Two Essays on the Knowledge-Based View of the Firm: The Impact of Local Market Knowledge on Domestic Firm Performance in Both Transitional and Developed Economies

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TWO ESSAYS ON THE KNOWLEDGE-BASED VIEW OF THE FIRM: THE IMPACT OF LOCAL MARKET KNOWLEDGE ON DOMESTIC FIRM PERFORMANCE IN BOTH TRANSITIONAL AND DEVELOPED ECONOMIES

by
Ted B. Randall

A Dissertation

Presented in Partial Fulfillment of Requirements for the Degree of Doctor of Business Administration In the Coles College of Business Kennesaw State University

Kennesaw, GA 2013
Dissertation Defense: March 22, 2013

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ABSTRACT

TWO ESSAYS ON THE KNOWLEDGE-BASED VIEW OF THE FIRM: THE IMPACT OF LOCAL MARKET KNOWLEDGE ON DOMESTIC FIRM PERFORMANCE IN BOTH TRANSITIONAL AND DEVELOPED ECONOMIES

by

Ted B Randall

Are there strategies that domestic transitional economy firms (TEFs) can use in order to be successful given the increasing numbers of multinational enterprises (MNEs) operating in their home country markets? How do domestically focused, small and medium-sized enterprises (SMEs) in developed economies maintain satisfactory levels of performance when faced with the superior resources of MNEs and the resulting increased competitiveness in domestic industrial markets?

I attempt to answer these two questions in two separate papers. In the first paper, I examine TEFs by using research on the knowledge-based view of the firm (KBV) to create and test a new theory based on the advantages that domestic TEFs enjoy, due to the superior local market knowledge that comes from being local or indigenous. This new theory, called the Advantages of Indigenousness (AOI), suggests that local firms in transitional economies can develop strategies based on their indigenousness that will result in improved performance. I test this new theory on a sample of Romanian firms, examining three specific AOI based strategies, and find some empirical support for the theory.
In the second paper, I examine domestic manufacturing SMEs in a developed economy to see if their superior local market knowledge provides a source for niche strategies that enhance performance. Based on the KBV, I hypothesize that domestic SMEs which use superior local market knowledge to develop niche strategies perform better than SMEs that do not. To test these hypotheses, I use primary data collected from manufacturing SMEs in the U.S. An empirical analysis lends credence to my claim that superior local market knowledge can be used to create niche strategies that result in improved performance.
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CHAPTER 1: INTRODUCTION

In today’s global economy, domestic markets in both transitional economies and developed economies are becoming increasingly competitive, fueled in part by the superior financial, technological, and managerial resources of multi-national enterprises (MNE). Transitional economy firms (TEF) and small and medium-sized enterprises (SME) in developed economies are faced with the ever increasing challenge of developing or maintaining sustainable competitive advantage in their home markets. This study extends research on the knowledge-based view of the firm (KBV) by examining how domestic firms can use internally embedded knowledge as a basis for sustainable competitive advantage (SCA). This proposal is comprised of two essays: the first focuses on firms in a transitional economy, while the second focuses on SMEs in industrial markets in a developed economy, the U.S.

Essay #1: Are there strategies that domestic transitional economy firms (TEFs) can use in order to be successful, given the increasing numbers of multinational enterprises (MNEs) operating in their home country markets? Expanding on the knowledge-based view of the firm, a new theory called “Advantages of Indigenousness” (AOI) is introduced, which suggests that performance enabling strategies based on superior local market knowledge exist, which domestic firms can use in markets with foreign competition. I hypothesize that TEFs that develop AOI based strategies which: 1)
target customers that require a time-sensitive supply network; or 2) use umbrella branding; or 3) emphasize their local origin, outperform domestic firms that do not. Primary data, collected from firms in Romania, is used to empirically test these three hypotheses. The results indicate that the idea of AOI may have merit in playing a significant role in determining success of domestic firms when faced with foreign competition in local markets. TEFs in my sample that developed strategies based on their indigenous advantages had superior performance, compared to TEFs that did not use at least one of these strategies.

Essay #2: How do domestically focused, small and medium-sized enterprises (SMEs) in developed economies maintain satisfactory levels of performance when faced with the superior resources of MNEs, and the resulting increased competitiveness in domestic industrial markets? This paper draws upon the knowledge-based view of the firm to suggest that domestic SMEs in a developed economy, operating in competitive industrial markets that use their local market knowledge to develop niche strategies, will typically outperform their domestic counterparts that do not use these strategies. I hypothesize those strategies which target: 1) specific product needs, or 2) specialized supply needs, or 3) use a specialized product strategy, may provide sustainable competitive advantage for domestic firms. Drawing on primary data collected from manufacturing SMEs across the U.S., empirical results provide some initial support for the notion that SMEs from developed countries can use superior local market knowledge as a basis for increasing firm performance in industrial markets.
CHAPTER 2: ESSAY #1 - ADVANTAGES OF INDIGENOUSNESS THEORY AND TRANSITIONAL ECONOMY FIRM PERFORMANCE

Introduction

The world economy has been transformed in recent years by the rise of globalization, and the integration of markets in goods, services and capital. Rapid technological innovations, combined with changes in the political environment of many countries and a rise in the liberalization of trade policies in the national, regional, and global levels, have fueled this ever-growing cross-border economic activity (Aulakh & Kotabe, 2008; Garrett, 2000; Robson, Skarmeas, & Spyropoulou, 2006).

These trends, coupled with the dramatic regime change from one-party systems to democratically elected governments, transformed most Communist nations in the late 1980’s and early 1990’s. During this period, these so called “transitional economies” transformed, changing from command economic structures where the government made the majority of production decisions, to free market economies, in which consumers have a choice among a large number of domestic and foreign products (Aulakh & Kotabe, 2008). These transitional economies saw increased competition as many Multinational Enterprises (MNEs) entered into the previously isolated countries of Central and Eastern Europe, Russia, and China, and new privately-owned local enterprises were allowed to be created (Kosova, 2010).
Faced with a crowded competitive environment, populated by MNEs that commonly possess superior financial, managerial, and technological resources (Mezias, 2002), local firms had to adapt their strategies to the new competitive, domestic marketplace if they wanted to survive and prosper (Spencer, 2008). The crucial question is why do some Transitional Economy Firms (TEFs) perform well in this rapidly changing competitive environment, while others do not? Are there strategies, that if followed, result in higher levels of performance in developing markets facing increasing foreign competition?

In recent years, many researchers have studied transitional economies in order to identify potentially effective strategies that allow domestic companies to survive and prosper in an environment experiencing rapid change, the destruction of old institutions, and their replacement by new structures/rules of the game that may not be well defined (Wright, Filatotchev, Hoskisson, & Peng, 2005). Theories such as Transaction Cost Theory, Institutional Theory, and the Resource Based View, that have shown in other national settings to provide companies with specific competitive advantages, were tested in transitional economies to examine whether they were helping companies to prosper in these unusual economic environments (Lyles, Saxton, & Watson, 2004; Meyer & Peng, 2005; Steensma, Tihanyi, Lyles, & Dhanaraj, 2005).

Wright, et al. (2005) classified much of this research into four categories; (1) developed country firms that compete in transitional economies, (2) TEFs that compete in other transitional economies, (3) TEFs that compete in developed economies, and (4) TEFs that compete in their own transitional economy. Of the four categories, Perez-Batres and Eden (2008) observed that, while there is growing interest in research of
TEFs, there appears to be a limited amount of research focused on domestic TEFs. What little research has been done applies theories that were initially developed to explain the behavior of firms in advanced economies to investigate firms in transitional economies. While this approach may extend the external validity of these theories, it ignores Wright’s (2005) warning that the dynamic nature of transitional economies presents unique challenges to the application of existing theory. Little has been done to develop new theories which examine the appropriate strategies that can maximize firm performance under conditions of radical environmental change (Keister, 2002), or major changes in the nature of competitors that has occurred in many transitional economies (Bruton, Ahlstrom, & Obloj, 2008).

Here I attempt to advance international business strategy research, extending prior research on the knowledge-based view of the firm, by introducing and empirically examining a new theory directed at selecting performance enabling strategies for domestic TEFs in markets with foreign competitors. I propose that the local firms which possess market knowledge and adopt certain strategies will outperform other domestic companies. This knowledge commonly provides local firms with a competitive advantage which I call “Advantages of Indigenousness” (AOI).

I propose that such AOIs create competencies that may provide a source of sustainable competitive advantage (SCA) for domestic TEFs, resulting in superior performance for TEFs that use them, compared to TEFs that do not. Superior, local market knowledge results in a better understanding of regulations, customer preferences, product needs, and delivery schedules (Inkpen & Beamish, 1997; Makino & Delios, 1996; Petison & Johri, 2008). Additional opportunities created by AOI include
exploitation of consumer ethnocentricity, which can result in the tendency of certain consumers’ preferences for local products, due to national pride and familiarity with local brands (Luo & Tung, 2007; Shankarmahesh, 2006; Yiu & Makino, 2002); and umbrella branding, which allows a firm to create promotional economies of scale and reinforce loyalty for a domestic brand (Zeithaml, 1988).

