Framing the Offshoring and Re-shoring Debate: A Conceptual Framework

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ABSTRACT

The debate about offshoring has been a part of both academic literature and mainstream news media for the last two decades. Recently, re-shoring has also been gaining popularity in academic and news media circles. On one side of the debate is the argument that offshoring business operations is an important part of a globally competitive business environment, which requires companies strategically positioning themselves in the global marketplace. On the other side of the debate is the argument that offshoring is a miscalculated business decision that is a lot costlier than initially envisioned. The argument continues that once the companies realize the true cost of offshoring, they will re-shore their operations to the US. This paper develops a conceptual framework and research agenda to further advance the debate theoretically and offers policy implications for businesses and host and home countries. This paper argues that the offshoring and re-shoring debate requires a multi-level analysis that takes into account (a) global environmental constraints and opportunities, (b) home country opportunities and constraints, (c) business strategy, (d) host country opportunity matrix and changes in opportunity matrix, and (e) business responses to the changing host country opportunity matrix.

Keywords: offshoring, re-shoring, strategic management, international business strategy, late-comer effect

INTRODUCTION

The nature of the global environment in which firms compete has gone through significant transformations. A glance at the interplay of several business dynamics within the Eurozone crisis alone reveals the extent of global transformations such as extensive industry linkages across the regions, speed of impact of business decisions, and new global economic powerhouses. It is often the firms, not the governments, that are at the forefront of the technology-enabled globalization process in which large firms are moving from “multinational corporations” to “globally integrated corporations” (Palmisano, 2006). Although the process is largely driven by global companies, the rapid technological developments and diffusion of innovations allow many emerging economies to take advantage of these new global dynamics and be able to leap frog the initial stages of economic development in value creation, acquisition, and further innovation. In these imperfect emerging market economies, incentive structure is often created and re-created by market forces as well as the government regardless of the political system. Reduction in export-import barriers largely because of WTO (World Trade Organization) membership further increases the speed of global interactions. How do firms behave in this global environment? What are their strategies to survive in a competitive global environment?

In this global setting, strategic management literature has paid considerable attention to the international market strategies of the companies. Especially in the last decade, we have witnessed the proliferation of peer reviewed journal articles addressing issues related to the concept of “offshoring.” For
example, an “Academic Search Premier” database search of peer reviewed journals shows that number of peer reviewed articles including “offshoring” or “offshore” and “manufacturing” was 128 between 1913 and 1988; 674 between 1989 and 2000; and 4,845 between 2000 and July 2012. Meanwhile, an emerging strand of strategic management articles started analyzing re-shoring or near-shoring of the companies (Porter and Rivkin, 2012). In fact, the March 2012 issue of Harvard Business Review includes several articles dealing with the competitiveness of America and explores the concept of near-shoring or re-shoring. In recent years, the concepts of “near-shoring” and “re-shoring” have become political hot-button issues because of the dismal job market. Theoretically, a review of literature indicates the following major trends and issues: (1) to explain market entry modes of companies, many studies use a combination of transaction cost theory, resource-based theories, and real options theories; (2) market entry strategies are often analyzed from the firm or supply-chain perspectives with a passing reference to the home and host country environmental factors; (3) time trajectory of mode entries at the aggregate is often highlighted, but a dynamic perspective on a firm’s decision as a response to market and environmental signals does not enjoy a wide recognition across scholars; and (4) scholars treat both home and host market dynamics as the same, except the degree of environmental attributes.

The goal of this article is to review existing theoretical perspectives and empirical frameworks and develop a novel conceptual framework that sheds light on the dynamics of business strategy, research and development, and emerging markets. This will be achieved within the framework of major forces (globalization and innovation diffusion) shaping the global business dynamics with specific reference to offshoring, re-shoring, and research and development activities of the firms. The reason for this focus is threefold: (1) a theoretical framework that focuses on a single aspect of offshoring is unable to capture the depth and breadth of the phenomenon. Offshoring has evolved from “production facility” to “R&D” and product design (Manning, Massini, and Levin, 2008); (2) in line with the evolution from production facility to product design, offshoring by industry also evolved over time. Before 1989, offshoring as an economic activity mostly involved energy and utilities. We saw a large spike in manufacturing offshoring between 1989 and 2000. After 2000, the major emphasis shifted to information technology and computing; and (3) as aptly put by Pisano and Shih (2009), offshoring of economic activities is not as easily reversible as some consultants suggest. An effort to re-shore some of the manufacturing facilities may bring some positive results, but re-shoring for many manufacturers is not an easy task.

