M@n@gement

ISSN: 1286-4692

Emmanuel Josserand, *CMOS, University of Technology, Sydney (Editor in Chief)*

Jean-Luc Arrègle, *EMLYON Business School (editor)*
Laure Cabantous, *Cass Business School (editor)*
Stewart Clegg, *University of Technology, Sydney (editor)*
Olivier Germain, *Université du Québec à Montréal (editor, book reviews)*
Karim Mignonac, *Université de Toulouse 1 (editor)*
Philippe Monin, *EMLYON Business School (editor)*
Tyrone Pitsis, *University of Newcastle (editor)*
José Pla-Barber, *Universidad de València (editor)*
Michael Tushman, *Harvard Business School (editor)*

Walid Shibbib, *Université de Genève (managing editor)*
Alexander Bell, *Université de Genève (editorial assistant)*

Martin G. Evans, *University of Toronto (editor emeritus)*
Bernard Forgues, *EMLYON Business School (editor emeritus)*

Muhammad MOHIUDDIN
Zhan SU 2013

# Offshore Outsourcing of Core and Non-Core Activities and Integrated Firm-Level Performance: An Empirical Analysis of Québec Manufacturing SMEs

*M@n@gement, 16*(4), 454-478.

M@n@gement est la revue officielle de l'AIMS

AIMS Association internationale de management stratégique

M@n@gement is the journal official of AIMS

Copies of this article can be made free of charge and without securing permission, for purposes of teaching, research, or library reserve. Consent to other kinds of copying, such as that for creating new works, or for resale, must be obtained from both the journal editor(s) and the author(s).

M@n@gement is a double-blind refereed journal where articles are published in their original language as soon as they have been accepted.
For a free subscription to M@n@gement, and more information:
http://www.management-aims.com

© 2013 M@n@gement and the author(s).

M@n@gement vol. 16 no. 4, 2013, 454-478

# Offshore Outsourcing of Core and Non-Core Activities and Integrated Firm-Level Performance: An Empirical Analysis of Québec Manufacturing SMEs

MUHAMMAD MOHIUDDIN

Faculty of Administrative Sciences
Laval University, Quebec, Canada. G1V0A7
Muhammad.mohiuddin.1@ulaval.ca

ZHAN SU

Faculty of Administrative Sciences
Laval University, Quebec, Canada
zhan.su@fsa.ulaval.ca

**Abstract**

The objective of this study is to demonstrate the relationship between outsourcing of core and non-core activities and integrated firm-level performance (IFLP) consisting of competitive, financial, strategic, and stakeholders' performance. Empirical data was collected from manufacturing small and medium size enterprises (SMEs) in Quebec that outsource, using a web-based questionnaire. A linear regression analysis was performed to establish the relationship between outsourcing and IFLP. The findings show that outsourcing of non-core activities and insourcing (internalization) of core activities have a positive impact on a firm's integrated performance. The findings also demonstrate that offshore outsourcing enhances the economic, social, and strategic performances of manufacturing SMEs, which enables them to thrive in the current volatile business environment. However, managers need to identify carefully functions that could be outsourced in order to determine trade-offs between outsourcing and internalization. The broadness of the IFLP concept and the intrinsic complexity of offshore outsourcing tasks call for further study with larger samples.

**Key words:** Offshore outsourcing, Firm-level, Integrated performance, Internalization, SMEs.

## INTRODUCTION

Offshore outsourcing in this study refers to the delegation of any task or subtask to a foreign-based external organization or the competitive procuration of components, including embedded services, from a specialized middle market. The terms offshore outsourcing and outsourcing are employed interchangeably in this article. Outsourcing is a poorly understood business strategy that is highly publicized and debated among researchers, practitioners, and the public. Researchers have studied it from diverse points of view, using different theories (Mohiuddin, 2011), and applying different research methodologies.

Canada is the second largest per-capita exporter among the top manufacturing countries in the OECD (Organization for Economic Co-operation and Development) (Mohiuddin & Su, 2013). Many Canadian small and medium enterprises (SMEs) that adopt offshore outsourcing themselves supply specialized products and services to large multinational companies (MNCs) from the United States and elsewhere. The offshore outsourcing done by Canadian manufacturing SMEs is very different from the outsourcing utilized by other OECD countries. Canadian export-oriented manufacturing firms are largely dependent on the US market for their complete or modular products and services. Through outsourcing, export-oriented manufacturing SMEs in Québec and the rest of Canada are able to delegate activities in which they do not have a competitive advantage, and thus create for themselves a level playing field in the US market.

The debate on the implications of offshore outsourcing is pronounced. There are many intuitively appealing arguments for and against outsourcing as a means of achieving sustainable competitive advantages (SCAs). The arguments for the beneficial effects of outsourcing are many. Gorzig and Stephan (2002) find that outsourcing materials are positively correlated with profits. Bertrand (2011) finds a positive correlation between outsourcing and overall exports. In general, outsourcing enables firms to become more flexible in adjusting production to fluctuations in market demand and unforeseen changes (Contractor, Kumar, Kundu, & Pedersen, 2011). Outsourcing improves an organization's responsiveness and "leads to the availability of higher quality goods and services by creating competition among suppliers" (Rasheed & Gilley, 2005: 523). Thus, outsourcing can expand a firm's capacities (Callahan, Smith, & Spencer, 2013), even when the company in question does not possess all necessary resources and competencies. Outsourcing allows a firm to improve the quality of its products and services, thereby opening new opportunities to development in the long term (Ellram, Tate, & Billington, 2008). However, there are also negative outcomes associated with the practices of outsourcing; namely, it can cause a firm to lose its organizational competencies, become dependent on supplier firms, and suffer from opportunistic behavior.

Until now, studies dealing with the effects of outsourcing have been wanting or inconclusive. Jabbour (2010), Tomiura (2007), and Daveri and Lasinio (2007) find conflicting results in their study of the impact of offshore outsourcing on firms' productivity. In addition, another shortcoming of the extant literature is that its focus is imbalanced, devoting much attention to the study of large firms and insufficient attention to small firms. For instance, previous studies (Bertrand, 2011; Chen, 2009; Jiang & Qureshi, 2006; Kotabe, Mol, Murray, & Parente, 2012) have largely focused on the outsourcing practices of large firms, with the exception of a few studies (Di Gregorio, Musteen, & Thomas, 2009; Mohiuddin & Z. Su, 2013; Rashid & Al-Azad, 2013; Scully & Fawcett, 1994) focused on outsourcing practices of SMEs. This is an important issue because the outsourcing of large firms and SMEs may differ, according to company size and other characteristics. In summary, firms outsource for a variety of reasons, including but not limited to: access to competitive production factors, economies of scale, higher innovation capabilities, higher quality products, lower operating costs, greater focus on critical processes, and increased flexibility for coping with the current volatile business environment. The perceived benefits of outsourcing encompass competitive, financial, strategic, and stakeholder issues. Therefore, an in-depth study must incorporate all these performance components in order to shed light on whether manufacturing SMEs can obtain these benefits from outsourcing.

Most outsourcing performance studies (Gilley, Greer, & Rasheed, 2004; Gilley & Rasheed, 2000; Giustiniano & Clarioni, 2013; Jiang, Belohlav, & Young, 2007) have considered mainly outcome-based financial indicators because of the availability of financial performance data. However, financial indicators are considered historical and backward looking. They excessively reward short-term results that may cause management frustration and resistance (Verbeeten & Boons, 2009). As a result, they are generally incongruent with the strategic goals of an organization (Atkinson, Waterhouse, & Wells, 1997). Although profitability is important, short-term financial performance does not sufficiently indicate the sustainability of a venture. To be sustainable, a firm needs to look beyond profitability and incorporate competitive, strategic, and stakeholder concerns. The present study adopted the sustainability principles of the WCED (World Commission on Environment and Development) Report (1987: 24), which defines sustainability as "meeting the needs of the present generation without compromising the ability of future generations to meet their needs" and appears to consider sustainability beyond its classic ecological definitions. Studies on the effects of offshore outsourcing on firms need to incorporate competitive, financial, strategic, and stakeholder performance issues because such integrated performance can better reflect the firms' sustainability.

This study sheds light on the effects of outsourcing in terms of integrated firm-level performance (IFLP) in the context of manufacturing SMEs in Québec. IFLP is a broader concept than firm-level performance and incorporates competitive, financial, strategic, and non-equity stakeholder performance. In this regard, the outsourcing practices of non-core competencies and internalization of core competencies and their relation to the IFLP of manufacturing SMEs need to be studied rigorously. It is with this aim that this study examines whether outsourcing can influence IFLP. The concepts of core competencies and firm-level performance are distinctly defined and are evaluated differently by

researchers and practitioners. When focusing on their core competencies, firms decide which goods to produce in-house (internalization) and those whose production will be delegated to suppliers.