This paper is divided into four sections. The first section provides the theoretical background for the development of the Advantages of Indigenousness theory, and describes how persistent AOI can provide a source for strategic, competitive advantage for TEFs. The second section proposes specific hypotheses to test this new theory. The third section presents the methods and analyses that were used to test the hypotheses. The fourth section assesses the results, discusses the contributions and limitations for this study, and outlines potential avenues for future research.

Literature Review

Knowledge-based View of the Firm

In designing AOI theory, I draw upon the knowledge-based view of the firm (KBV), which suggests that knowledge is among the more important intangible resources that firms can use to create competitive advantage (Sharkie, 2003). KBV is at the very core of the resource-based view of the firm, which states that firm competitiveness comes from both tangible and intangible assets that are valuable, rare, non-imitable, and sustainable (Barney, 1991; Zheng, Yang, & McLean, 2010); a firm’s capability to create and utilize knowledge is one of the key sources of a firm’s SCA (Zheng, et al., 2010). Therefore, firm performance depends, in part, on the ability of a firm to successfully
convert knowledge into planned outcomes (De Clercq & Dimov, 2008). It is important to note that the type of knowledge varies, and as a result, so must the theories that support KBV (Spender, 1996). Gassmann and Keupp (2007) called for more theory building to support the knowledge-based view of the firm. To this end, AOI theory extends KBV by identifying a domestic firm’s inherent superior knowledge of, and experience in the local business environment (Lu & Beamish, 2006), as an important intangible asset based on knowledge/experience that can be utilized to create competitive advantage. Knowledge of the local business environment is crucial to a firm’s ability to gather and process market information, and is a significant means of strategic competition (Spender & Grant, 1996).

This knowledge of the local environment may allow a domestic firm to identify areas that are important for consumers. Strategies based on local market knowledge may be difficult and/or costly for foreign companies to develop, because they lack an intimate, experience-based understanding of the local environment (Zaheer, 1995). Other domestic companies may not recognize the importance of local market knowledge and/or fail to understand or use it to build competitive advantage. These areas can provide the basis for developing market driven strategies, such as targeting economic nationalism (Verlegh, 2007), umbrella branding (Lane & Jacobson, 1995), and specialized supply requirements (Li, Zhou, & Shao, 2008). Converting knowledge into planned outcomes that create value can be a determinant of performance differences (De Clercq & Dimov, 2008; Gassmann & Keupp, 2007). When this knowledge is employed in a way that is rare, non-imitable, valuable, and sustainable, it creates sustainable competitive advantage (Barney, 1991; Teece, Pisano, & Shuen, 1997).
Sustainable Competitive Advantage in Transitional Economy Firms

Sustainable competitive advantages (SCA) residing within a firm can be used to develop defendable product-markets and reap superior performance. Bases of SCA reside in either having superior internal resources, like patents, trademarks, proprietary know-how, firm reputation, brand equity (Barney, 1991), and/or having a market-based advantage that cannot be easily imitated by the competition, such as a firm having superior local market knowledge (Holburn & Zelner, 2010). This allows firms to engage in what is called “monopolistic competition” and reap supra-normal profits (Duan, Grover, & Balakrishnan, 2009).

Unfortunately, many competitive advantages initially developed by TEFs for their home country markets are not sustainable, and/or are being eroded, either by the arrival of MNEs, which often possess superior technology, internationally prestigious brands, and marketing know-how, or by newly established TEFs that have adopted Western know-how and technologies. The key reason for the loss of competitive advantage for many older TEFs may be found in their origin. Prior to the 1990’s, transitional economies were dominated by state-owned enterprises (SOEs) (Meyer, 2004; Meyer & Peng, 2005; Rangaswamy, Burke, & Oliva, 1993). As a whole, these enterprises were poorly run organizations, relying on government controls to mandate the type, quality, and quantity of goods or services that were made available to consumers (Ramamurti, 2003).

Reasons cited for their general lack of performance include poor accountability, lack of adequate monitoring by the state, ownership constraints on transfer of property rights, and subsidization of poor SOE performance from government funds. SOEs were also characterized by a deficiency of managerial and financial resources (Peng & Heath,
1996; Tan & Tan, 2004; Wright, Hoskisson, Filatotchev, & Buck, 1998). Instead of being chosen for their business acumen, most SOE managers were bureaucrats that were either political appointees, or taken from the Civil Service (Ramaswamy, 2001).

The primary source of competitive advantage during this period was the monopoly position granted the SOE by the State (Fahy, Hooley, Beracs, Fonfara, & Gabrijan, 2003), or managers’ expertise in dealing with governmental processes, like the license approval (Gaur, Vasudevan, & Gaur, 2011). Competition from foreign companies was limited, due to real or perceived government restrictions. Frequently, local governments would not allow foreign companies to enter the local market, while in other instances, reports of frustrations and failures that other foreign firms had experienced deterred companies from even making an attempt to establish local operations (Gaur, Vasudevan, et al., 2011; Pearce, 1991; Peng & Heath, 1996; Puffer, 1994). Because of the lack of competition, and the protection of the government, there were few incentives for SOEs to develop true sustainable competitive advantages. Most SOE SCA stemmed from the government (Gaur, Vasudevan, et al., 2011).

The inefficiencies inherent in an isolated command economy was one of the factors that led to the downfall of communist regimes in Eastern and Central Europe (CEE); by the 1990’s, many CEE governments found themselves resource constrained, experiencing acute shortages, and unable to finance expansion from internal resources (Ramamurti, 2003). As new democratically elected governments considered ways to overcome these difficulties, reformers hoped that replacing state ownership with private owners would generate new strategies, resulting in improved performance (Wright, et al., 1998). Policies were changed that allowed the privatization of SOEs, the creation of new
companies, and also opened the doors to foreign direct investment (Wright, et al., 1998), resulting in a more competitive marketplace for local firms (Spencer, 2008).

In some transitional economies, like Russia, and Central and Eastern Europe (CEE), the existing systems were replaced with new ones; countries like China attempted to maintain a Communist system that permitted privatization and foreign direct investment (Meyer & Peng, 2005; Tan & Tan, 2004). In both cases, the new privately owned enterprises (POEs) and the remaining SOEs found themselves struggling to sustain their advantages amid the escalating competition that eroded the competitive advantage previously protected by the state government (Tan & Tan, 2004). The managers of these domestic firms lacked resources, experience, and confidence, and were inflexible or unable to make the adjustments required to operate successfully in a market economy (Peng & Heath, 1996; Wright, et al., 1998). The initial increase of mainly foreign competition proved too strong for many domestic firms, and they vanished from the market (De Backer & Sleuwaegen, 2003; Kosova, 2010; Spencer, 2008).

Those domestic firms that remained were often relegated to market-following roles (Fahy, et al., 2003). For transitional economies, this typically means that low cost factors will be used to drive industrial development (Cateora & Hess, 1993), resulting in TEFs typically using low price strategies to compete (Brouthers & Xu, 2002). This is unfortunate, because competing on price lowers TEF profits, and may not be a long term sustainable strategy (Brouthers & Xu, 2002). In order for TEFs to avoid pursuing a low price strategy, they need to engage in a differentiation strategy, developing products that differ on key attributes or features when compared to other firms’ products (Porter, 1985).
Creating such products is a challenge given limited resources and technology (Ramamurti, 2003). As a result, with the exception of certain industries that are usually government-financed, government-owned or government-granted monopolies (Tan & Tan, 2004), and/or the existence of special business groups (e.g. called *grupos* in Latin America) (Guillen, 2000), TEFs tend to be small and resource poor, and operate in industries with relatively low barriers to entry (Contractor, Kumar, & Kundu, 2007).

**Advantages of Indigenousness Theory**

As transitional economy markets open up, indigenous TEFs often find themselves in markets where historical strategies no longer work (Tan & Tan, 2004). This fundamental change forces them to look for new competitive advantages that will allow them to succeed. One such area could be using the superior local market knowledge, and connection to the local community that indigenous firms possess, to create specialized distribution networks, understand the nuances associated with national pride, and integrating national pride into unique branding strategies (Inkpen & Beamish, 1997; Petison & Johri, 2008; Zaheer, 1995). Expertise in superior local market knowledge and its connection with the local community provides the basis for AOI theory; domestic TEFs may have advantages, due to their indigenousness, when competing in home country markets with foreign MNEs.

Research on market knowledge has shown that it can be a determinant of performance differences (Gassmann & Keupp, 2007). By using knowledge in new and distinctive ways to combine traditional assets and resources, firms can create SCA (Sharkie, 2003; Tsai & Li, 2007; Zack, 1999). I propose that expert knowledge of the local business environment can become especially important in markets where foreign
competition exists. This is especially true for TEFs that find themselves competing against other TEFs in markets where the superior financial, technological and managerial resources of foreign MNEs also exist (Bierly III & Daly, 2007; Mezias, 2002). Domestic firms that possess a better understanding and knowledge of the local marketplace can therefore better address their customers’ needs (Boisot & Child, 1996; Li & Li, 2008). Due to their familiarity and experience with the local market, domestic TEFs have indigenous advantages they can use to further their business (Lu & Beamish, 2006). TEFs with superior local market knowledge find it easier to develop and implement solutions to customer needs; this in turn enhances firm performance (Shane, 2000; Wiklund & Shepherd, 2003). Domestic TEFs that develop strategies based on their AOI should have an advantage in markets with foreign MNEs over domestic TEFs that do not develop such strategies. Here I propose that TEFs in markets with foreign MNEs, that use strategies based on superior local market knowledge derived from AOIs, will typically perform better than TEFs in the same markets that do not.