RESEARCH QUESTIONS AND DEFINITIONS

Research Questions
This paper addresses the following inter-related research questions:
(1) Why do some firms re-shore economic activities while others further strengthen their value-chain activities by offshoring their core competencies (i.e., research and development functions) in the emerging economies?
(2) What environmental signals affect a firm’s business strategy in the emerging countries? Or, how do firms see environment?

Definition of Concepts
Offshoring: Broadly speaking, this concept refers to a firm’s decision to move a part or all of the supply-chain operations overseas. It is often used to describe the movement of business operations to the emerging markets in Asia.
Re-shoring: This concept refers to the reversal of the previously offshored business activities. In the US context, this means the relocation of the business operation to the US mainly from emerging markets.

Research and Development: This is a part of a firm’s supply-chain activities and often considered as the core competency of a firm. It is a high-value added component in the supply chain. Research and development often includes product design, engineering, innovation, and other related activities.

Emerging markets: The concept of emerging markets in this study refers to the countries such as China, India, and Turkey. Mexico is considered a near-shore emerging market.

LEVEL OF ANALYSIS AND LITERATURE REVIEW

Level and Unit of Analysis

In addressing the research questions, this study reviews literature from an interdisciplinary perspective, including organizational behavior, management strategy, international business, international relations and economic development.

Unit of analysis in this study is a firm’s decision to offshore or to re-shore. Multiple levels of analysis are employed to account for a firm’s offshoring or re-shoring decisions.

Economic Development

The very concepts of offshoring and re-shoring involve geographical boundaries of business activities. In the last two decades, geographical boundaries in economics have been an important part of the economic research (Fujita et al., 1999). Although this is an important recognition of spatial economics, this renewed interest in economics mainly focuses on spatial distribution of the industrial production and is not useful for explaining a firm’s decision to offshore or re-shore. Offshoring or re-shoring involves locational change at the firm level that requires a perspective akin to the Schumpeterian innovation: new markets and new inputs (Schumpeter, 1934; Stam, 2006).

At the state level, however, this study benefits from economic development literature, especially from the perspectives highlighting “latecomers effect” (Gerschenkron, 1962; Mathews, 2006). According to this perspective, firms and other actors in emerging markets may be able to effectively enter the global supply chain with the help of their governments without going through the development of underlying technology. This process works through multiple channels: knowledge, technology networks and links (linkage); licensing, technology transfer through incentives (leverage); and know-how, industrial learning (Mathews, 2006).

Historical Institutionalism

Historical institutionalism allows us to connect firm level processes to the environmental level processes from a historical perspective (Steinmo, et al., 1992). Historical institutionalism emphasizes the interaction between organizations and the environment from a historical perspective. Scott (2008) provides a good review of institutionalism in general and historical institutionalism in particular within the management context. Institutions are defined as formal and informal rules and routines that both constrain and define the opportunity sets available to the firms and managers at any given time. Although, rules and routines exhibit path-dependent nature, conflict and cooperation arising from differing ideas/viewpoints through interactions between firms and environment, on the one hand, and within the firms among shareholders on the other, providing a menu for change in strategy by redefining the
available opportunity set. The most striking perspective is provided by Biggart and Guillen (1999) in that when faced with similar institutional pressures, firms are likely to respond in divergent ways. Combined with the strategic management theories that follow, this perspective provides a potential for an integrated approach to understanding the firms’ choice on offshoring and re-shoring.

Strategic Management Theories

Several theoretical perspectives when used together offer important insights into the firms’ decision processes.