The remainder of this paper is organized as follows: Section 2 discusses the literature on the relationships between core and non-core activity outsourcing and IFLP; Section 3 describes the research methodologies used; Section 4 presents the findings and their analysis; finally, Section 5 presents the conclusions and limitations of this study.

## ANALYTICAL FRAMEWORK AND HYPOTHESIS: OFFSHORE OUTSOURCING AND INTEGRATED FIRM-LEVEL PERFORMANCE (IFLP)

Many scholars and practitioners view outsourcing as an efficient way to address organizational competitiveness (Giustiniano & Clarioni, 2013; Mohiuddin & Su, 2013; Mohiuddin, Z. Su, & A. Su, 2010; Mukherjee, Gaur, & Datta, 2013; Wu, Li, Chu, & Sculli, 2005). Outsourcing involves the process of vertical disintegration across the globe in favor of competitive production factors and market opportunities, which correspond to the new international division of labor (A. Su, Regnière, & Z. Su, 2013). An increasing number of studies discuss the different operational, managerial, governance, and strategic issues of outsourcing as well as its firm-level implications. However, despite the increasing use of outsourcing as a business strategy, the effects it has on IFLP, the increasing complexities of outsourcing governance, and how and what activities to choose for outsourcing remain hotly debated. This would suggest that there is still an incomplete understanding of outsourcing as a concept. The following subsection discusses outsourcing of core and non-core activities to highlight which of these can be outsourced or internalized to improve a firm's overall competitiveness.

### THEORETICAL INSIGHTS ON GOVERNANCE STRUCTURE AND NON-CORE ACTIVITIES IN OFFSHORE OUTSOURCING

Outsourcing issues are being investigated in several academic research fields (Marchegiani, Pirolo, Peruffo, & Giustiniano, 2010). Owing to the variety of perspectives represented in outsourcing research, studies often produce contradictory results (Mol, van Tulder, & Beije, 2005). This implies that scholars and practitioners need to address more unresolved questions related to outsourcing, one of which is the effect of outsourcing on IFLP.

Core competencies are the highest level of organizational knowledge and skills shared across business units, which contribute the most to added values and result from the integration and harmonization of the strategic business unit competencies. A core competency is defined as a collection of competencies that are widespread in the firm (Javidan, 1998). Outsourcing enhances firm performance because it helps the firm operate more efficiently by reducing costs and augmenting managerial focus on core competencies (Gulbrandsen, Sandvik, & Haughland, 2009; Javalgi, Dixit, & Scherer, 2009; McNally & Griffin,

2004). Sharpe (1997) asserts that through outsourcing of non-core activities, firms can concentrate on core competencies and improve their productivity, competitiveness, and sustainability in the marketplace. Corporate survival in the long term is dependent on a firm's ability to exploit core competencies (Torkkeli & Tuominen, 2002).

In the field of research pertaining to the motivations and outcomes of outsourcing, the two most prominent theories on how to decide what to outsource and what to internalize are transaction cost economics (TCE) and the resource-based view (RBV) (Espino-Rodŕıguez & Padrón-Robaina, 2006; Mayer & Salomon, 2006; Reitzig & Wagner, 2010).

## Transaction Cost Economics (TCE) and Offshore Outsourcing

Drawing on the Coase theorem (1937), the transaction cost economics (TCE) theory uses frequency, asset specificity, and uncertainty to explain the boundaries of firms and to identify when a "task" is transacted in a hierarchy instead of "in a market". Assumptions about "transactions" in TCE are relaxed to some extent from the neoclassical perspective of economics, in order to reconcile economic theory with organizational reality where there are hierarchies as well as markets. For example, in the neoclassical economic paradigm, information is considered perfect, whereas in the TCE perspective information is considered asymmetric and a source of uncertainty. The TCE perspective recognizes that parties involved in a transaction may not disclose all relevant information, which leads to opportunistic behavior.

In neoclassical economics, the identities of the buyer and seller do not matter, whereas in TCE, they do, which leads to asset specificity (Nagpal, 2004). In economic science, agents are considered as rational. However, in reality, economic actors are intendedly rational, but only limitedly so in reality; this is called bounded rationality (Williamson, 1985). TCE assesses the choices between internal production (hierarchy) and outsourcing of the same activities by comparing the internal costs and the costs of "using" the market (Jones & Hill, 1988). The available outsourcing literature sheds some light on the possible ambiguities related to the assessment of the actual dynamics of transaction costs (Chen, 2009). For example, economic, political, and institutional differences including cultural and linguistic factors, may have a great impact on transaction costs. Understanding this might limit the repetition of generalizations made in prior studies across national governance systems (Marchegiani, Giustiniano, Peruffo, & Pirolo, 2012; Sultana, Rashid, Mohiuddin, & Mazumder, 2013).

Moreover, from a TCE perspective, it seems that outsourcing becomes crucial when markets are not able to allocate resources efficiently and reduce uncertainty (Giustiniano & Clarioni, 2013). Therefore, outsourcing could represent a means of reducing selection, negotiation, reorganization, and control costs (Coase, 1937), particularly when the resource dependence of firms is high (Hillman, Withers, & Collins, 2009). In general, TCE uses frequency, uncertainty, and asset specificity to propose an optimal set of governance structures; the cost of transactions varies systematically with the attributes of transactions (Williamson, 1985). TCE addresses deciding between internal production and outsourcing, as shown in Table 1.

**Table 1**. Governance structure under TCE

| Uncertainty | Frequency | Asset specificity | | |
|---|---|---|---|---|
| | | Non-specific | Mid-level specific | Idiosyncratic |
| Low | Low | Outsource with classical contract | Outsource with neoclassical contract | |
| High | High | | Relational contract | Insource (Internalization) |

*(Developed by authors with adaptation from Nagpal, 2004).*

## Transaction Cost Economics (TCE), Outsourcing, and Performance

Rise in frequency of transaction increases the cost of maintaining the transaction relationship between two organizations. Transaction cost economics (TCE) asserts that the higher the frequency of transaction, the greater the chances of internalization of activities by the organization. However, utilizing information and communication technology can reduce the transaction cost between the collaborating organizations in the standardized low-to-medium technology industries. In addition, there is a trade-off between the fixed setup cost of production and the variable cost of transactions. Generally, the fixed cost of production is higher than the variable cost of market transactions. This means that companies can change their cost structure from a fixed setup to variable cost through outsourcing. The fixed setup cost structure is more rigid and investment-dependent and is less able to cope with the volatile market environment. Thus, firm performance can be enhanced by outsourcing rather than by incurring significant fixed setup costs. To avoid such inertia, a firm can also outsource high-frequency tasks to improve its overall performance and to ensure that high-frequency transactions minimize marginal cost. This type of TCE is different from classical TCE, which asserts that high-frequency tasks should be internalized.

Asset specificity is the most important attribute of TCE. Asset specificity means the degree of customization associated with the transaction (McIvor, 2009). There are at least three types of asset specificities: (i) physical asset specificity, (ii) human asset specificity, and (iii) locational asset specificity. Asset specificity can be standardized, i.e., it can be non-specific. When this is the case, outsourcing can enhance the performance of firms, especially in low-to-mid-technology manufacturing industries. TCE suggests that firms should internalize tasks related to idiosyncratic (specific) assets to protect themselves from the opportunistic behaviors of partner firms in market transactions. Internalization allows firms to effect more innovations and protect more valuable assets, including intellectual property rights. Firms can then exploit these advantages in order to survive over the long term and to create higher value-added job opportunities for their communities. Hybrid assets, which fall between standardized and idiosyncratic assets, can be outsourced under a joint governance system, such as captive outsourcing, to enhance organizational performance. Among the tasks of the three types of asset specificity, those for human idiosyncratic assets can also be outsourced because of the ease of their transferability and their ability to improve firm performance.

The third attribute of TCE is uncertainty, which can be either external uncertainty determined by the marketplace or internal uncertainty in relation

to the organization's decisions of what to outsource and what to internalize. The external uncertainties are market volatility, unpredictability, and any other aspects that can disrupt the market and its predictability. In the event of high external uncertainty, TCE posits an internalization of tasks so that strategies can be adapted according to changes in market movements. In the case of high asset-specific tasks, internal uncertainties stem from firms' bounded rationality and their lack of awareness of outsourced tasks. However, in the case of low-to-medium asset-specific tasks, the level of external uncertainty is generally acceptable and the level of internal uncertainty is low, making the outsourcing of such tasks usually beneficial to the performance of the firm. The outsourcing of tasks can also mitigate the impact of some external uncertainties, such as natural disasters and disruption of supply chains, because of its reliance on multiple channels and multiple locations. On the whole, outsourcing can contribute to the downsizing of firms and make them more flexible and competitive in a volatile marketplace. Divesting from less-performing activities saves resources, which can be redirected to more value-added activities. In turn, these higher value-added activities make these focal firms more productive and more distinctive than their competitors, enabling them to adopt strategic positions in the marketplace, create better-value jobs, and bring more wealth into their communities.

