owing, to the benefits of competition in the market place. However, certain dimensions of transactions raise transaction costs and combine to create market failure, making vertical integration more efficient than market governance. These dimensions are transaction asset specificity, behavioral (internal), and environmental (external) uncertainty (Williamson, 1985).

The composition of these transaction variables is supposed to be decisive for the way cost-efficient governance modes should be assigned to the transaction (Williamson 1981b). Therefore, hypotheses will be developed about how transaction specific investments, environmental, and behavioral uncertainty affect decisions to adopt a specific type of multiple channel system.

2. Hypotheses

2.1. Transaction asset specificity and multiple channel system

Transaction specific assets refer to investments in physical or human assets that are dedicated to a particular partner and whose redeployment entails considerable switching costs (Heide, 1994; Williamson, 1985). These specific assets have lower value when used in other transactions or for other purposes. A manufacturer may become locked-in with a particular channel member as a result of its investments in channel specific assets (Williamson, 1985). From the manufacturer's viewpoint, this locked-in condition created by transaction specific assets is hazardous because it increases the manufacturer's vulnerability against opportunism by its channel members. The TCA framework states that substantial asset specificity increases the costs of safeguarding interfirm agreements because of the prospects of opportunistic behavior of the trading partners (Williamson, 1985). As a channel member's likelihood to involve in an opportunistic behavior increases, the manufacturer must devise and implement controls to guarantee the fulfillment of contractual obligations and smooth operation of the entire channel system. Since the manufacturer needs to monitor its channel members to make sure that they do not behave opportunistically and fulfill their obligations, manufacturer's safeguarding entails transaction costs -mostly in the form of monitoring costs (Lal, 1990). The classic solution to this problem is to reorganize the transactions with a greater reliance on hierarchy. For instance, Anderson (1985) showed that firms facing