Organizational Behavior: There are several perspectives that are relevant to this research. Organizations influence individuals’ habits and flow of communications (Simon, 1947). Within an organization, satisfying behavior of individuals (Simon, 1947; March and Simon, 1958), information overload and lack of attention (Simon, 1947) and bounded rationality (Simon, 1982) are major constraints on the managers’ decision-making process. In addition, mostly biased, a simple-minded problemistic search indicates unresolved conflicts within organizations (Cyert and March, 1963). These key perspectives from organizational behavior suggest that internally organizational decisions are sub-optimal and constrained by the ability of individuals to process information and the organizations’ routines (habits), which promote risk averse decision-making within the “zone of acceptance” (Simon, 1947).

Transaction Cost Theory (TCT): TCT as advanced by Williamson (1975, 1985, and 1996) offers key insights about the offshoring and re-shoring decisions of firms within the emerging market context. This theory is widely used in strategic management literature. Its appeal comes from the fact that the theory emphasizes the role of market frictions, particularly uncertainty, transaction costs, bounded rationality and opportunistic behaviors in a firm’s decision to restructure its value-chain. In particular, Williamson’s analysis of vertical integration and associated benefits and costs sheds light on a firm’s decision to choose an appropriate entry mode when offshoring core competencies. Furthermore, Williamson’s (1985) arguments about the asset specificity (physical, human, and site) and commitment (sunk cost with respect to physical assets) may have important implications for a firm’s relocation decision. Many recent studies take Transaction Cost Theory as a starting point and then blend it with additional theoretical perspectives to explain managers’ behaviors in site selection (Brouthers et al., 2008).

Real Options: Recently, strategic management literature uses Real Options perspective as an alternative and complementary perspective to the Transaction Cost Theory. The key emphasis in this perspective is on managerial flexibility in a firm’s decision to invest (see Trigeorgis, 1996). In this research context, this perspective allows us to shed light into why some firms make further offshoring decisions for their core competencies while others pull back (re-shore) their existing operation. Managerial flexibility under uncertainty gives firms strategic options, which may be valuable for the firm in making long-term commitments. The flexible nature of perspective also allows us to incorporate a historical perspective on the sequence of decision-making into a competitive strategy analysis.

Dynamic Capabilities and Resource-Based View of Firms: These perspectives are very important for a proper understanding of emerging country market dynamics. According to Dynamic Capabilities Theory, a firm’s invisible assets are essential for that firm’s sustainable competitive advantage (Itami and Roehl, 1987). In emerging countries, government and market forces attempt to alter the incentive structure in the economy to lure companies with a stock of invisible assets. This model also has potential for incorporating other perspectives because of its emphasis on the information flow between environment and corporate entity.
Nelson and Winter (1982) developed an evolutionary theory of economic change by highlighting how a heterogeneous group of firms motived by improving their profits drives less profitable firms out of business. Key emphases of this approach are (1) firms’ behaviors reflect routines and strategic orientations traceable to the past; and (2) firms themselves have certain organizational capabilities and decision rules at any given time, which can be modified by deliberate problem-solving tasks or random events. This perspective’s appealing part is the concept of the entrepreneurial search for new markets, new technology, and organizational structures. However, strong emphasis on routines and path-dependent behavior makes it hard to make the adaptation to the fast technological changes.

Finally, I found several aspects of Resource-Based View of firms particularly relevant on a firm’s decision to offshore or re-shore. So-called “The Penrose Effect” (Penrose, 1959) argues that a firm’s growth potential is limited by the competencies of its managers. The subjective opportunity set of a firm is determined by the managerial skill set and company resources. If a firm expands its organization faster than its management can handle, efficiency will suffer. According to Penrose (1959), change in organizational dynamics is driven by the interaction between resources and management. Following the similar tradition, Chandler (1990) argues that in order for firms to take advantage of economies of scale and scope, they need to increase their organizational capabilities by making three inter-related investments: (1) production in proportion to technological requirements; (2) global marketing and networking; and (3) human resources. Chandler (1990) clearly sets the tone for a sustainable competitive advantage. However, the mechanism to achieve this competitive advantage is mostly internal to the firm.