Based on the conclusions of the preceding discussion, our first hypothesis is as follows:

**H1: Offshore outsourcing of non-core activities enables Québec manufacturing SMEs to be more productive, profitable, competitive, and strategic and to create opportunities for non-equity stakeholders.**

## OFFSHORE OUTSOURCING OF CORE ACTIVITIES AND INTEGRATED FIRM-LEVEL PERFORMANCE (IFLP)

Core competencies are an organization's strengths and abilities developed over a long period of time. They provide value to customers and are difficult for competitors to replicate. Core competencies can be considered the raison d'être of the firm. Rather than outsourcing core activities, a company should outsource non-core functions to supplier firms. By doing so, skilled employees are able to focus on core operations; that is, on activities that add higher values to the product or service of the firm and improve overall productivity of the firm.

### Resource-Based View (RBV) and Outsourcing

The RBV of the firm has been employed over the last decade to explain outsourcing strategy. The RBV assists in analyzing organizational capabilities, and therefore can help link outsourcing with an organization's performance and competitive priorities (McIvor, 2009). The RBV assumes that firms maximize long-term profits by developing and exploiting resources for competitive advantage (Javalgi et al., 2009). It also enables firms to expand beyond their own limits in order to have greater access to organizational resources and capabilities they do not possess. Grant (1996) and Mohiuddin and Z. Su (2010) point out that an organization's competency depends on its capability to

continuously combine, recombine, and reconfigure resources and processes to meet desired objectives.

The RBV provides some insightful views and overcomes some of the limitations found in the TCE tenants, such as the problems of bounded rationality. The outsourcing decision depends on the capabilities of the firm in relation to that of their suppliers. Espino-Rodŕiguez and Padrón-Robaina (2004) divide this perspective into two subcategories: (1) the focus on the propensity to outsource and (2) the relationship between the decision to outsource and organizational performance. The RBV predicts that firms with a rich competency base that can be deployed to undertake an activity may internalize it. On the other hand, firms less prepared internally for that activity may outsource it. Thus, when a company is highly capable of tackling an activity there is a reduced likelihood that it will outsource that activity (Barney, 1999; Leiblein, Reuer, & Dalsace, 2002). Outsourcing tasks for which there are insufficient internal capabilities, focusing on tasks for which there are core capabilities, and outsourcing non-core tasks enhance organizational performance. Focusing on tasks for which there are core capabilities enables firms to specialize and create more value-added job opportunities for their community. However, selectively outsourcing to enter a new emerging market, such as China, can also open new opportunities. Firms that outsource gain access to complementary resources, interactions, and exchanges with other firms, which can improve knowledge transfer and organizational agility for all firms involved. Thus, the RBV posits that firms that outsource tasks can improve their competitive, financial, strategic, and stakeholder performances.

Within the resource-based literature, the concept of organizational competencies has evolved from focusing on the skills and capabilities of a firm towards emphasizing its distinctive competencies—areas in which the organization excels and performs better than its competitors (Reed & DeFillippi, 1990). However, the concept of core competencies is problematic (Quinn & Hilmer, 1994), mainly because it is difficult to determine a company's short-term and long-term core competencies, and almost impossible to predict what these will be in the future. Prahalad and Hamel (1990) identified three characteristics: a core competency (i) must contribute significantly to customer benefit from a product; (ii) should be competitively unique, and as such, should be difficult for competitors to imitate; and (iii) should provide potential access to a wide variety of markets. However, core competencies are dynamic and need to evaluate continuously that become challenging for managers.

The construction of a core competency is difficult because developing skills and capabilities is time-consuming and costly. Moreover, a company's priorities change over time due to dynamic environments and the capabilities other firms develop (Lei, Hitt, & Bettis, 1996). This means that a company's current decisions will be critical for its uncertain future. On the other hand, Goddard (1997) emphasizes the "uniqueness" of a core competency. According to him, a firm can have only one core competency at a time, and this core competency is scattered across the firm's SBUs. According to the comparative advantage theory, this core competency should be based on the firm's specific capability or competency and not simply on any of its resources (Javidan, 1998; Mooney, 2007).

According to Quinn (1999), keeping core competencies under internal control and outsourcing non-core activities simultaneously enables companies to

focus and flatten their organizations because they concentrate their limited resources on a few knowledge-based core competencies to develop "best in class" capabilities. This leverages their internal innovation capabilities through effective personal, IT, and motivational links to outside knowledge sources. The outsourcing of non-core activities also eliminates the rigid fixed overhead, bureaucracy, and physical plant-related costs by conscientiously tapping into the more nimble resources of their customer value chain downstream, and technology and supply value chain upstream (Al-Azad, Mohiuddin, & Rashid, 2010). In addition, companies can expand their own knowledge and physical investment capabilities by exploiting the facilities and program investments of outside sources.

### Resource-Based View (RBV), Outsourcing, and Performance

Researchers and policy makers have long argued about what should be outsourced and what should remain in-house. Common wisdom indicates that any function or sub-function that is strategic—and therefore, an essential part of the core competency of an organization—should not be outsourced. Logically, anything that is not a core competency can be outsourced; by doing so, firms can redirect resources to the core competency and improve their sustainability. By outsourcing non-core activities and concentrating on core activities, firms may increase their performance by becoming more flexible and innovative. By developing a web of specialized firms for each non-core activity in a virtual production network, a firm creates a virtuous circle of best performers that make it the most competitive in the marketplace. Divesting from non-core activities and investing resources into core activities also improves the specialization of the firm and offers opportunities for stockholders and stakeholders in the high value-added segments of the firm. For example, firms can procure non-core intermediate goods and services at lower costs from specialized firms in low-cost advanced emerging countries like China and India.

Several authors have identified relationships between outsourcing of core-competencies and firm performance. Among them, Elmuti (2003) analyzes the relationship between outsourcing strategy and organizational performance. He demonstrates that outsourcing benefits a firm's performance by improving its expertise and service quality, minimizing the number of employees it needs, optimizing its processes, and reducing costs and administrative burden. Gilley and Rasheed (2000) find evidence that a core competency enables a firm to differentiate between peripheral outsourcing and core outsourcing. Dekkers (2011) states that firms should consider their core competency when deciding to outsource. He classifies firms' activities according to the location of their performance, that is, as outsourcing to a supplier firm, as internalization, or as near-core activities under a strategic partnership. Commonly, these authors highlight the importance of focusing on core competencies and internalizing them for better performance.

The kind of activities a firm should outsource is still widely debated. Most scholars concur that a firm should not outsource its core activities (Arnold, 2000; Quinn & Hilmer, 1994), because doing so may reduce interfaces for innovation, disclose critical technologies and processes to competitors, increase potential opportunistic behaviors from partners, and create moral hazards, all of which offset the potential benefits to be gained from outsourcing. Hence, managers prefer to maintain their companies' core activities and outsource "disposable

and core-distinct activities" (Arnold, 2000, p. 134) to external providers. Modular production systems and ever-increasing technological developments allow firms to break up their activities into tasks that are carried out in a variety of locations around the globe. This is what Mudambi (2007) calls "fine slicing" (McDermott, Mudambi, & Parente, 2013). Firms have fewer opportunities to collaborate, interact, and exchange among their different modules of activities and miss out on the opportunity to introduce and improve new inter-departmental processes and innovation (Bettis, Bradley, & Hamel, 1992). Outsourcing in manufacturing fragments and disintegrates the supply chain, which makes it easier for new competitors to enter the industry and undermines pricing power and profitability. The fragmentation and slicing of core activities in manufacturing can lessen a firm's inimitability, providing its supplier firms access to proprietary product processes and creating potential imitators and competitors. The presence of the latter can intensify the competition, shorten product cycles, and squeeze return on investment (ROI). In sum, one of the negative outcomes of outsourcing rather than internalizing core activities is that it diminishes a firm's potential for innovation, competitiveness, and consequently, long-term performance. Based on the preceding discussion, the following hypotheses are proposed:

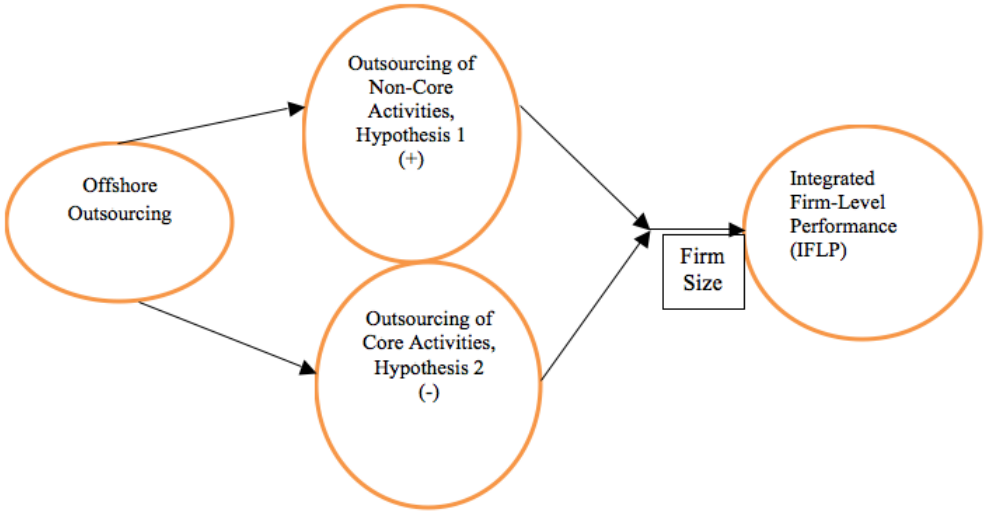
**H2a: Outsourcing core tasks "hollows out" a firm, reducing its innovative capability and profitability.**
**H2b: Internalizing core tasks enables a firm to specialize, improving its innovative capability, competitiveness, strategy, and profitability.**

Combining TCE and the RBV, Mayer and Salomon (2006) find that contractual hazards provide firms with an incentive to internalize, regardless of a firm's capabilities. However, firms with weak technological capabilities are more likely to outsource. The TCE and RBV perspectives appear to complement each other as ways to approach outsourcing analysis (Leiblein & Miller, 2003; Mohiuddin & Z. Su, 2013), especially in their focus on the positive aspects of in-house strategic activities (Espino-Rodríguez & Padrón-Robaina, 2006) and resources (Prahalad & Hamel, 1990). Resource-based models recognize the idiosyncratic capabilities of every organization. They suggest that organizations can gain SCAs by deploying firm-specific resources and capabilities efficiently and strategically. These resources and capabilities should be rare, valuable, and non-substitutable (Barney, 1991; Kotabe, & Murray, 2004).

## CONTROL VARIABLE

The production characteristics of SMEs are more traditional than those of large firms. SMEs can produce more customized products, focus on niche regional markets, and interact more easily with their clients. The proximity of SMEs to the market makes it possible for them to offer a fast, direct, and close response to customer demand (Pelham, 2000). Previous research on outsourcing has focused primarily on large firms. Blackburn, Hart, and Wainwright (2013), for instance, argue that the size and age of enterprises are the dominant factors in their performance and are more important than strategy. As such, it follows that the antecedents, processes, and outcomes of outsourcing for large firms differ from those of outsourcing SMEs, particularly in the manufacturing sector.

**Figure 1.** Conceptual Framework




Previous research on SME outcomes is also inconclusive. Scully and Fawcett (1994) find that international sourcing provides few benefits to SMEs and does not necessarily help them compete with low-cost manufacturers. On the other hand, Sinha, Akoorie, Ding, and Wu (2011) find that manufacturing SMEs that pursue offshore outsourcing gain flexibility, lower their production costs, and customize delivery, and as a result improve their overall competitiveness. Hayes, Hunton, and Reck (2000) find that outsourcing provides more positive and more significant market value gains for smaller firms than for larger firms, and for service firms than for non-service firms. Gilley and Rasheed (2000), and Park, Vertinsky, and Lee (2012) suggest that the size of a firm influences its performance. SMEs outsource differently from large firms. Size can moderate the effects of outsourcing for Québec manufacturing firms. This idea is the basis of this study's conceptual framework relating outsourcing and performance, shown in Figure 1.

## RESEARCH METHODOLOGY

The objective of this study is to investigate the relationship between outsourcing of core and non-core activities and IFLP. A web-based survey was conducted using a quantitative approach based on the study of Gilley and Rasheed (2000). The survey data culled from the responses of Québec manufacturing firms were then analyzed with the help of the SPSS software package. Most of the activities of the manufacturing firms were grouped under 14 categories (Table 2).

**Table 2.** Activities of Québec manufacturing firms

| | |
|---|---|
| Accounting | Product repair |
| Advertising | Purchasing |
| Assembly | R&D |
| Customer service | Publicity |
| Information systems | Logistics |
| Machining/manufacturing | Training |
| Payroll | Warehousing |

### PERFORMANCE VARIABLES AND MEASURES

In this study, the level of outsourcing was defined by two criteria—intensity and breadth—based on the method used by Gilley and Rasheed (2000). Outsourcing intensity was measured as the percentage of any category of activities that have been outsourced. Outsourcing breadth was measured as the number of activities outsourced (e.g., accounting, human resources, manufacturing), divided by the maximum number of activities that could be outsourced by the firm. The indicators of outsourcing were calculated by multiplying the mean of the intensity by the breadth of outsourcing for each firm. A task was considered outsourced if it could be performed internally (under the firm's current financial and managerial capacity) and if 25% or more of the task is outsourced. Each category of task or activity was rated on a Likert scale from 1 to 5 (1 = completely outside the capacity of the firm; 5 = completely within the capacity of the firm). The Likert scale values 3, 4, and 5 indicate tasks that are within the financial and managerial capacities of the firm.

Two indicators were used to measure each core competency. First, the subjective opinions of executives on the importance of each activity were taken. Then, each category of activities was classified on the Likert scale of 1 (not at all important) to 5 (extremely important). Each task was classified according to its importance in the industry for superior performance in terms of sales growth and profitability (Gilley & Rasheed, 2000). The averages of these two indicators were utilized in deciding the strategic importance of each category of activities. Activities classified on the Likert scale as 3, 4 and 5 were considered as core competencies and activities classified as 1 and 2 were considered as peripheral or non-core activities.

Many authors have proposed a variety of performance measure alternatives, from enhanced economic profit measures to balanced scorecards integrating financial and non-financial measures (Kaplan & Norton, 2001; Maksoud, 2004).

Leading authors such as Kotabe, Murray, and Javalgi (1998) and Carney (1997) have focused on outsourcing performance measures. Kotabe et al. (1998) identifies three types of performance measures as necessary components in any outsourcing performance measurement system: strategic, financial, and quality measures. Carney (1997) uses additional dimensions of market performance such as cost savings, cycle time, customer satisfaction, and productivity to measure the effectiveness of outsourcing strategy. However, no study has addressed the effects of offshore outsourcing on IFLP, which consists of competitive, financial, strategic, and stakeholder performances. The objective of the present study is to shed light on this gap in available research. IFLP deserves more attention in the post-financial crisis era when firms are looking for alternative competitive strategies such as outsourcing to survive in the marketplace. Outsourcing emphasizes the efficient use of scarce resources, both by investing in strategic activities of the firm in order to gain SCAs, and by divesting from less important arms of the firm so that the firm can avail itself instead of competitive services offered by other firms in the marketplace. Offshore outsourcing allows a firm to create a network of the best performers in non-core activities in the marketplace.

To determine the IFLP of the firms, four types of performance—competitive, financial, strategic (innovation), and non-equity stakeholder—were taken into consideration. Our dependent variable is IFLP. In the web-based survey, executives were asked whether they had improved their organization's performance based on these four types of performance measures. The improvement of all four types of performance was collectively considered as IFLP. Our independent variables are categorized into competitive, financial, strategic, and non-equity stakeholder performances. The measures of each independent variable category are presented in Table 3.

**Table 3.** Measures of Independent Variables

| Type of indicators | Elements and measures of indicators |
|---|---|
| Competitive | • Productivity (Görg, Hanley, & Strobl, 2008; Kitcher, McCarthy, Turner, & Ridgway, 2013). (% Change of gross output).<br>• Market share (Kotler, 2006; Wang, Lo, & Yang, 2004). (% change). |
| Financial | • Return on investment (ROI) (Chakravarthy, 1986; Greer et al., 1999). (% change)<br>• Sales (revenue) performance (Chakravarthy, 1986; Gilley & Rasheed, 2000). (% change). |
| Strategic (innovation) | • Investment in R&D (Gilley & Rasheed, 2000). (% change)<br>• Volume of product and process innovations (Chakravarthy, 1986; Gilley & Rasheed, 2000; Narasimhan & Das, 1999). (number of innovations). |
| Non-equity stakeholder | • Employment creation in core activities (Mohiuddin et al., 2010). (number of jobs created).<br>• Relationship with clients (Gilley & Rasheed, 2000; Gilley, Greer, & Rasheed, 2004). (perception on 5-point Likert scale). |

These four types of indicators can be categorized into two groups, internal and external performance, as shown in Table 4.

