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The impact of purchasing strategy-structure (mis)fit on purchasing cost and innovation performance

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ABSTRACT

The organizational design literature strongly supports the notion of "structure follows strategy", and suggests that a misfit between the two has a negative effect on performance. Building on this line of argument, we examine to what extent the (mis)fit between purchasing strategy and purchasing structure impacts purchasing performance. We focus on cost and innovation purchase category strategies, and examine how the deviation from an ideal purchasing structure defined along three dimensions (centralization, formalization, and cross-functionality) impacts purchasing performance. Analysing data collected from 469 firms in ten countries, we demonstrate that a strategy-structure misfit negatively impacts purchasing performance in both cost and innovation strategies. We also find that purchasing proficiency is a mediator in this relationship between misfit and performance. Our findings aid managerial decision making by empirically validating the necessity of having the right purchasing structure for successfully executing different purchasing strategies.

1. Introduction

Although the purchasing function, like any other business function, can adopt a variety of strategies (Krause et al., 2001), two main strategic objectives stand out: cost and innovation (Blome et al., 2013; Carey et al., 2011). The importance of the purchasing function in generating cost savings and increasing efficiencies for organizations is well-documented (Ellram, 1995; Trent and Monczka, 1998; Zsidisin et al., 2003). In addition to this traditional focus on cost, the purchasing function's role in contributing to innovation has become quite prominent in the past decade, both in practice as well as in research (Baier et al., 2008; Blome et al., 2013; Schiele, 2010; Wynstra et al., 2003).

Whether or not these strategies translate into functional and business performance depends on several factors. Some studies have investigated the performance effect of alignment; i.e. the extent to which purchasing strategies are aligned with other functional strategies and business strategies (Baier et al., 2008; González-Benito, 2007; Narasimhan and Das, 2001). When there is a greater fit between purchasing strategies and business strategies, firms achieve higher performance (Baier et al., 2008; González-Benito, 2007).

Another factor that may significantly impact performance is the fit between purchasing strategy and the organizational structure within the purchasing function (Schneider and Wallenburg, 2013), but so far only a few studies investigated this link between purchasing strategy and purchasing structure. Among those, Tate and Ellram (2012) examine how a services offshore outsourcing strategy leads to adaptations in purchasing structure, and Trautmann et al. (2009) examine the different types of purchasing structures that are more likely to be implemented when pursuing a global sourcing strategy. Both studies increase our understanding about the link between purchasing strategy and structure, but further insights can be gained by investigating other types of purchasing strategies (than offshoring and global sourcing) and by specifically adopting a "fit" perspective to examine this phenomenon.

There have been several studies in the strategy literature that build on the contingency notion of "structure follows strategy" (Chandler, 1962), and examine the fit between strategy and structure, and the effect of (mis)fit on firm performance (Galunic and Eisenhardt, 1994; Miller, 1987; Porter, 1985). The common finding of those studies is that the organizational design characteristics of a firm should match the firm's strategy in order to achieve sustainable superior performance (Burns and Stalker, 1961; Govindarajan, 1986; Wasserman, 2008). Translating this line of argument to the purchasing context, one would argue that organizational design characteristics of purchasing need to be in line with the purchasing strategy to have high purchasing performance, and deviations from this ideal situation would result in lower purchasing performance. Currently, however, there is a lack of empirical evidence about this claim. In response to this gap, the

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objective of this study is to examine the impact of the (mis)fit between purchasing strategy and purchasing structure on purchasing performance. In doing so, we aim to contribute to the literature in three ways.

First of all, we investigate purchasing structure in a holistic way by considering its multiple dimensions. Research on organizational design in purchasing has been dominated by the centralization-decentralization debate (Trautmann et al., 2009). However, there are several other organizational design dimensions, in particular formalization and cross-functionality (Burns and Stalker, 1961; Damanpour, 1991; Tate and Ellram, 2012; Trautmann et al., 2009). Although there have been some studies that investigate formalization and cross-functionality in purchasing individually (e.g. Cousins et al., 2006a; Moses and Åhlström, 2008; Trent and Monczka, 1994), these dimensions of purchasing structure have seldom been examined as part of an overarching purchasing structure concept, and they have not been studied in relation to specific purchasing strategies. In this study, we therefore examine the relationship between purchasing strategy and three elements of purchasing structure: centralization, formalization, and cross-functionality.

Second, we examine purchasing strategy and purchasing structure at the level of the purchase category. Studies examining purchasing organization design mostly focus on the overall purchasing function level (e.g. David et al., 2002; Foerstl et al., 2013; Johnson et al., 2002; Rozemeijer et al., 2003). However, recent research acknowledges that purchasing structure is defined at a more specific level where firms have different purchasing structures for their various purchase categories managed with different purchasing strategies (Karjalainen, 2011; Trautmann et al., 2009). Increasingly, organizations adopt more hybrid structures, which can for instance accommodate varying degrees of centralization. In that context, it is of crucial importance to distinguish between organizational structure requirements for different types of purchase categories (Trautmann et al., 2009).