**DATA, PROPOSITIONS AND CONCEPTUAL FRAMEWORK**

**Offshoring**

A review of search results through LexisNexis Academic indicates a long-term evolution of the offshoring activities by sector. According to Table 1, the offshoring was primarily associated with energy and utilities and oil and gas industry before 1989. Between 1989 and 2000, the manufacturing sector topped the list. After 2000, the manufacturing sector dropped to the 5th place after computing and information technology, banking and finance, software services and appliances, and personal and business services.

<table>
<thead>
<tr>
<th>Top Industries Mentioned</th>
<th>Rank</th>
<th>Manufacturing</th>
<th>Rank</th>
<th>Manufacturing</th>
<th>Rank</th>
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<tbody>
<tr>
<td>Energy &amp; Utilities (580)</td>
<td>1</td>
<td>Manufacturing (261)</td>
<td>1</td>
<td>Computing &amp; Information Technology (265)</td>
<td>1</td>
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<tr>
<td>Oil &amp; Gas Industry (366)</td>
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<td>Energy &amp; Utilities (244)</td>
<td>2</td>
<td>Banking &amp; Finance (145)</td>
<td>2</td>
</tr>
<tr>
<td>Mining &amp; Extraction (434)</td>
<td>3</td>
<td>Oil &amp; Gas Industry (238)</td>
<td>3</td>
<td>Software Services &amp; Applications (138)</td>
<td>3</td>
</tr>
<tr>
<td>Oil &amp; Gas Exploration &amp; Extraction (405)</td>
<td>4</td>
<td>Banking &amp; Finance (228)</td>
<td>4</td>
<td>Personal &amp; Business Support Services (124)</td>
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<tr>
<td>Oil &amp; Gas Extraction (338)</td>
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<td>Mining &amp; Extraction (202)</td>
<td>5</td>
<td>Manufacturing (121)</td>
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<td>Manufacturing (253)</td>
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<td>Financial Markets &amp; Investing (163)</td>
<td>6</td>
<td>Administrative Support Services (117)</td>
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<td>Oil &amp; Gas Processing &amp; Products (235)</td>
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<td>Oil &amp; Gas Exploration &amp; Extraction (159)</td>
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<td>Computer Software (111)</td>
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<td>Petroleum Products (195)</td>
<td>8</td>
<td>Securities &amp; Other Investments (143)</td>
<td>8</td>
<td>Professional Services (99)</td>
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<tr>
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<td>Transportation &amp; Warehousing (71)</td>
<td>15</td>
<td>Computing &amp; Information Technology Overview (48)</td>
<td>15</td>
</tr>
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</table>

*Note: Search is conducted using LexisNexis Academic.*

*Note 1: Numbers in parentheses are the frequency of news covering that industry within the context of offshoring and manufacturing.*
This finding is in line with the survey data from Duke University, Offshoring Research Network, which suggests several trends about the depth and breadth of the offshoring. One visible trend is that a shift from offshoring the production facility to the product development has occurred over the years (Manning, Massini, and Levin, 2008). What I call “forward offshoring,” which means that companies start first with offshoring their production facilities and then gradually move their core competencies to the offshore locations, has increased dramatically since the year 2000. In other words, although it is still a factor in offshoring decisions, a significant number of companies moved from low cost production and skilled talent capture to offshore value creation, acquisition and innovation.

Figure 1 shows R&D expenditures performed abroad by majority-owned foreign affiliates of the U.S. parent companies between 1997 and 2008 in Brazil, China, and India. The data for China in 2000 is suppressed because of confidentiality issues. According to Figure 1, the US companies have increased their R&D investments in China especially after China’s membership to the World Trade Organization (WTO).

How many jobs have migrated outside the United States since 1994? Figure 2 below presents the cumulative job losses between 1994 and 2012. According to the Department of Labor Trade Adjustment Assistance Consolidated Petitions Database (Public Citizen, 2013), a total of 2,677,282 jobs have migrated to outside the United States.
Where did these jobs go? Unfortunately, there is no reliable location specific data. Figure 3 shows the breakdown of lost jobs by location type. According to my estimates, of the total jobs, the “near-shore” including Canada and Mexico accounts for 27 percent of the lost jobs; offshore 14 percent; and location-unknown 59 percent. Many of the certified Trade Assistance Adjustment cases do not report the specific locations. I anticipate that many of the non-specific location cases before 2001 involved the near-shore locations, while the non-specific locations after 2001 involve offshoring locations, primarily Asia.
Re-shoring