**Table 4.** Categorization of Performance Indicators

| Type of indicators | Internal performance | External performance |
|---|---|---|
| Competitive | Productivity | Market share |
| Financial | Return on investment (ROI) | Sales (revenue)performance |
| Strategic (innovation) | Investment in R&D | Volume of product and process innovations |
| Non-equity stakeholder | Job creation in core activities | Client satisfaction |

## DATA COLLECTION

A web-based questionnaire was used to collect the data for this research. The questionnaire was sent to executives of Québec manufacturing firms that use outsourcing. The executives were asked to first classify their firm's internal capacity for performing any task and then to classify the percentage of outsourcing adopted for any given task or activity. When the activity was performed entirely internally, outsourcing was 0%, and when the activity was entirely outsourced, outsourcing was 100%. The questionnaire had four parts: (1) general information on the firm, (2) evaluation of outsourcing, (3) performance evaluation, and (4) executives' comments. The web-based survey method was chosen because it is cost-effective and time-efficient. One of its drawbacks, however, is that it has varying response rates according to the target population of the study. Berry's (2005) survey obtained a response rate of 21% from a sample of university students, and Cobanoglu, Warde, and Moreo's (2001) survey obtained a response rate of 44% from a sample of university professors. In contrast, the response rates from samples of manufacturing firms have ranged from 10 to 17%. Griffis, Goldsby, and Cooper (2003) obtained a 14.3% response rate, and Gilley and Rasheed (2000) obtained a 16.8% response rate. In the present study, the web-based questionnaire was sent to 598 firm executives, of which 102 responded, representing a 17.1% response rate.

To conduct this study, a database was created with a list of SMEs in the manufacturing sector of the Québec province in Canada. According to the data bank of Québec manufacturers and wholesale distributors managed by the Banque d'information industrielle of the Centre de recherche industrielle du Québec (CRIQ, 2009) in 2009 there were 883 manufacturing firms in this province. Of these, 724 (82%) were considered SMEs (between 5 and 250 employees). Firms with five or fewer employees were excluded, as their use of outsourcing was negligible. In addition, 176 firms did not have an e-mail address and 62 were subsidiaries of other firms, and were thus excluded from participation in the survey. A total of 598 (68%) firms were taken into consideration for this study.

The firms in this study belong to the 21 broad sectors of the North American Industry Classification System (NAICS). Specifically, they belong to five major manufacturing industries: (1) production of metal products; (2) manufacturing of wood products; (3) manufacturing of furniture and related products; (4) food processing; and (5) machinery manufacturing. A breakdown of the annual revenues of the Québec SMEs in this study is shown in Table 5.

**Table 5.** Breakdown of Annual Revenue of Firms under Study

| Annual revenue (CAD) | Percent of total firms |
|---|---|
| $0.1 million to $0.5 million | 12% |
| $0.5 million to $1 million | 13% |
| $1 million to $3 million | 25% |
| $3 million to $5 million | 10% |
| $5 million to $10 million | 13% |
| $10 million to $25 million | 13% |

*Note: The revenue for 14% of the firms is unknown.*

## RESULTS AND DISCUSSION

Some 71% of the firms had 5 to 49 employees, and the remaining firms (29%) had 50 to 250 employees. The average number of employees was 52 ($\sigma$ = 94.5), and the median number of employees was 22. Further, 29% of the firms were in the metal industry, 16% in the wood product industry, 16% in the machinery industry, 12% in the chemical and plastic industry and 27% in other industries. Concerning the position of the respondents, 26% were president, 23% were director general, and 23% were CEO. In summary, 71% of the respondents were senior managers of the sample firms.

### SURVEY RESULTS

The analysis of the data from the web-based questionnaire survey revealed that machinery and electronic manufacturing firms had the best performance (3.70 and 3.60, respectively) after beginning to outsource part of their activities. Chemical and wood industry firms had the lowest overall performance (3.00 and 3.01, respectively). The external performance of firms was similar across all sectors. The score of 'three' indicates the average performance of Québec firms. Table 6 provides an overview of the performance of Québec manufacturing firms.

**Table 6.** External Performance of Firms by Industry

| Industry | Average | Std. Dev. | N |
|---|---|---|---|
| Machinery | 3.70 | 0.72 | 16 |
| Electronics | 3.60 | 1.25 | 3 |
| Metal products | 3.39 | 0.62 | 30 |
| Food processing | 3.20 | 0.95 | 4 |
| Paper and pulp | 3.20 | 0.87 | 3 |
| Others | 3.17 | 0.63 | 6 |
| Furniture | 3.16 | 0.84 | 9 |
| Clothing | 3.10 | 0.71 | 2 |
| Wood products | 3.02 | 0.88 | 17 |
| Chemical and plastics products | 3.00 | 0.99 | 12 |

Table 7 shows the firms' performance as perceived by the executives. Note that the average performance of the Québec manufacturing firms is three.

**Table 7.** External Performance of Firms according to Executives' Position

| Position in firm | Average | Deviation | N |
|---|---|---|---|
| Director | 3.60 | 0.41 | 7 |
| Vice-president and director general | 3.60 | N/A | 1 |
| Director general | 3.57 | 0.75 | 23 |
| Secretary | 3.55 | 0.77 | 4 |
| CEO | 3.42 | 1.03 | 23 |
| President | 3.22 | 0.64 | 27 |
| Administrator | 3.20 | 0.42 | 2 |
| Vice president | 3.16 | 0.91 | 5 |
| Others | 2.88 | 0.73 | 5 |
| Owner | 2.68 | 0.70 | 5 |

Finally, it is interesting to note that the external performance of outsourcing firms is correlated positively and significantly with the annual revenue (R = 0.2568). This suggests that the higher the annual revenue, the better the estimated performance of the firm. The estimated performance (> 3.00) of the firm is higher than the average of the respective Québec industry sector.

## TESTING OF HYPOTHESES

Table 8 presents descriptive statistics of the executives' responses.

**Table 8.** Descriptive Statistics of Executives' Responses

| Type of outsourcing | Frequency | % Respondents | Rate of outsourcing |
|---|---|---|---|
| General (all types) | 64 | 62.75% | 45% |
| Non-core activity outsourcing | 23 | 32.55% | 70% |
| Core activity outsourcing | 57 | 55.88% | 26.7% |

Table 8 shows that 64 of the 102 respondents utilized outsourcing for one of the 14 categories of activities. Furthermore, 55.88% of the firms (57) firms utilized outsourcing for core activities. The data collected from the web-based questionnaire survey was analyzed by a simple linear regression to determine the impact of outsourcing on IFLP. The results of the statistical analysis showed that outsourcing (all kinds of outsourcing for the 14 categories of activities), regardless of outsourcing classification, has effects on IFLP but not significant. As we mentioned previously, an outsourcing rate of at least 25% of an activity can have a measurable impact on the IFLP; a lower rate of outsourcing does not. However, the explanatory power of the model is very weak (R2 = 0.0150) compared to that for a level of 1% (R2 = 0.0048).

Covariance analysis was performed to test the impact of non-core and core activity outsourcing on firm performance for the different categories of activities.

There were fewer responses for non-core activity outsourcing than for core activity outsourcing; the impact of non-core and core activity outsourcing on firm performance was calculated for only six activities: payment services, logistics, client services, accounting, sales, and publicity. The results of the analysis indicate that non-core activity outsourcing had a positive and significant impact on firm performance for the logistics and publicity activities. However, the results regarding the impact for the other four activities are inconclusive.
The internal performance of a few selected categories of activities following the outsourcing of non-core and core activities is shown in Table 9.

**Table 9.** Internal Performance of Activities by Category

| Category of activities | Internal performance level | | P-value |
|---|---|---|---|
| | Non-core activity outsourcing | Core activity outsourcing | |
| Publicity/promotion | 5.75 | 3.28 | 0.028 |
| Logistics | 4.33 | 3.14 | 0.007 |
| Payment services | 3.94 | 3.33 | 0.214 |
| Client services | 3.78 | 3.33 | 0.405 |
| Sales | 2.83 | 3.56 | 0.067 |
| Accounting | 2.75 | 3.54 | 0.310 |

Since the analysis was incomplete, the correlation between firms' external performance and firms' utilization of different kinds of outsourcing was tested. Specifically, the correlations between firms' performance and intensity of non-core activity outsourcing, core activity outsourcing, internalization of core activities, and internalization of non-core activities were tested. Only one significant correlation was found: the correlation between the internalization of core activities and firms' performance (R = 0.2191).