Superior local market knowledge can be manifest in multiple ways, including customer preferences, understanding regulations, and stringent delivery schedules (Inkpen & Beamish, 1997; Makino & Delios, 1996; Petison & Johri, 2008). Superior local market knowledge is developed over time, with an understanding of the nuances of traditions, political relationships, and business ties (Li, et al., 2008). For example, tight linkages between indigenous firms enable them to acquire quality materials and services, and provide timely delivery; abilities that MNEs entering foreign markets commonly lack (Li, et al., 2008; Moen, Bolstad, Pedersen, & Bakas, 2010). MNEs entering transitional economies commonly struggle to develop an understanding of local markets
(Moen, et al., 2010). Often, they attempt to overcome this lack of knowledge through the formation of alliances with local firms (Hitt, Ahlstrom, Dacin, Levitas, & Svobodina, 2004).

While this strategy may improve the knowledge base of the MNE, it is often limited by communication barriers and agency concerns over the new acquisition or alliance (Griffith, 2003; Mohr & Nevin, 1990). Just as potential entrants lack detailed knowledge of local markets, they also cannot easily identify the best alliance partners (Holburn & Zelner, 2010). This lack of knowledge may be compounded if local partners choose to pursue their own agenda at the expense of the MNE; a classic agency theory problem (Holburn & Zelner, 2010).

Conversely, domestic TEFs have a better knowledge and understanding of the local marketplace, and can address the specific needs of customers and suppliers (Boisot & Child, 1996; Li & Li, 2008). Thus, domestic TEFs that develop strategies based on superior local market knowledge may find that resultant competitive advantages are more sustainable in the transitional economy marketplace, and for that reason, may have higher levels of firm performance compared to domestic TEFs that choose other ways to compete. Domestic TEFs that do not use these AOI-based strategies often rely on strategies that predate the economic reforms (Peng, 1997), and for that reason, tend to be less effective.

Indigenous advantages of domestic firms can be expressed in multiple ways. Firms with superior local market knowledge often have a better understanding of customer needs, the local culture, and the idiosyncratic local government policies and regulations (Hitt, Dacin, Levitas, Arregle, & Borza, 2000). Additional advantages also
include access to distribution channels, ethnic bonds, and strong relationships with both private and government organizations and personnel (Child & Rodrigues, 2005; Hitt, Li, & Worthington, 2005).

Focusing on the advantages associated with local culture, and superior knowledge of local distribution channels and organizations, this paper makes an initial attempt to theoretically develop and empirically examine the effectiveness of selected “advantages of indigenousness.” More specifically, I develop three hypotheses based on three different strategies derived from specific AOIs, which if used by TEFs, can result in superior performance: the “Made-in” strategy, umbrella branding, and tight delivery schedules. I theorize that TEFs that use strategies based on these specific “AOIs” typically perform better than TEFs that do not.

*The “Made-in” Product Strategy*

One AOI based potential source of SCA is the use of local market knowledge associated with economic nationalism, which is a preference for national products and services over foreign products/services, and a willingness to make a sacrifice in order to purchase domestic products (Demirbag, Sahadev, & Mellahi, 2010). Research has shown that there is a preference for products from one’s own country over foreign products (Bilkey & Nes, 1982). These preferences can occur because some may consider it wrong, almost immoral, to buy foreign products; this phenomenon is called consumer ethnocentrism (Shimp & Sharma, 1987).

Verlegh (2007) explained national pride as a feeling of belonging to an inclusive community with a certain identity that is reinforced by language, cultural products, and symbols such as flags. One example of this is the Indian soft drink Thums Up. In 1977, faced with government edicts, Coca-Cola and Pepsi exited the Indian soft drink market. As a result, a
number of local cola brands, such as Double Seven, Thums Up, and Campa Cola, filled the gap (Page, 2009). While other companies tried to copy the international colas, Thums Up catered to the local consumer, using a domestic image and a uniquely Indian cola flavor, and as a result, rose to the top, capturing more than thirty percent of the market share. When government regulations relaxed in 1993, Coca-Cola reentered the Indian market, purchased Thums Up, and attempted to eliminate the brand (Pande, 2009). The resultant outcry from the local population, and the drop in market share, forced Coca-Cola to rethink their strategy, and they began promoting Thums Up using national celebrities and capitalizing on the domestic image. This led to Thums Up recapturing the lead in the Indian soft drink market (Page, 2009).

These “consumer ethnocentrism” effects provide opportunities for indigenous firms to strengthen performance by promoting a “made in” strategy (Shimp & Sharma, 1987). Steenkamp and de Jong (2010) studied the positive effect that ethnocentrism can have on the consumer’s attitude toward locally made products, and showed that traditional societies, such as transitional economies, place an emphasis on national pride and protectionism, which is exhibited through the purchase of locally made products. Individuals seek to express themselves through the consumption of domestic products, which consumption may serve as a symbol for national identity. In addition to ethnocentrism, Verlegh (2007) tested the motivation of national identification which “reflects the desire for positive national identity created by a need for self-enhancement”. This home country bias in product judgments is often conceptualized as a form of protectionism at the consumer level (Verlegh & Steenkamp, 1999), and as such, provides an opportunity for domestic TEFs to develop competitive advantages by emphasizing that they are local.

One way to implement support for domestic products is through a “made in” strategy. Consumers often rate products from their home country higher than products from a foreign country (Bilkey & Nes, 1982; Brouthers & Pieper, 2009; Wall & Heslop,
1986). As an AOI, national pride provides a source of SCA to develop a cogent strategy. By promoting the “made in” strategy, domestic TEFs can capitalize on the AOI national pride, leveraging it to achieve typically higher levels of firm performance in markets with foreign competition than TEFs that do not. Thus I hypothesize:

H1: TEFs that develop strategies which emphasize their local origin have better performance than TEFs that do not.

_Umbrella Brands_

A second way for TEFs to use their local market knowledge associated with nationalism is to develop a SCA through the use of umbrella brands (Wernerfelt, 1988; Zeithaml, 1988). Research on signaling theory suggests that tying products together through umbrella branding can improve beliefs about new and lesser known products (Wernerfelt, 1988). Umbrella branding is effective because it reduces time and money spent in new brand development; it has been associated with reducing marketing costs, improving marketing productivity, and reducing consumer perceived risk (Lane & Jacobson, 1995; Rangaswamy, et al., 1993; Tauber, 1981). By advertising and promoting an umbrella brand, instead of a number of individual brands, firms may enjoy economies of scale (Capon, Berthon, Hulbert, & Pitt, 2001). Umbrella branding can also increase visibility, and reinforce consumer tendencies to purchase domestic over foreign products (Erdem & Sun, 2002; Klein, Ettenson, & Morris, 1998; Shankarmahesh, 2006) by using the umbrella brand as a “national pride” signal (Aaker & Keller, 1990; Erdem, 1998). Thus, umbrella branding can reinforce feelings of national pride and provide an AOI basis for SCA for domestic TEFs in a market with foreign competition. One example of this is the Mavi Jean Company, headquartered in Turkey. The company started in
with a focus on incorporating detail true to the brand’s Mediterranean spirit – exotic and inspirational. Mavi, the Turkish word for blue, quickly became a success, and by 1996 was the most popular jeans brand in the Turkish market, surpassing the international Levi’s brand (Turgut, 2003). Using the national popularity of the Mavi brand, the company expanded into other products and both domestic and international markets.

Umbrella branding is the practice of labeling more than one product with a single brand name (Sullivan, 1990). A recognized local umbrella brand can be the foundation of sustainable competitive advantage by reducing the time and money spent in brand development and marketing costs (Lane & Jacobson, 1995; Tauber, 1981), improving marketing productivity, and decreasing consumer perceived risk. This, in turn, increases consumer utility (Montgomery & Wernerfelt, 1992).

Umbrella branding can be used to strengthen consumer confidence in the quality of lesser known products (Wernerfelt, 1988); it extends the perceived quality from known products to unknown products under the same umbrella brand (Swaminathan, Fox, & Ready, 2001). Erdem (1998) explains that consumers transfer their experience from a recognized product, to other less recognizable products under the same umbrella brand, resulting in improved sales and loyalty.

Applying this same logic to the concept of nationalism suggests that domestic TEFs can use the indigenous advantage associated with ethnocentrism to further extend acceptance of other products from their firm. Through umbrella branding, domestic firms can use national pride associated with a recognized product to bolster the sales of a less recognized product, thus creating AOI based SCA.
Based on the above discussion, I hypothesize that domestic TEFs which use umbrella branding in markets with foreign competition will, on average, have better performance than TEFs that do not. Therefore:

H2: TEFs that use an umbrella brand strategy will typically have higher performance than TEFs that do not.