Re-shoring is a recent phenomenon, where some companies that offshored their operations are bringing their operations back to the U.S. According to a Boston Consulting Group survey, nearly one-third of the manufacturing companies operating in China indicated that they either have planned or are planning to move their operations back to the U.S. (IndustryWeek.com, 4/20/2012). Furthermore, according to www.reshorenow.org website, a number of companies have already re-shored their operations back to the U.S. News reports from www.reshorenow.org suggest that the number of reported re-shoring cases has accelerated since 2007. Figure 4 reports number of news reports about the re-shoring activities over the years.

![Figure 4: Number of Re-shoring News Reports](source: Author’s calculations from www.reshorenow.org)

Research Questions, Propositions and Conceptual Framework

Why do some firms re-shore economic activities while others further strengthen their value-chain activities by offshoring their core competencies (i.e., product design, engineering and research and development) in host countries?

Proposition 1: Firms respond to similar pressures in divergent ways because firms’ decisions to offshore and re-shore are constrained by (1) global competitive dynamics; (2) home country competitive pressure (i.e., degree of commoditization); (3) host country opportunity set; and (4) firm-specific processes, capabilities, and constraints.

Proposition 2: History and institutions matter in firms’ decisions in a particular direction. Given the subjective opportunity sets and market imperfections, firms exercise flexibility to make subsequent strategic decisions.
**Proposition 3:** Four levels of constraints (global, home country, host country, and firm-specific) determine a firm’s choice set or menu of options for business strategy, and this in turn affects offshoring or re-shoring decisions, as well as the entry mode (captive/in-house, joint venture, alliance, cooperation, others).

**Proposition 3a:** A firm’s menu of option of choice set may include following strategic decisions:

1. Dominating target market
2. Entering a new market or entering a market with a new product
3. Following a cost strategy and producing for both home and host market
4. Following a cost strategy and producing for the home market
5. Any other opportunistic strategies

**Proposition 4 (Chart 2):** When production cost in the host country increases because of increasing wages, an offshored business faces two options: (1) change the firm’s business strategy to capture the potentially lucrative host country market by making additional product development investments, or (2) exit the market by re-shoring the business activity.

**Proposition 4a:** this option may depend on where the firm is located within a global value-chain, and whether the initial offshoring decision is part of the firm’s global business strategy or simply cost-hopping tactics to improve its competitive strategy.

**Proposition 4b:** Even if it is a part of cost-hopping strategy, managers may be able to exercise real options to change the business strategy by focusing on the new emerging market (shifting from production to marketing).
What environmental signals affect a firm’s business strategy in the emerging markets? Or, how do firms see environment?

**Proposition 5 (Chart 2):** Emerging market governments create and re-create opportunity sets available for foreign direct investment (“latecomers” effect).

**Proposition 5a:** thanks to globalization and rapid diffusion of technological advances, the emerging countries do not need to go through classical economic development trajectories.

**Proposition 5b:** because of significant market failures in these economies, governments fill the vacuum by reducing the investment risk and uncertainty.

**Proposition 5c:** Meanwhile, by applying 3L strategy (leverage, linkage, and learning), governments in emerging economies strategically alter the incentive structure and available opportunity set for foreign direct investment.

**Proposition 6 (Chart 2):** If a firm’s subjective opportunity set intersects with the host country’s recreated opportunity set for foreign direct investment, firms are likely to invest further to customize their products for the local consumers.

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**Chart 3: Host Country Opportunity Set, Changes in Opportunity Set and Re-shoring Dynamics**

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**FUTURE RESEARCH**

Conceptual framework presented in this study provides a rich research agenda to test strategic management and international business theories. It is particularly interesting to further investigate the firms’ responses to the incentives created by governments in emerging economies using case studies. In situations of re-shoring, case studies analyzing the processes leading to the discrepancy between initial cost estimates and total actual costs of offshoring may provide important insights into the firm-level processes from the strategic management perspective. Currently, data collection and processing efforts are underway to further investigate offshoring and re-shoring dynamics.
REFERENCES