**Table 10.** Correlation between Internalization and Firm Performance

| | Internalization | | Outsourcing | |
|---|---|---|---|---|
| | Core activities | Non-core activities | Core activities | Non-core activities |
| Correlation | 0.2191 | 0.1026 | 0.1244 | -0.1003 |
| P-value | 0.0277 | 0.3074 | 0.2152 | 0.3185 |

Table 10 shows that the greater a firm's internalization of core activities, the better its external performance. However, this result explains only a small portion of the observed variable values (R2 = 0.0480).
Based on this analysis, Hypothesis 1 is accepted. Three out of the 14 categories of activities that were outsourced positively affected performance. Similarly, internalization of core activities positively affected firms' external performance. Thus, Hypothesis 2b is accepted. In contrast, Hypothesis 2a cannot be accepted, in part because of the low number of survey responses from the firms that outsource core activities across the 14 categories of activities. Thus, outsourcing of non-core tasks and internalization of core tasks does improve the performance of focal firms. The regression results do not show a moderating effect of the number of employees on the relationship between outsourcing and firm performance among the sample of SMEs. We also tested

for the moderating effect of firm size on the relationship between outsourcing of a category of activities and performance of that category of activities. This test was performed only for three categories of activities, namely payment services, logistics, and client services, and showed no moderating effects. These results suggest that the size of a firm does not have a moderating effect on the relationship between a firm's outsourcing of a function and its performance. Likewise, in the results of our study the number of employees does not have any effect on the relationship between internalization of core activities and external performance.

To clarify further, the first hypothesis on the effects of non-core activity outsourcing on firm performance is supported, and the second hypothesis on the effects of internalization of core activities is only partially supported. The results show that outsourcing non-core activities that have no or low uncertainty has positive effects on firm-level performance in spite of the high frequency of transactions as shown in Table 9. Thus, the results of the present study validate two (asset specificity and uncertainty) of the three attributes of TCE. On the other hand, internalization of core activities—activities which are valuable, rare, inimitable, hard to substitute, and create competitive advantages—has positive effects on firm-level performance. This result satisfies the tenants of the RBV of the firm. Thus, our results validate the TCE and RBV theories.

However, the results do not indicate the moderating effects of firm size. This would indicate that outsourcing non-core activities and simultaneously internalizing core activities does improve firm-level performance. However, firm size does not seem to affect this relationship. That is, the relationship between outsourcing and firm-level performance does not seem to differ between smaller and bigger SMEs. Nevertheless, it is important to keep in mind that the performance implications of outsourcing decisions have been widely debated.

## CONCLUSIONS

Presently, outsourcing is more than merely a financial strategy for firms. It has evolved from an efficiency oriented strategy to a growth-oriented, value-creating strategy. This study's objective was to identify the relationship between core and non-core activity outsourcing of manufacturing SMEs and IFLP. The results showed a positive relationship between outsourcing of non-core activities and IFLP as well as between internalization of core activities and IFLP. However, the correlation R2 is weak. There are several reasons for this result. The first reason is the broadness of the IFLP measure, which consists of competitive, financial, strategic, and non-equity stakeholder performance. Some firms may not demonstrate all four kinds of performance, which may explain the weak IFLP reported by firms in this study. The second reason is that the responses on the impact of core outsourcing for each of the 14 categories of activities or tasks were relatively low at the category or sub-category levels. This might be explained by the fact that there are near-core activities that are not suitable for arm's length outsourcing but can be done under a hybrid governance system (validating one of the attributes of TCE). Managers, owing to their bounded rationality, very often are undecided on whether to outsource near-core activities and miss opportunities to gain advantages from working with

advanced supplier firms. Thirdly, outsourcing itself is even more complex an operation than it appears to be. For example, coordination and re-integration of dispersed outsourced activities into one concerted organization are necessary but complicated. Transferring knowledge from the client firm to the supplier firms is also difficult to implement.

Future research should attempt to collect longitudinal data. Critical knowledge transfer to supplier firms is one of the setbacks of outsourcing and can be studied only with longitudinal data, which existing studies have not addressed adequately. Moreover, the effects of outsourcing on focal firms can be understood better when comparing their performance between two time periods, instead of their perceived performance from survey data. Simon (1962: 468) states that complexity should be understood as a system consisting of "a large number of parts that interact in a non-simple way". Since the system governing firms' performance and their outsourcing is complex, one remedy for the challenges mentioned above could be enlarging the sample size and changing the web-based survey to a more rigorous survey with regular follow-up calls in order to increase the response rate and perform a more robust statistical analysis.

Despite its shortcomings, this study still makes some valuable contributions to the field of available research. Firstly, this is the first study, in our knowledge, to consider the four IFLP constructs of competitive, financial, strategic, and non-equity stakeholder performances in relation to the results of the outsourcing of non-core activities and insourcing (internalization) of core activities. The findings indicate that outsourcing contributes to the economic and social performances of focal firms and enables them to thrive in the volatile business environment of the 21st century. Outsourcing can be one of the best ways to gain SCAs. Secondly, the study extends the TCE perspective that high-frequency activities can also be outsourced. Lastly, the study combines the principles of TCE and the RBV to show that offshore outsourcing contributes to both the efficiency and growth of manufacturing SMEs. In brief, this study improves our understanding of core activity insourcing and non-core activity outsourcing of manufacturing SMEs and their effects on IFLP. The results of this study can help practitioners in determining functions to outsource and to insource (internalize). The results suggest that managers cannot only improve their firm's financial benefits but also create competitive, strategic, and non-equity stakeholder advantages through well-managed offshore outsourcing. However, managers need to categorize core and non-core tasks carefully. Challenges could arise in deciding whether to outsource or internalize near-core tasks. Moreover, managers need to be aware of the modular and integral nature of products. The latter products are those made of components whose functionalities are closely related. The interfaces of these integrative systems are physically distributed across all or most other systems and, as such, they pose formidable challenges to managers who need to reintegrate dispersed integral components.

This paper discusses the strategic aspects of offshore outsourcing. The results indicate that managers also need to be aware of the impact of their firms' relationships with suppliers and sub-suppliers on quality and timely delivery of outsourced goods. A high degree of due diligence and commitment is required from offshoring both focal firms and supplier firms. Policy makers may find this study interesting, as it shows that outsourcing contributes to improving the overall performance of the focal firms. The results show that offshore

outsourcing is a win-win rather than zero-sum game strategy. A pro-outsourcing policy allows low-to-mid-tech manufacturing firms to thrive in an era when firms can choose the global value chain over high-cost countries like Canada and other OECD countries.

The relationship between outsourcing and vertical disintegration needs to be studied further. In particular, researchers should examine the extent to which outsourcing can reduce a firm's involvement in successive stages of production. Managers still face difficulties in determining core and non-core activities and in deciding whether to outsource or insource these activities. The survey responses in this study indicate that some managers had difficulties distinguishing between core and near-core activities, which might have caused the low number of responses regarding the outsourcing of non-core activities or the insourcing of core activities. This limitation presents an opportunity for rigorous study using larger samples of firms and larger corresponding data sets. Likewise, additional data need to be collected for each of the categories of activities and for all types of outsourcing to facilitate a more rigorous analysis for all outsourced tasks and subtasks. It is highly likely that outsourcing influences the relevant individual functional areas such as publicity and logistics. For example, by outsourcing in these areas, manufacturing operations may reduce costs and/or improve customer service by shifting publicity and other promotional activities to an outside specialist organization. Therefore, outsourcing may improve or impair individual functional areas. Although it is certain that outsourcing will always present empirical and normative challenges, firms' experiences are contributing to a theory that can provide some guidance on how to perform better in terms of this important issue (Golembiewski, 1999). Ultimately, further study is needed to establish the relationship between each outsourced task or subtask and its contribution to performance, instead of focusing only on the relationship between the task or subtask and aggregate firm-level performance.

The manufacturing firms in this study belong to different sectors, and the number of responses differed according to the type of outsourcing of tasks with different degrees of (low, mid or high) specificities. Taking into account these response variations and the weak R2, we conclude that the results cannot be generalized for the entire population of outsourcing manufacturing SMEs. Firms must also be classified into beginning, mature, and declining stages of their development and their outsourcing practices because such classification may reveal new outsourcing effects on IFLP. There is also a need to better understand the particularities of Québec manufacturing firms. Many of these firms are themselves supplier firms for larger outsourcing Canadian and US MNCs. For these Québec firms, outsourcing is of secondary importance, which may have caused confusion among the firms' survey respondents.

Another potential limitation of this study is the common method bias. This is a general criticism of survey-based research, because independent and dependent constructs are often measured entirely using self-reported data. The evaluation of performance of some variables on a 5-point Likert scale is another limitation. In this study, we found that respondents most often choose the average response of 3, which made it difficult for us to determine whether the effects of outsourcing are positive or negative. Future studies might find it helpful to use a paired Likert scale to encourage respondents to indicate either positive or negative effects on IFLP. There were also some ambiguities in the determination of a firm's core competency. Some respondents confused

core competency with associated concepts such as capability, comparative and competitive advantages, and other important tasks. Future research needs to define core competency more clearly in survey questions to ensure that it obtains responses that are more articulate and therefore conducive to a more transparent analysis. A Delphi method questionnaire can be administered to responding executives before the administration of the main survey to enhance their understanding of core and non-core activities and IFLP variables, and consequently, to obtain more accurate responses.