Specialized Supply Networks

The third AOI is also based on superior local market knowledge. Superior local market knowledge involves TEFs knowing more about specific attributes concerning their home country than foreign MNEs (Dikova, 2009). Such attributes may include: laws, politics, culture, regulations, language, customer preferences, and spending habits (Inkpen & Beamish, 1997; Makino & Delios, 1996; Petison & Johri, 2008). This knowledge is typically found within domestic firms, whereas MNEs must find a way to acquire it (Brouthers & Pieper, 2009; Gaur & Lu, 2007). This knowledge can be difficult for foreign firms to obtain, and is often time consuming and expensive (Lu & Beamish, 2006). As such, TEFs that develop strategies around the AOI related to superior local market knowledge may be able to create SCA in their domestic market.

Knowing how to market to domestic customers, and focusing on customers that have unique, time-sensitive supply needs, can provide a basis for SCA. For example, the Japanese market has been very difficult for foreign companies to penetrate, due to its fragmented nature. Companies have to establish long-term relationships with a multitude of retailers, providing them with frequent deliveries of very small amounts of merchandise. As a result, local companies that supply these small businesses have developed a sustainable competitive advantage, which has protected them from foreign
competition. Similarly, Luo, Shenkar and Nyaw (2001) showed that having solid supply networks and entrenched distribution channels contribute to TEF performance. TEFs that have a better understanding of local business practices are more likely to operate at lower costs, and generate higher profits in markets with foreign competition (Li & Li, 2008; Luo, 1997). The strategic use of local market knowledge gives TEFs the ability to form strong links with suppliers and customers, allowing them to target applications and products that require a specialized, time-sensitive supply network (Boisot & Child, 1996).

Using their superior local market knowledge as an AOI, TEFs can develop strategies associated with targeting those products that require a tight delivery schedule. Based on the above discussion, I hypothesize that:

H3: TEFs that use a strategy targeting customers that require a time-sensitive supply network typically have higher performance than TEFs that do not.

Methods

Data Collection

The data used to test the hypotheses was collected through surveys submitted to local transitional economy firms in Romania. Tan and Litschert (1994) defined a transitional economy as being one in the process of moving from a centrally planned state of economic development to one that is more market driven. Romania is one of the democratized post-communist nations that are transitioning from a centrally controlled economy to one that is more market driven. However, due to particularly higher levels of inflation, and a government that was more focused on political issues instead of economic change, Romania lagged behind some of the other CEE countries, and along with
Bulgaria, was one of the latest countries to enter the European Union (Filip & Raffournier, 2010). This delay in completing the transition to a market driven economy makes Romania a prime candidate for this study.

Collecting primary survey data in a transitional economy can be challenging, due to local intricacies, and cultural barriers originating in the country’s political history, because the participants often have a concern for confidentiality, and believe there is little benefit from participating in a research project (Brouthers, O'Donnell, & Hadjimarcou, 2005). Past literature has noted that survey participants in transitional economies can be suspicious of the motives and intended purpose of a survey, which leads to further distrust and less participation (Hoskisson, Eden, Lau, & Wright, 2000).

To overcome these data collection issues, the participants were assured that their responses would be kept confidential, and their names and organizations would never be revealed (Lee & Miller, 1999), which helps to ensure that the answers are accurate and adequately reflect the actual situations in the sampled firms. Similar to prior research (Brouthers, et al., 2005), the original surveys were translated into Romanian by a native speaker, then translated back into English to ensure the meanings of the English version were the same as the Romanian version. A list of 5,693 businesses was obtained from an independent Romanian company that specializes in organizing conferences and exhibitions for a wide variety of industries. Research personnel from a well-respected Romanian institution sent an initial email inviting the participants to take part in the survey. After an interval of three weeks, a follow up email was sent. A total of 382 participants responded to the questionnaire, resulting in a low response rate of 6.7%. Although this is a very low response rate, it is not uncommon for surveys in Romania
(Lawler, Chen, Wu, Bae, & Bai, 2011; Liao, Welsch, & Pistrui, 2001). The low response could be due, in part, to a reluctance of executives in this region to disclose information (Kaynak, Yalcin, & Tatoglu, 2006), and/or the lack of trust mentioned by Hoskisson et al. (2000).

Further examination of the data showed that several of the surveys were either incomplete, or from companies that were owned by firms and therefore, did not qualify as domestic TEFs. The final dataset contained data from 150 firms, with a mean age of 23.3 years and the average firm size of 775 employees. To test if the usable sample was representative of the original list, a two tailed t-test ($\alpha = .05$) was performed comparing average firm size for the initial population to the usable sample. The t-test failed to reveal a statistically reliable difference between the means between the firms from the original list, and firms from the usable sample for firm size ($t = -1.65$, $df = 151$, and $p = .102$); growth rate ($t = -.914$, $df = 5691$, and $p = .361$); and profits ($t = .160$, $df = 5691$, and $p = .873$), suggesting that the usable sample is representative of the original list (Dikova, 2009; Uhlenbruck, 2004).

**Dependent Variable**

As in many previous studies (Brouthers, Brouthers, & Werner, 1999; Brouthers, et al., 2005; Brouthers & Pieper, 2009; Luo, 2001; Nitsch, Beamish, & Makino, 1996), this research uses a perceptual measure of firm performance. Perceptual measures are considered appropriate when: (1) firms are either unwilling or unable to provide financial measures, (2) variations in accounting practices across countries hinder the reconciliation of differences, (3) fluctuations in exchange rates and/or financial reporting differences between home and host countries exist (Woodcock, Beamish, & Makino, 1994). Prior
studies have shown that perceptual measures of performance satisfaction correlate well with objective measures of performance (Dess & Robinson Jr, 1984; Geringer & Herbert, 1991). Ketokivi and Schroeder (2004) conducted a multi-trait, multi-method analysis of a perceptual performance measure to investigate item-specific trait, method and error variance. Their findings showed that perceptual measures satisfy the requirements of both reliability and validity.

Table 1: Essay #1 - Variable Definitions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXPERIENCE</td>
<td>Number of years the firm has been in business</td>
<td>Numeric</td>
</tr>
<tr>
<td>RESOURCE</td>
<td>Firm has access to substantial financial resources (1=strongly disagree, 7=strongly agree).</td>
<td>7-point Likert scale</td>
</tr>
<tr>
<td>LOW PRICE</td>
<td>Emphasize lower price</td>
<td>Yes/no</td>
</tr>
<tr>
<td><strong>Dependent variable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SGRROWTH</td>
<td>Satisfaction w/ firm performance in terms of:</td>
<td>5 items</td>
</tr>
<tr>
<td>PROFIT</td>
<td>Sales growth</td>
<td>10-point Likert scale</td>
</tr>
<tr>
<td>MKTSHARE</td>
<td>Profitability</td>
<td>10-point Likert scale</td>
</tr>
<tr>
<td>CUSTREL</td>
<td>Market share</td>
<td>10-point Likert scale</td>
</tr>
<tr>
<td>OVERALL</td>
<td>Overall performance</td>
<td>10-point Likert scale</td>
</tr>
<tr>
<td><strong>Independent variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MADEIN</td>
<td>Strategies to address foreign competition: Focus on replacement market and emphasize “Made in Romania”</td>
<td>Yes/no</td>
</tr>
<tr>
<td>UMBBRAND</td>
<td>Develop an umbrella brand</td>
<td>Yes/no</td>
</tr>
<tr>
<td>DELIVERY</td>
<td>Target customers with tight delivery schedules</td>
<td>Yes/no</td>
</tr>
</tbody>
</table>
The measure for satisfaction with performance consists of five items that assess the extent to which the respondent was satisfied with that aspect of the firm’s performance (Brouthers & Pieper, 2009). These items include satisfaction with: sales growth, profitability, market share, managing customer relationships, and overall performance. Each of the five items are measured on a 10-point Likert scale ranging from 1 (very unsatisfied) to 10 (very satisfied) as has been previously used to assess performance (Brouthers, Brouthers, & Werner, 2003; Brouthers & Pieper, 2009; Dess & Robinson Jr, 1984; Geringer & Herbert, 1991). To measure satisfaction, a summated composite score from the five items was calculated (PERFORMANCE). A factor analysis of the five measures confirmed they could be loaded on a single factor (Cronbach’s alpha of 0.883) (Hair, Black, & Anderson, 2010).

**Independent Variables**

My independent variables of interest consist of three different strategies used to create an advantage of indigenousness: using a “Made in” (MADEIN) strategy; using an umbrella brand (UMBRAND) strategy; or targeting applications and products that typically require a tight delivery schedule (DELIVERY). Although each of these variables has been used in prior studies (Brouthers, et al., 2005; Brouthers & Pieper, 2009; Martin & Grbac, 2003), none have been used in prior studies to measure the Advantages of Indigenousness.