Third, we not only test whether a (mis)fit between strategy and structure results in (lower) higher purchasing performance, but we also aim to shed light on the mechanism for this effect. Specifically, we investigate the mediating role of purchasing proficiency on the relationship between strategy-structure misfit and purchasing performance. Purchasing proficiency can be defined as the quality of managing the purchasing processes due to the advancement of skills and knowledge (Feisel et al., 2011; Millson and Wilemon, 2002). In line with what has been termed the 'extended contingency model', namely the strategy-structure-process-performance link (Rodrigues et al., 2004; Zheng et al., 2010), we argue that a (mis)fit between purchasing strategy and structure (negatively) positively impacts purchasing proficiency, thereby resulting in (lower) higher purchasing performance.

The remainder of the paper is structured as follows. In the Literature Review section we first briefly discuss two key types of purchasing strategies defined in terms of strategic objectives: cost and innovation. Then, we elaborate on how purchasing structure is examined at the functional and purchase category level, and subsequently discuss how purchasing strategy relates to purchasing structure. We complete the literature review by discussing the mediating role of purchasing proficiency. In the Research Design section, we explain our data collection and sample characteristics, measurement, and various checks for biases. After that, we present our findings in the Results section. Finally, the Discussion section elaborates on the most intriguing findings, reviews the theoretical and managerial implications, and discusses research limitations and suggestions for future research.

2. Literature review

2.1. Purchasing strategies

The organizational strategy process typically consists of two steps: 'strategy formulation' which relates to the strategic intent/strategic objectives, and 'strategy implementation' which consists of the practices and actions taken to implement the objectives defined in the strategy formulation step (Ginsberg and Venkatraman, 1985).

The majority of studies on purchasing strategy focus on the implementation part where specific purchasing practices and actions are examined as elements of purchasing strategies (González-Benito, 2010). For instance, purchasing strategies are defined by Burke et al. (2007) as single versus multiple sourcing, by Trent and Monczka (2005) as local versus global sourcing approaches, and by Birou et al. (1998) as a bundle of purchasing practices such as cost reduction, value analysis, supply base reduction, supplier development, and benchmarking. Interestingly, strategic objectives have been examined to a lesser extent in defining purchasing strategies. For instance, Watts et al. (1995) argue that manufacturing and purchasing strategies need to be aligned, and define purchasing strategies based on competitive priorities, such as cost, quality, delivery, and flexibility. Similarly, González-Benito (2010) define purchasing strategy as a profile of generic competitive objectives, not as a set of practices deployed by the purchasing function. In order to understand why specific purchasing practices are implemented in the first place, one should look at one step back, and examine the purchasing objectives.

Cost management and cost reduction are traditionally argued to be the most prevalent objectives in purchasing (Carter and Narasimhan, 1996; Zsidisin et al., 2003). This is not surprising considering that the purchased goods and services, components, and systems constitute the majority of the total cost of goods sold in various industries (Dubois and Pedersen, 2002; Van Weele, 2010). In addition to this traditional role, cost management in purchasing also has a strategic role nowadays due to the growing amounts of outsourcing and global sourcing (Trautmann et al., 2009; Zsidisin et al., 2003). Therefore, a *Cost Strategy*, where the focus is on decreasing the unit prices of purchased items, reducing total cost of ownership, improving efficiency, and increasing asset utilization (David et al., 2002; Narasimhan and Das, 2001; Zsidisin et al., 2003), is considered as one key purchasing strategy.

With the increased understanding of the strategic role that purchasing functions can play in contributing to competitive advantage (Carr and Pearson, 2002; Cousins et al., 2006b), firms started to add more value-adding activities to their purchasing agenda such as supplier involvement in innovation (Carr and Pearson, 2002; Narasimhan and Das, 2001; Wynstra et al., 2003). Instead of relying on only internal research and development (R & D) capabilities, many firms approach their suppliers to get more innovative components and production/ process technologies (Schiele, 2006; Walter et al., 2003), and actively involve them in joint new product development (NPD) projects (Handfield et al., 1999; Jean et al., 2012; Schiele, 2006). As the purchasing function has first-hand knowledge about suppliers and is responsible for managing relationships with suppliers, the necessity of translating innovation strategies into purchasing strategies is obvious. In line with this, firms pursue an *Innovation Strategy* in their purchasing function when they aim to improve the introduction rates and timing of new products and services as well as achieve improvements in quality, specifications and functionality (Baier et al., 2008; Primo and Amundson, 2002).

Although we acknowledge that there can be other purchasing objectives such as flexibility, delivery, and sustainability (González-Benito, 2007; Luzzini et al., 2012; Watts et al., 1995), usually cost and innovation are considered the most important ones (Baier et al., 2008; David et al., 2002; Terpend et al., 2011), and in a similar vein, regarded as crucial purchasing performance outcomes. Recently, Carey et al. (2011) investigated the impact of social capital in buyer-supplier relationships on purchasing performance by focusing on buying firm's cost and innovation improvement. Similarly, Blome et al. (2013) also argue that cost and innovation performance in purchasing are the two most important outcomes for contractual and relational governance of suppliers.

While firms may have purchasing strategies at the overall function level, they also have purchasing strategies at a lower level of aggrega-