**Muhammad Mohiuddin** is a PhD candidate in International Management at Laval University, Canada. His research interests are focused on sustainable offshore outsourcing and emerging markets. He won 'best paper awards' at the ASAC, 2012, AGBA 2013 conferences and Honorable mention at the AIB-NE, 2013 conference. His academic and research excellences enabled him to get awards from the CIRRELT, FQRSC, SSHRC, ISESCO and Dean's Award.

**Zhan Su** is a Professor of Business Strategy and International Management at Laval University, Canada. His research interests are among others on Strategic management of international joint ventures, and the internationalization process of firms. Professor Su has published in numerous journals and books. He received several prestigious awards for his research and teaching. He is currently Chair professor of Stephen A. Jarislowsky Chair on International Business.

## REFERENCES


- Al-Azad, M. S., Mohiuddin, M., & Rashid, M. M. (2010). Knowledge transfer in offshore outsourcing and international joint ventures (IJVs): A critical literature review from cross-cultural context. *Global Journal of Strategies and Governance, 1*(1), 41-67.

- Arnold, D. (2000). Seven rules of international distribution. *Harvard Business Review, 78*(6), 131-137.

- Atkinson, A. A., Waterhouse, J. H., & Wells, R. B. (1997). A stakeholder approach to strategic performance measurement. *Sloan management review, 38*(3), 25-37.

- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99-120.

- Barney, J. B. (1999). How a firm's capabilities affect boundary decisions. *Sloan Management Review, 40*(3), 137-145.

- Berry, R. M. (2005). Web-based survey research: Lessons from the University of Akron study. *Journal of Public Administration, 28*(1), 57-72.

- Bertrand, O. (2011). What goes around comes around: Effects of offshore outsourcing on the export performance of firms. *Journal of International Business Studies, 42*(2), 334-344.

- Bettis, R. A., Bradley, S. P., & Hamel, G. (1992). Outsourcing and industrial decline. *The Executive, 6*(1), 7-22.

- Blackburn, R. A., Hart, M., & Wainwright, T. (2013). Small business performance: Business, strategy and owner-manager characteristics. *Journal of Small Business and Enterprise Development, 20*(1), 8-27.

- Callahan, C. M., Smith, R. E., & Spencer, A. W. (2013). The long-term performance consequences of strategic partnerships in high tech industries. *Journal of Applied Business Research, 29*(1), 217-134.

- Carney, W. (1997). Outsourcing HR and benefits: Navigating the right course. *Compensation International, 26*(7), 15-23.

- Centre de recherché industrielle du Québec. (2009). Répertoire d'entreprises du Québec [Directory of Québec firms].

- Chen, S. S. (2009). A transaction cost rationale for private branding and its implications for the choice of domestic vs. offshore outsourcing. *Journal of International Business Studies, 40*(1), 156-175.

- Chakravarthy, B. S. (1986). Measuring strategic performance. *Strategic Management Journal, 7*(5), 437-459.

- Cobanoglu, C., Warde, B., & Moreo, P. J. (2001). A comparison of mail, fax and web-based survey methods. *International Journal of Market Research, 43*(4), 441-452.

- Contractor, F. J., Kumar, V., Kundu, S., & Pedersen, T. (2011). Global outsourcing and offshoring: In search of the optimal configuration for a company. In F. J. Contractor, V. Kumar, S. Kundu, & T. Pedersen (Eds.), *Global outsourcing and offshoring: An integrated approach to theory and corporate strategy* (pp. 3-47). London: Cambridge University Press.

- Coase, R. (1937). The nature of the firm. *Economica, 4*(16), 386-405.

- Daveri, F., & Lasinio, C. J. (2007). *Offshoring and productivity growth in the Italian manufacturing industries,* (Working Paper No. 08/2007). Parma: Universita degli Studi di Parma. Retrieved from: http://swrwebeco.econ.unipr.it/RePEc/pdf/I_2007-08.pdf

- Dekkers, R. (2011). Impact of strategic decision making for outsourcing on managing manufacturing. International *Journal of Operations & Production Management, 31*(9), 935-965.

- Di Gregorio, D., Musteen, M., & Thomas, D. E. (2009). Offshore outsourcing as a source of international competitiveness. *Journal of International Business Studies, 40*(6), 969-988.

- Elmuti, D. (2003). The perceived impact of outsourcing on organizational performance. *American Journal of Business, 18*(2), 33-41.

- Ellram, L. M., Tate, W. L., & Billington, C. (2008). Understanding professional services outsourcing and offshoring. *Journal of Operations Management, 26*(2), 148-163.

- Espino-Rodríguez, T. F., & Padrón-Robaina, V. (2004). Outsourcing and its impact on operational objectives and performance: A study of hotels in the Canary Islands. *International Journal of Hospitality Management, 23*(3), 287-306.

- Espino-Rodríguez, T. F., & Padrón-Robaina, V. (2006). A review of outsourcing from the resource-based view of the firm. International Journal of Management Reviews, 8(1), 49-70.

- Greer, C. R., Youngblood, S. A., & Gray, D. A. (1999). Human resource management outsourcing: The make or buy decision. The Academy of *Management Executive, 13*(3), 85-96.

- Gilley, K. M., Greer, C. R., & Rasheed, A. A. (2004). Human resource outsourcing and organizational performance in manufacturing firms. *Journal of Business Research, 57*(3), 232-240.

- Gilley, K. M., & Rasheed, A. A. (2000). Making more by doing less: An analysis of outsourcing and its effects on firm performance. *Journal of Management, 26*(4), 763-790.

- Giustiniano, L., & Clarioni, G. (2013). The impact of outsourcing on business performance: An empirical analysis. *Journal of Modern Accounting and Auditing, 9*(2), 153-168.

- Goddard, J. (1997). The architecture of core competence. *Business Strategy Review, 8*(1), 43-52.

- Golembiewski, R. T. (1999). Lessons from downsizing: Some things to avoid, and others to emphasize. *M@n@gement, 2*(3), 45-53.

- Görg, H., Hanley, A., & Strobl, E. (2008). Productivity effects of international outsourcing: Evidence from plant-level data. *Revue Canadienne d'Économique, 41*(2), 670-688.

- Görzig, B., & Stephan, A. (2002). Outsourcing and firm-level performance. *DIW-Discussion* paper No. 309. Berlin. Retrieved from: http://www.econstor.eu/bitstream/10419/18045/1/dp309.pdf

- Grant, R. M. (1996). Prospering in dynamically competitive environments: Organizational capability as knowledge integration. *Organization Science, 7*(4), 375-387.

- Griffis, S. E., Goldsby, T. J., & Cooper, M. (2003). Web-based and mail survey: A comparison of response, data, and cost. *Journal of Business Logistics, 24*(2), 237-258.

- Gulbrandsen, B., Sandvik, K., & Haugland, S. A. (2009). Antecedents of vertical integration: Transaction cost economics and resource-based explanations. *Journal of Purchasing and Supply Management, 15*(2), 89-102.

- Hayes, D., Hunton, J., & Reck, J. L. (2000). Information systems outsourcing announcements: Investigating the impact on the market value of contract-granting firms. *Journal of Information Systems, 14*(2), 183-193.

- Hillman, A. J., Withers, M. C., & Collins, B. J. (2009). Resource dependence theory: A review. *Journal of Management, 35*(6), 1404-1427.

- Jabbour, L. (2010). Offshoring and firm performance: evidence from French manufacturing industry. *The World Economy, 33*(3), 507-524.

- Javidan, M. (1998). Core competence: What does it mean in practice? *Long Range Planning, 31*(1), 60-71.

- Javalgi, R. G., Dixit, A., & Scherer, R. F. (2009). Outsourcing to emerging markets: Theoretical perspectives and policy implications. *Journal of International Management, 15*(2), 156-168.

- Jiang, B., Belohlav, J. A., & Young, S. T. (2007). Outsourcing impact on manufacturing firms' value: Evidence from Japan. *Journal of Operations Management, 25*(1), 885-900.

- Jiang, B., & Qureshi, A. (2006). Research on outsourcing results: Current literature and future opportunities. *Management Decision, 44*(1), 44-55.

- Jones, G. R., & Hill, C. W. (1988). Transaction cost analysis of strategy-structure choice. *Strategic Management Journal, 9*(2), 159-172.

- Kaplan, R. S., & Norton, D. S. (2001). *The strategy-focused organization.* Boston: Harvard Business School Press.