Similar to previous studies (Brouthers & Pieper, 2009; Brouthers & Xu, 2002), respondents were provided with a list of strategies to select from, including the three AOI strategies of interest and a category labeled “other” (Matsuno & Mentzer, 2000), and
asked to select all strategies that apply to their business; responses were coded with a “1” for each of the three above strategies if selected, and “0” if they were not selected.

*Control Variables*

Three control variables were included in the study: firm experience (EXPERIENCE), financial resources (RESOURCES), and low price product strategy (LOW PRICE). Previous studies (Lu, Zhou, Bruton, & Li, 2009; Luo, et al., 2001; Zhou, Su, & Bao, 2002) show that a firm’s level of experience is a contributing factor in its performance. Experience is measured as the number of years that the firm has been in business (Chung, Lee, Beamish, & Isobe, 2010). Having available financial capital and resources has also been shown to be a contributing factor in firm performance (Hitt, et al., 2000; Lee, Lee, & Pennings, 2001; Newman & Nollen, 1996). Similar to Borch, et al., (1999) financial resources is measured with one self-reported item on a seven-points Likert-type scale. The respondents were asked to indicate their level of agreement with the statement, “My firm has access to substantial financial resources”, with 1 indicating they “strongly disagree” and 7 indicating they “strongly agree” (Borch, et al., 1999).

The final control variable, a low price product strategy, has been shown to negatively affect performance (Brouthers & Xu, 2002). Transitional economies are among the developing economies that often develop an over-reliance on low factor costs to drive industrial development (Brouthers & Pieper, 2009; Root, 1994). Relying on low factor costs often results in TEFs using low price product strategies (Porter, 1985), increasing price competition, and decreasing performance satisfaction (Brouthers, Werner, & Matulich, 2000; Brouthers & Xu, 2002; Zhou, et al., 2002). In the survey, managers were asked to indicate if their firm used low price as a product strategy.
Responses were coded “1” if the firm followed a low price strategy and “0” if they did not (Brouthers & Xu, 2002).

**Analysis**

The first step in analyzing the data was to check for multicollinearity by examining the correlations among the variables (Hair, et al., 2010). The correlation matrix consisted of the three control variables, the three independent variables, and the composite dependent variable. The results shown in Table 2 indicate no unreasonably large correlations, indicating that multicollinearity should not be a problem. This was further substantiated when testing showed that the maximum variance inflation factor (VIF) for the variables is 1.096, which is substantially less than the lowest VIF threshold of 10 recommended by Hair et al. (2010).

Because the dependent and independent variables are gathered from the same respondents at the same time, there is a concern that common methods variance (CMV) may occur (Podsakoff & Organ, 1986). Common methods variance may occur when both the independent and dependent variables are subjective, and come from the same respondent (Podsakoff & Organ, 1986). However, because in this study the independent variables are objective, and the dependent variables are subjective, common methods variance is unlikely (Harrison, McLaughlin, & Coalter, 1996). To check for evidence of possible CMV, a single factor method suggested by Podsakoff and Organ (1986) was used, which suggests that common methods variance may occur if all the variables load on one factor that accounts for the majority of covariance. An exploratory factor analysis using all seven variables of interest resulted in three factors, the largest accounting for
only 24.6% of the covariance. This further supports the claim that common methods variance is most likely not a problem in this study.

Table 2: Essay #1 – Descriptive Statistics and Correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>32.72</td>
<td>23.31</td>
<td>4.29</td>
<td>0.07</td>
<td>0.23</td>
<td>0.17</td>
<td>0.25</td>
</tr>
<tr>
<td>StdDev</td>
<td>8.81</td>
<td>23.88</td>
<td>1.95</td>
<td>0.26</td>
<td>0.42</td>
<td>0.38</td>
<td>0.43</td>
</tr>
<tr>
<td>1 PERFORMANCE</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 EXPERIENCE</td>
<td>-0.01</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 RESOURCES</td>
<td>0.53***</td>
<td>-0.08</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 LOW PRICE</td>
<td>-0.25***</td>
<td>-0.06</td>
<td>-0.10</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 MADE IN</td>
<td>0.26***</td>
<td>0.22**</td>
<td>0.07</td>
<td>-0.03</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 UMBBRAND</td>
<td>0.21**</td>
<td>0.05</td>
<td>0.14*</td>
<td>-0.13</td>
<td>0.04</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>7 DELIVERY</td>
<td>0.00</td>
<td>-0.09</td>
<td>0.06</td>
<td>0.14*</td>
<td>0.16*</td>
<td>-0.06</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Sig. (2-tailed): * p < .10; ** p < .05; *** p < .01; N=150

Results

In order to evaluate the relative influence of the three independent variables on the dependent variable, five hierarchical linear regression models were used (Hair, et al., 2010), shown in Table 3. First, a regression model consisting of just the controls variables (EXPERIENCE, RESOURCES, and LOW PRICE) was conducted to establish a baseline adjusted $R^2$ value. Consistent with prior research, Model 1 shows financial resources have a positive effect on performance ($p < .01$), while following a low price strategy has a significantly negative effect on performance ($p < .01$). Model 1 explains 30.8 percent of the variance in satisfaction with performance, as indicated by the adjusted $R^2$. 
Model 2 shows support for H1: TEFs that develop strategies which emphasize their local origin have better performance than TEFs that do not. The variable MADEIN was positive ($\beta = .23$) and significantly related to the performance satisfaction variable ($p < .01$). Model 3 indicates that the variable of interest (UMBRELLA) was significant ($p < .05$) and positive ($\beta = .12$), providing support for H2: TEFs that use an umbrella brand strategy typically have higher performance than TEFs that do not.

Model 4 shows that the third variable of interest (DELIVERY) was not significant. Prior research (Li & Li, 2008; Luo, 1997; Luo, et al., 2001) has shown that TEFs typically have solid supply networks and a better understanding of local business practices, which contribute to TEF performance. However, H3: TEFs that use a strategy targeting customers that require a time-sensitive supply network typically have higher performance than TEFs that do not; was not supported.
Finally, Model 5 analyzes all three of the strategies that TEFs may use to address foreign competition by combining the three variables of interest (MADEIN, UMBRAND, and DELIVERY). The results are similar to those of the analyses for the variables individually with H1 and H2 supported, and H3 not supported.

Although one of the hypotheses was not supported, the change in $R^2$ from Model 1 to Model 5 was 0.064, which is significant ($p < .01$). This empirical result suggests that there is some support for my notion of AOI; domestic TEFs that pursue the three selected strategies chosen to represent AOI, on average, appear to have higher performance satisfaction than those TEFs that do not.

Conclusion

As the previously isolated countries of Central and Eastern Europe, Russia, and China transitioned to free market economies, the domestic businesses faced an increasing level of competition from foreign MNEs. A considerable amount of research has been conducted on foreign direct investment in transitional economies. However, research is limited on how domestic firms in these transitional economies can address the increase in foreign competition. In this study, I attempted to answer the call to develop new theories which expand the knowledge-based view of the firm (Gassmann & Keupp, 2007), and apply them to the competitive changes that occur in many transitional economies (Bruton, et al., 2008) by introducing a new theory called the Advantages of Indigenousness. According to Lu & Beamish (2006), domestic firms have an inherent superior knowledge of and experience in the local business environment. AOI theory suggests that domestic firms can use their superior local market knowledge as a source of
SCA, from which they can develop performance enabling strategies. To test this theory, I developed three hypotheses based on potential AOI based strategies used to address foreign competition.

The first hypothesis suggested that domestic TEFs that developed a “made in” strategy for addressing foreign competition are more satisfied with performance than domestic TEFs that do not. I found that using this type of strategy significantly increased performance in domestic TEFs. This supports prior research (Bilkey & Nes, 1982; Verlegh, 2007) and lends credence to AOI theory. My results suggest that appeals to national pride (an AOI) appear to be effective when competing in environments containing foreign competition.

The second hypothesis found that an umbrella brand strategy used to address foreign competition had a positive impact on firm performance, providing empirical support for a second AOI strategy. Research by Erdem (1998) suggests that generalizing a brand from one product category to other categories may result in greater firm performance. Thus, domestic firms should be able to use their superior local market knowledge to successfully position different products under an umbrella brand, and obtain superior performance.

The final hypothesis failed to show support for AOI theory. This hypothesis suggested that TEFs can use their superior local market knowledge to develop strategies that focus on customers who prefer tight delivery schedules. Prior research (Boisot & Child, 1996; Li & Li, 2008) indicates that a superior knowledge of local business practices give TEFs the ability to form the strong links with suppliers and customers, which allow them to target applications and products that require tight delivery
schedules. My research showed that focusing on this strategy to address foreign competition was not significantly related to performance.

One possible reason for the lack of significance could reside in the difference between having the networks to support normal supply situations, versus being able to exploit them to meet a tight delivery schedule. Although having a solid supply network and understanding of the business may improve performance, TEFs may be unable to successfully meet a tight delivery schedule due to other reasons, such as limited manufacturing capabilities. Another possible explanation may be that while the networks may exist, TEFs may not have the managerial skills needed to successfully implement the processes to manage tight delivery schedules. I therefore speculate that the indigenous advantage of superior knowledge expressed in networks that domestic TEFs form (Boisot & Child, 1996) may be offset by the superior technological and managerial resources of foreign MNEs.

I conclude that the concept of AOI may have merit in playing a significant role in determining success of domestic firms, when faced with foreign competition in local markets. TEFs in my sample that developed strategies based on their indigenousness advantages had superior performance, compared to TEFs that did not use these strategies.

Limitations and Future Research

This study is meant as an introduction to a new theory, and as such, has some limitations and offers ample opportunity for future research. First, the number of strategies that I used to test this new theory are limited. Additional AOI based strategies may exist. For instance, domestic firms may use their superior knowledge of local governments and networks to develop strategies that are focused on markets that are
highly regulated, or require substantial networks. Additionally, domestic firms may
develop strategies that further exploit the concept of nationalism, by developing products
that cater to specific demands unique to the local environment. Future research could
expand on the different types of strategies to further test the validity of AOI theory.

Second, in this study I did not control for the type of industry, or the amount of
resources (other than financial) available to the firm. In some industries, it may be easier
to exploit indigenousness advantages than in others. Understanding the level of AOI in a
specific market may help managers to choose the type and level of AOI strategies to
develop. Additionally, the amount or type of resources available to the firm may have an
effect on their ability to recognize and effectively deploy AOI strategies. Small firms
may lack resources, but have more flexibility. Perhaps there are AOI based strategies
that work better for firms with specific types of resources.

Finally, this study is focused on only one transitional economy, Romania. Will
other transitional economies see the same results? Romania was one of the more recent
additions to the European Union. Future research could determine if AOI theory applies
equally to firms from economies that are further along the process of transitioning from a
controlled economy to a free-market economy. Future research could also focus on
domestic firms in developed countries to see if they also have indigenousness advantages.

My findings have important implications for domestic firms in transitional
economies that are facing foreign competition. Some research suggests that domestic
firms in transitional economies should seek international diversification (Perez-Batres &
Eden, 2008; Thomas, Eden, Hitt, & Miller, 2007). AOI theory provides additional
options whereby domestic firms can develop strategies to defend against foreign
competition, and allow them to compete in their local markets. By introducing a new theory, I depart from past research (Lyles, et al., 2004; Meyer & Peng, 2005; Steensma, et al., 2005) that uses theories developed for established economies to explain events in transitional economies, and instead focus on strategies that improve domestic firm performance in the ever-changing transitional economies.

With this research, I set out to introduce and test a new theory called the Advantages of Indigenousness. Based on the knowledge-based view of the firm, AOI theory proposes that domestic firms have inherent advantages based on their superior market knowledge of, and experience in local markets. My results show that there is some empirical support for this new theory. Future studies could help identify additional AOI strategies whereby domestic firms can enhance performance in markets in the ever increasing presence of foreign competition.
CHAPTER 3: ESSAY #2 - THE KNOWLEDGE-BASED VIEW OF THE FIRM AND INDUSTRIAL SME PERFORMANCE IN THE U.S.

Introduction

In today’s global environment, small and medium-sized enterprises (SMEs) in developed economies are faced with the ever increasing challenge of developing or maintaining sustainable competitive advantage (Knight & Kim, 2008). Challenges come from a variety of sources. These challenges include the complexity of the seller/buyer relationship in an industrial marketplace (Kahn & Mentzer, 1995); competition from domestic MNEs; the influx of MNEs from other developed nations bringing diversity of experience, and superior managerial skills (Shaked, 1986); and emerging market MNEs with their wealth of cheap labor and natural resources, creating new low price strategy competitors (Brouthers & Xu, 2002).

Faced with such challenges, one might have expected that domestic SMEs in developed economies would be at a severe competitive disadvantage, and as a result, their economic role would be continuously declining. Instead, SMEs have continued to be very important players in the economy, by creating jobs and providing vital products and services to consumers or other companies. For example, in 2008, SMEs accounted for 99.7% of firms with employees in the USA, and 50% of all firm employment; these numbers have remained stable (within 1%) throughout the most recently reported decade (USCB, 2008). It would be impossible for a modern economy to function efficiently
without a vibrant small business sector that constantly rejuvenates and challenges the sometimes sclerotic business culture of large companies.

While not all SMEs are successful, with many failing and new ones created, a significant number of SMEs not only survive, but by following the appropriate strategies, perform well in the competitive marketplace (Bernard, Jensen, & Schott, 2006). Past research has investigated the unique strategies that SMEs can employ to improve performance. For example, studies have shown that SME performance benefits through innovation, niche or focused operations, the use of international alliances, marketing orientation, and entrepreneurial tendencies (Keh, Nguyen, & Ng, 2007; Kohn, 1997; Qian & Li, 2003; Rosenbusch, Brinckmann, & Bausch, 2011).

A recent meta-analysis of 46 published and unpublished studies on innovation found that both innovation orientation, and innovation activities create value for new and established SMEs (Rosenbusch, et al., 2011). Niche or focused operations allow SMEs to concentrate limited resources, overcome size constraints, and maximize core competencies (Fiegenbaum, Hart, & Schendel, 1996; Kohn, 1997). Another area of SME research has illustrated the potential advantages of upstream vertical alliances, previous alliance experience, and the importance of forming alliances when expanding internationally (Arend, 2006; Lohrke, Kreiser, & Weaver, 2006; Steensma, Marino, Weaver, & Dickson, 2000). Additional areas of SME research include marketing orientation (Raju, Lonial, & Crum, 2011; Rosenbusch, et al., 2011), trust (Gaur, Mukherjee, Gaur, & Schmid, 2011) and entrepreneurial tendencies more complex than commonly found in consumer markets (Cooper & Jackson, 1988). Industrial buyers tend to require more specialized information, use a different set of behavior factors, and rely
more on rational group decisions, compared to consumer marketplace buyers (Rau & Samiee, 1981).

According to the knowledge-based view of the firm, applying this superior market knowledge in ways that are hard to imitate can create sustainable competitive advantage for a company. Domestic firms possessing superior local market knowledge typically have a better understanding of the local business environment and the needs of the buyer (Lu & Beamish, 2006); this can provide a basis for specialized niche strategies.

Unfortunately, certain aspects of superior local market knowledge, such as familiarity and access to distribution networks, may diminish over time as foreign and domestic companies acquire similar knowledge through avenues such as alliances with other firms possessing knowledge, or by hiring local employees (Wilkinson, Peng, Brouthers, & Beamish, 2008). However, certain aspects of local market knowledge are “sticky”. These “sticky” characteristics include complexity, specificity, and/or being tacit; each of these aspects has the potential to create imitation barriers (Galunic & Rodan, 1998; Von Hippel, 1998; Zander & Kogut, 1995). Domestic SMEs able to capitalize on the non-imitability of their superior local market knowledge may be able to develop niche strategies that generate sustainable competitive advantage (Covin, Slevin, & Covin, 1990).

I propose that domestic SMEs in industrial markets that use their superior local market knowledge to develop niche strategies to create sustainable competitive advantage typically outperform their domestic counterparts. More specifically, I hypothesize that SMEs in industrial markets that use specific knowledge to develop niche strategies that target: (1) specific product needs, (2) specialized supply needs, or (3) use a specialized
product strategy, on average, outperform domestic SMEs that do not use these strategies in their domestic markets.

This research extends KBV theory in two ways. First, it applies KBV theory to domestic industrial SMEs struggling to compete in a developed domestic market with increasing competition from MNEs. Second, it further strengthens the relationship between KBV theory and niche marketing (Bierly III & Daly, 2007). This research uses survey data collected from a sample of SME industrial manufacturers in the U.S.

Literature Review

Sustainable Competitive Advantage

Firms that employ value creating strategies that their rivals are unable to easily duplicate are deemed to have a sustainable competitive advantage (O'Shannassy, 2008). Sustainable competitive advantage (SCA) can reside in superior internal resources like patents, trademarks, proprietary know-how, firm reputation and brand equity (Barney, 1991), and/or in having a market-based advantage that cannot be easily imitated by the competition (Holburn & Zelner, 2010). Firms that develop SCA are able to engage in monopolistic competition and obtain supra-normal profits (Duan, et al., 2009). With the importance of SCA and the major role that SMEs play in economies, it is not surprising that research tying SCA to SMEs has covered a wide range of resources, including: innovation (Rangone, 1999), the ability to exploit niche markets (Lee, Lim, & Tan, 1999), alliance formation (Bretherton & Chaston, 2005; Gottschalg & Zollo, 2007), organizational learning (Olavarrieta & Friedmann, 2008), and entrepreneurial orientation (Aragon-Corra, Hurtado-Torres, Sharma, & Garcia-Morales, 2008; Yu, 2001).
A firm’s capacity to capitalize on their market orientation has been shown to be a strong source of competitive advantage, due to the firm’s ability to understand the nature of value to the customer, and the causal implications of market oriented norms and behaviors (Kumar, Jones, Venkatesan, & Leone, 2011; Pelham, 2000; Raju, et al., 2011). Closely related to market orientation research is the ability of SME firms to be more flexible in responding to the needs of the customers in terms of output volumes, technology changes, and both inter-firm and personal relationships (Aragon-Correa, et al., 2008; Fiegenbaum & Karnani, 1991).