- Kitcher, B., McCarthy, I. P., Turner, S., & Ridgway, K. (2013). Understanding the effects of outsourcing: Unpacking the total factor productivity variable. *Production Planning & Control, 24*(4-5), 308-317.

- Kotabe, M., Murray, J., & Javalgi, R. (1998). Global sourcing of service and market performance: An empirical investigation. *Journal of International Marketing, 6*(4), 10-13.

- Kotabe, M., & Murray, J. Y. (2004). Global sourcing strategy and sustainable competitive advantage. *Industrial Marketing Management, 33*(1), 7-14.

- Kotabe, M., Mol, M. J., Murray, J., & Parente, R. (2012). Outsourcing and its implications for market success: Negative curvilinearity, firm resources, and competition. *Journal of the Academy of Marketing Science, 40*(2), 329-346.

▪ Kotler, P. (2006). *Marketing managemen*t. New York: Prentice Hall.

▪ Leiblein, M. J., & Miller, D. J. (2003). An empirical examination of transaction- and firm-level influences on the vertical boundaries of the firm. *Strategic Management Journal, 24*(9), 839-859.

▪ Leiblein, M. J., Reuer, J. J., & Dalsace, F. (2002). Do make or buy decisions matter? The influence of organizational governance on technological performance. *Strategic Management Journal, 23*(9), 817–833.

▪ Lei, D., Hitt, M. A., & Bettis, R. A. (1996). Dynamic core competencies through meta-learning and strategic context. *Journal of Management, 22*(4), 549-569.

▪ Maksoud, A. B. (2004). Manufacturing in the UK: Contemporary characteristics and performance indicators. *Journal of Manufacturing Technology Management, 15*(2), 155-171.

▪ Mayer, K. J., & Salomon, R. M. (2006). Capabilities, contractual hazards, and governance: Integrating resource-based and transaction cost perspectives. *Academy of Management Journal, 49*(5), 942-959.

▪ McIvor, R. (2009). How the transaction cost and resource-based theories of the firm inform outsourcing evaluation. *Journal of Operations Management, 27*(1), 45-63.

▪ McNally, R. C., & Griffin, A. (2004). Firm and individual choice drivers in make-or-buy decisions: A diminishing role for transaction cost economics. *Journal of Supply Chain Management, 40(*1), 4-17.

▪ Marchegiani, L., Giustiniano, L., Peruffo, E., & Pirolo, L. (2012). Revitalising the outsourcing discourse within the boundaries of firm's debate. *Business System Review, 1*(1), 157-177.

▪ Marchegiani, L., Pirolo, L., Peruffo, E., & Giustiniano, L. (2010). National corporate systems and outsourcing decisions: A cross-country analysis. *Proceedings of Strategic Management Society Conference*, Rome, Italy.

▪ McDermott, G., Mudambi, R., & Parente, R. (2013). Strategic modularity and the architecture of multinational firm. *Global Strategy Journal, 3*(1), 1-7.

▪ Mohiuddin, M. (2011). Research on offshore outsourcing: A systematic literature review. *Journal of International Business Research, 10*(1), 59-76.

▪ Mohiuddin, M., & Su, Z. (2010). Firm level performance of offshore outsourcing strategy of manufacturing enterprises: A research agenda. *Competition Forum, 8*(1), 13-27.

▪ Mohiuddin, M., & Su, Z. (2013). Manufacturing small and medium size enterprise's offshore outsourcing and competitive advantage: An exploratory study on Canadian offshoring manufacturing SMEs. *Journal of Applied Business Research, 29*(4), 1111-1130.

▪ Mohiuddin, M., Su, Z., & Su, A. (2010). Towards sustainable offshore outsourcing: A case study of Quebec manufacturing firms Outsourcing to China. *The Journal of CENTRUM Cathedra, 3*(1), 84-95.

▪ Mol, M. J., van Tulder, R. J. M., & Beige, P. R. (2005). Antecedents and performance consequences of international outsourcing. *International Business Review, 14*(5), 599-617.

▪ Mooney, A. (2007). Core competence, distinctive competence, and competitive advantage: What is the difference? Journal of Education for Business, 83(2), 110-115.

▪ Mudambi, R. (2007). Offshoring: Economic geography and the multinational firm. *Journal of International Business Studies, 38*(1), 206-221.

▪ Mukherjee, D., Gaur, A. S., & Datta, A. (2013). Creating value through offshore outsourcing: An integrative framework. *Journal of International Management, 19*(4), 377-389.

▪ Nagpal, P. (2004). Use of Transaction Cost Economics Framework to Study IT Sourcing: Over-Application or Under-Theorizing? Sprouts: *Working Papers on Information Environments, Systems and Organizations, 4*(2), 98-110. Retrieved from: http://sprouts.case.edu/2004/040206.pdf

▪ Narasimhan, R., & Das, A. (1999). An empirical investigation of the contribution of strategic sourcing to manufacturing flexibilities and performance. *Decision Sciences, 30*(3), 683-718.

▪ Park, C., Vertinsky, I., & Lee, C. (2012). Korean international joint ventures: how the exchange climate affects tacit knowledge transfer from foreign parents. *International Marketing Review, 29*(2), 151-174.

▪ Pelham, A. (2000). Market orientation and other potential influences on performance in small and medium-sized manufacturing firms. *Journal of Small Business Management, 38*(1), 48-67.

▪ Prahalad, C. K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review, 68*(3), 79-91.

- Quinn, J. B. (1999). Strategic outsourcing: leveraging knowledge capabilities. *Sloan management review, 40*(4), 9-21.

- Quinn, J. B., & Hilmer, F. G. (1994). Strategic outsourcing. *Sloan Management Review, 3*5(4), 43-55.

- Rasheed, A. A., & Gilley, K. M. (2005). Outsourcing: National and firm-level implications. Thunderbird International *Business Review, 47*(5), 513-528.

- Rashid, M. M., & Al-Azad, M. S. (2013). Relocating low-to-medium tech manufacturing activities to developing countries: Empirical analysis of Taiwanese and South Korean manufacturing outsourcing to Bangladesh. Transnational *Corporations Review, 5*(2), 16-29.

- Reed, R., & DeFillippi, R. (1990). Casual ambiguity, barriers to imitation, and sustainable competitive advantage. *Academy of Management Review, 15*(1), 80-102.

- Reitzig, M., & Wagner, S. (2010). The hidden costs of outsourcing: Evidence from patent data. *Strategic Management Journal, 31*(11), 1183-1201.

- Scully, J. I., & Fawcett, S. E. (1994). International procurement strategies: Challenges and opportunities for the small firm. Production & Inventory *Management Journal, 35*(2), 39-46.

- Sharpe, M. (1997). Outsourcing, organizational competitiveness, and work. *Journal of Labor Research, 18*(4), 535-549.

- Simon, H. A. (1962). The architecture of complexity. Proceedings of the American *Philosophical Society, 106*(6), 467-482.

- Sinha, P., Akoorie, M. E., Ding, Q., & Wu, Q. (2011). What motivates manufacturing SMEs to outsource offshore in China?: Comparing the perspectives of SME manufacturers and their suppliers. *Strategic Outsourcing: An International Journal, 4*(1), 67-88.

- Sultana, M. A., Rashid, M. M., Mohiuddin, M., & Mazumder, M. N. H. (2013). Cross-cultural management and organizational effectiveness: A content analysis perspective. *International Journal of Business and Management, 8*(8), 113-146.

- Su, A., Regnière, M.-H., & Su, Z. (2013). "Made with the World" vs. "Made for the World": What would be the future of "Made in China" products? *Transnational Corporations Review, 5*(2), 1-15.

- The World Commission on Environment and Development (WCED). (1987). *Our common future: Report of the World Commission on Environment and Development*. Oslo: UN.

- Tomiura, E. (2007). Foreign outsourcing, exporting, and FDI: A productivity comparison at the firm level. *Journal of International Economics, 72*(1), 113-127.

- Torkkeli, M., & Tuominen, M. (2002). The contribution of technology selection to core competencies. *International Journal of Production Economics, 77(*3), 271-284.

- Verbeeten, F. H. M., & Boons, A. N. A. M. (2009). Strategic priorities, performance measures and performance: An empirical analysis in Dutch firms. *European Management Journal, 27*(1), 113-128.

- Wang, Y., Lo, H.- P., & Yang, Y. (2004). The constituents of core competencies and firm performance: Evidence from high-technology firms in China. *Journal of Engineering & Technology Management, 21*(4), 249-280.

- Williamson, O. (1985). *The economic institutions of capitalism: Firms, markets, relational contracting.* New York: Free Press.

- Wu, F., Li, H. Z., Chu, L. K., & Sculli, D. (2005). An outsourcing decision model for sustaining long-term performance. International *Journal of Production Research, 43*(12), 2513-2535. org/10.1080/00207540500045717