SMEs may also be able to mitigate resource disadvantages by creating an advantage based on flexibility, defined here as a firm’s ability to rapidly respond to market changes (Bierly III & Daly, 2007; Li & Ogunmokun, 2000). In order for a firm to employ strategies based on flexibility, it needs to possess expert knowledge about the local market/customer needs (Johnson, Sohi, & Grewal, 2004; Luca & Atuahene-Gima, 2007). Such knowledge may be used to increase a firm’s ability to discover and exploit specific market opportunities that can create a basis for differentiation and sustainable competitive advantage (Wiklund & Shepherd, 2003).

Knowledge-based View of the Firm

Market knowledge has been found to be a determinant of performance differences (Gassmann & Keupp, 2007). Successfully converting knowledge into planned outcomes is a key aspect of the knowledge-based view of the firm (De Clercq & Dimov, 2008). The knowledge-based view of the firm focuses on a firm’s intangible resources, rather than on its physical assets (Gassmann & Keupp, 2007). Knowledge is arguably among the most important intangible strategic resources, because organizations with
superior knowledge can create new and distinctive ways to combine traditional assets and resources; thereby providing superior value to customers (Sharkie, 2003; Teece, et al., 1997). For this reason, the ability to acquire, develop, share, and apply knowledge can lead to the creation of SCA (Grant, 1996; Kogut & Zander, 1992; Macher & Boerner, 2006; Matusik & Hill, 1998). According to the knowledge-based view, internally embedded knowledge can provide a basis for SCA because it has value, is a unique creation, and therefore is difficult to imitate (Tsai & Li, 2007; Zack, 1999).

According to McEvily and Chakravarthy (2002), there are three characteristics of knowledge that increase the non-imitability or “stickiness” of knowledge, and have been linked to imitation barriers: complexity, specificity, and being tacit. These characteristics increase the costs to transfer knowledge across organizational boundaries, and may frustrate competitors’ efforts to replicate (Galunic & Rodan, 1998; McEvily & Chakravarthy, 2002; Von Hippel, 1998; Zander & Kogut, 1995).

Complexity is usually defined according to various aspects that increase the difficulty to understand the functions of a system and how it produces outcomes (McEvily & Chakravarthy, 2002), which in turn, may raise the costs of transfer and increase the likelihood of imperfect imitation (Dierickx & Cool, 1989). This is especially pertinent for SMEs in industrial markets where demands are typically more complex (Cooper & Jackson, 1988). Domestic SMEs that appropriately apply their local market knowledge may readily navigate the complexity of the industrial marketplace (Harvey, Speier, & Novicevic, 1999).

Local market knowledge can be referred to as specific when it is either maximally effective in a particular use, or when utilized by a particular firm (McEvily &
Applying local market knowledge in the development of niche strategies targets specific applications or services. When local market knowledge is used in a specific manner, it may prolong a firm’s advantage by increasing the immobility of its distinctive resources (Peteraf, 1993).

The final aspect of local market knowledge “stickiness” is being tacit, which can be described as the inability to articulate knowledge (McEvily & Chakravarthy, 2002). Knowledge can be difficult to articulate, particularly when it is learned implicitly, or because it has become second nature and is taken for granted (Reber, 1993), such as is commonly the case for local market knowledge that domestic firms possess.

In markets where increased levels of competition exist, expert knowledge of the local business environment becomes an especially important resource. Foreign and domestic MNEs commonly have superior financial, technological, and managerial resources when compared to domestic SMEs (Bierley III & Daly, 2007; Mezias, 2002). However, some domestic SMEs have a superior knowledge and understanding of the marketplace, and for that reason can better address specific needs of their customers (Boisot & Child, 1996; Li & Li, 2008).

Firms that have superior knowledge of their markets and know better ways to serve their customers, find it easier to develop and implement solutions to customer needs; this can result in higher levels of firm performance (Shane, 2000; Wiklund & Shepherd, 2003). This type of knowledge can be abundant in some firms because of their myriad of domestic experiences and familiarity with the local marketplace; this can prove advantageous in industrial markets. Although some advantages related to local market knowledge may diminish over time (Wilkinson, et al., 2008), firms that apply local
market knowledge in unique ways, such as developing niche strategies, are still be able to create sustainable competitive advantage (Tsai & Li, 2007). Superior local market knowledge is often expressed in a better understanding of customer needs, strong relationships with government agencies, improved access to distribution channels, and a enhanced understanding of the dynamics around product strategies (Child & Rodrigues, 2005; Hitt, et al., 2000; Hitt, et al., 2005; Slotegraaf, Moorman, & Inman, 2003).

More specifically, I develop three hypotheses based on niche strategies derived from superior local knowledge, that if used, can result in enhanced performance: strategies that focus on specific product needs, tight delivery schedules, and specialized products. I theorize that domestic SMEs that use niche strategies based on superior local market knowledge will typically perform better than SMEs that do not.

*Specific Product Needs*

Developing niche strategies focused on specific product needs by using local knowledge is one example of translating superior local market knowledge into a basis for competitive advantage (Li, et al., 2008). SMEs that compete in the industrial marketplace regularly face buyers whose demands typically are more complex than buyers commonly find in the consumer marketplace (Cooper & Jackson, 1988). Industrial buyers typically place a greater emphasis on information, use group decision making, and rely on a different set of behavior factors, compared to consumer marketplace buyers (Rau & Samiee, 1981).

The industrial market buying experience is comprised of rational motives, defined purchasing policies and methods, volume purchasing, sensitivity to product specification and performance, and a large proportion of sales in raw materials and semi-finished
products and components (Industrial Marketing Committee Review Board, 1954; Kahn & Mentzer, 1995). Additional studies have shown that criteria such as reciprocity relationship with the supplier, personality, salesmanship, and technical expertise, and firm size can also play a critical role in the industrial buyer/seller experience (Sheth, 1973).

These criteria suggest that it is important for SMEs in industrial markets to have an extensive knowledge of the criteria that an industrial buyer uses in order to be successful. Local SMEs are well situated to acquire and exploit this type of knowledge (Harvey, et al., 1999); they tend to have superior knowledge of the market conditions and the needs of the buyer (Lu & Beamish, 2001). With this knowledge, SMEs are able to anticipate new projects, better address changes in the marketplace, and adjust to changes in schedules; flexibility that comes from local market knowledge which domestic SMEs can exploit (Zhang & Morrison, 2007).

Using their local market knowledge, domestic SMEs can develop niche strategies targeting those products that address specific customer needs. Based on the above discussion, I hypothesize that:

H1: SMEs in industrial markets that use a strategy targeting customers that require specific product needs, typically have higher performance than SMEs that do not.

Specialized Supply Network

A second aspect of KBV theory related to local market knowledge in industrial markets is expressed in specialized supply networks. Developing and employing strategies based on an understanding of local customers’ specialized supply networks
allows domestic SMEs possessing superior market knowledge to establish a competitive advantage in the marketplace (Li, et al., 2008). One example of this is found in the difficulty that foreign firms have in penetrating Japanese markets (Beamish & Inkpen, 1995). Local companies have to develop long-term relationships with a number of firms and provide them with frequent deliveries and small amounts of merchandise. As a result, local companies that supply these businesses have developed a sustainable competitive advantage, which has protected them from foreign competition. Firms that have an understanding of local business practices and develop niche strategies are more likely to operate more economically, and create higher profits than their foreign or domestic counterparts who do not possess this knowledge (Li & Li, 2008; Luo, 1997). Local market knowledge gives SMEs the ability to form formidable bonds with suppliers and customers that are not easily replicated, allowing them to target applications and products that require specialized supply networks (Boisot & Child, 1996).

One area where specialized supply networks can be exploited is in markets where customers require tight delivery schedules. One example of this is TNT, a British company that is a market leader in express delivery. A major component of TNT’s success is their ability to identify niche opportunities to enhance their business. They have developed a network that allows them to take advantage of available storage space in regularly scheduled, long distance bus routes managed by a national bus company. This specialized network allows TNT to minimize costs, while still meeting the tight delivery schedules of their customers. TNT used their superior local market knowledge to tap into an outside source, which enables them to target customers with stringent delivery requirements (Jones, 1995).
Similarly, by using their local market knowledge, SMEs in industrial markets can develop niche strategies associated with targeting those customers that require tight deliveries. Using specialized supply networks can further enhance these niche strategies. Based on the above discussion, I hypothesize that:

H2: SMEs in industrial markets that use a niche strategy targeting customers that require tight a delivery schedule typically have higher performance than SMEs that do not.

**Specialized Product Strategy**

A third aspect of KBV theory related to local market knowledge is expressed in specialized product strategies. I propose that KBV theory provides the basis for SMEs to develop product strategies that can provide competitive advantage, by identifying areas where additional value can be created that are contrary to the typical or “generic” product strategies of the industrial market.

Brouthers, et al. (2000) advanced the concept of generic product strategies (Day, 1990) in the international business literature, demonstrating that national differences in factor costs, corporate climates, competitive structures, and demand conditions (the combination of all termed the “dominant demand structure”) result in different home country “generic product strategies” for each of the Triad “nations” of Japan (superior value), the EU (premium), and the USA (economy) (Brouthers & Pieper, 2009). Brouthers, et al. (2000) determined that U.S. firms typically pursued an “economy” strategy (lower quality, lower price) in order to achieve strategic fit with their home country business environment. Among the driving forces of lower quality/lower price strategies in the U.S. are the short term perspective with respect to employee relations,
Based on the above discussion, it would appear that the most common path for domestic SMEs in industrial markets in the U.S. is to choose the “economy” product strategy. However, much of the research conducted on pricing strategies in the U.S. (including generic product strategies) involved larger firms (Hill, Hitt, & Hoskisson, 1988; Sin, Chellappa, & Sambamurthy, 2005). Previous efforts have determined that findings for MNEs do not always apply to SMEs (Rangone, 1999). SMEs are not merely smaller versions of big business; frequently, they deal with different issues and behave differently in how they analyze and interact with their environments (Rangone, 1999; Shuman, Shaw, & Sussman, 1985).

SMEs that use an “economy” product strategy find themselves competing with MNEs that have advantages such as reduced input costs, and economies of scale (Bierly III & Daly, 2007), which makes competing with an “economy” product strategy difficult. This difficulty is compounded by emerging market firms that typically enter the domestic market with products of comparative quality at lower prices (Brouthers & Xu, 2002); providing economy products at lower prices than the domestic SMEs, resulting in a decrease in domestic firm profit margins (Chung, 2001; Ghosal, 2002; Katics & Petersen, 1994). The increased intensity of foreign competition forces marginal competition out of the industry, leaving behind firms that have adjusted to the vastly more competitive market (Caves, 1996; Wiersema & Bowen, 2008).

Market knowledge is a key aspect of product strategy that allows firms to differentiate themselves (Slotegraaf, et al., 2003). Whereas the generic product strategies
in the U.S. are based on lower cost/lower quality, industrial SMEs that develop product strategies based on their local market knowledge may wish to differentiate their product strategy from what is common, enabling them to create unique product offerings.

One alternative to generic product strategies are specialized product strategies, such as market-driven product strategies, which are often shaped by unique opportunities and threats in the market and competitive environment (Cravens, Piercy, & Prentice, 2000). Firms that develop market-driven product strategies match distinctive capabilities with superior customer value opportunities. By doing so, they develop strategies which take into account differences in customer needs and preferences, using such differences to develop competitive advantages (Cravens, et al., 2000); this provides a significant advantage for those firms faced with the complex demands of industrial buyers (Cooper & Jackson, 1988). In contrast, SMEs that continue to use the economy product strategy are forced to either find other sources of competitive advantage, such as improved efficiencies and technological development, or be forced out of the industry (Caves, 1996; Driffield & Munday, 2000; Scherer & Huh, 1992).

In the industrial marketplace, most buyers prefer higher quality goods (Calantone & Knight, 2000). Past research indicates that those firms that are able to determine and produce the level of quality that industrial buyers prefer, perform better over time (Calantone & Knight, 2000). I propose that U.S. SMEs in industrial markets that use their local market knowledge to develop niche strategies that produce higher quality products create a sustainable competitive advantage, and as a result, achieve higher levels of performance than SMEs that pursue other product strategies. Thus, I hypothesize:
H3: U.S. SMEs in industrial markets that emphasize a quality product strategy typically have higher performance than U.S. SMEs that do not.

Methods

Sample

The USA was selected for this study as an example of a developed country with large numbers of manufacturing SMEs that face foreign competition (Payne & Yu, 2011; USSEC, 2010). Consistent with the U.S. Small Business Administration, SMEs are defined as firms with less than 500 employees (Hayton, 2003).

To collect the data, a list of SMEs was obtained from a professional database company that provides multi-channel, direct marketing services, with a specialty in postal, email, and telephone list solutions. The list contained 9,800 contacts from SME manufacturing companies within industrial markets located in the U.S.; most were CEOs or owners of the company. Similar to prior research (Ma, Yao, & Xi, 2009), a sample size of 250 potential participants were selected from the original list.

An attempt was made to get in touch with each person in the sample via the telephone (Audia & Rider, 2005; Dickson, Weaver, & Hoy, 2006). Seventy-one contacts were eliminated because either (1) the phone numbers were disconnected, or (2) the employee was no longer with the company. This left an effective sample size of 179. In two rounds of telephone calls, 98 respondents completed the survey, which resulted in a response rate of 54.7%. The completed surveys represent 98 firms with a mean age of 43.5 years, and an average firm size category of 2.39 (1 = 1 to 9 employees; 2 = 10 to 49 employees; 3 = 50 to 250 employees; 4 = 250 to 499 employees).
**Dependent Variable**

This study uses a perceptual measure of firm performance similar to ones used in previous studies (Brouthers, et al., 1999; Brouthers, et al., 2005; Luo, 2001; Nitsch, et al., 1996). Perceptual measures of performance were chosen to avoid the reluctance typically found in private firm respondents who are asked to divulge financial information (Wilkinson & Brouthers, 2006).

Previous research has shown that objective measures of performance and perceptual measures of performance satisfaction correlate well (Dess & Robinson Jr, 1984; Geringer & Herbert, 1991). Additionally, Ketokivi and Schroder (2004) analyzed perceptual performance measures using a multi-trait, multi-method analysis to investigate item-specific trait, method and error variance, with the results showing that the requirements of both reliability and validity were met. For all of the above reasons, the use of subjective performance measures appears to be warranted.

The measures for satisfaction with performance consist of five different items; each evaluating the level to which the respondent is satisfied with that aspect of firm performance. The five items are satisfaction with: sales growth, profitability, marketing, managing customer relationships, and overall performance. As in prior research, each of the five items were measured on a 10-point Likert scale, ranging from 1 (very unsatisfied) to 10 (very satisfied) to assess performance (Brouthers, et al., 2003; Brouthers & Pieper, 2009; Dess & Robinson Jr, 1984; Geringer & Herbert, 1991). The data for the five performance variables was collected, and a summated composite score was calculated to create a single variable (PERFORMANCE). A factor analysis
confirmed that the five performance measures could be loaded into a single factor (Cronbach’s alpha of .804) (Hair, et al., 2010).

*Independent Variables*

In this study, there are three independent variables of interest. The first two variables of interest are strategies used to address competition: whether a firm uses a strategy to address specific product needs of their customers (PNEEDS), and whether a firm uses a strategy that targets customers that require a tight delivery schedule (DELIVERY). A total of five strategy selections were provided to the respondents (Matsuno & Mentzer, 2000), including those of interest, and asked, “Which of the following strategies does your firm use?” The respondents were directed to select all of the strategies that apply to their business. The responses were coded with “1” for each of the specified strategies if selected, and “0” if they did not select the specific strategy.

The third variable of interest is the selection of a primary product strategy (PSTRATEGY). Generic product strategies have been shown to influence the development of MNE and SME product strategies (Brouthers, et al., 2005; Brouthers & Pieper, 2009; Brouthers, et al., 2000). Research proposes that different national factor costs, corporate climates, and competitive structures produced stereotypic generic product strategies (Brouthers, et al., 2000). As in prior studies (Brouthers, et al., 2005; Brouthers & Pieper, 2009; Brouthers, et al., 2000; Matsuno & Mentzer, 2000), respondents were asked to select the primary product strategy used by their firm from a list of product strategies. The responses are coded with “1” for firms that emphasize a quality product strategy, and coded “0” if they do not. Similar measurements have been used in past research to measure a firm’s strategy (Martin & Grbac, 2003).
<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXPERIENCE</td>
<td>Number of years the firm has been in business.</td>
<td>Numeric</td>
</tr>
<tr>
<td>FIRM_SIZE</td>
<td>Number of employees at the firm.</td>
<td>Category</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 = 1 to 9;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 = 10 to 49;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 = 50 to 249;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 = 250 to 499;</td>
</tr>
<tr>
<td>TECHNOLOGY</td>
<td>Technology level of your firm’s primary product.</td>
<td>Low/Medium/High</td>
</tr>
<tr>
<td>RESOURCES</td>
<td>Firm has access to substantial financial resources (1=strongly disagree, 7=strongly agree).</td>
<td>7-point Likert scale</td>
</tr>
<tr>
<td><strong>Dependent variable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SGROWTH</td>
<td>Satisfaction w/ firm performance in terms of:</td>
<td>5 items</td>
</tr>
<tr>
<td>PROFIT</td>
<td>Sales growth</td>
<td>10-point Likert scale</td>
</tr>
<tr>
<td>MKTSHARE</td>
<td>Profitability</td>
<td>10-point Likert scale</td>
</tr>
<tr>
<td>CUSTREL</td>
<td>Managing customer relationships</td>
<td>10-point Likert scale</td>
</tr>
<tr>
<td>OVERALL</td>
<td>Overall performance</td>
<td>10-point Likert scale</td>
</tr>
<tr>
<td><strong>Independent variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNEED</td>
<td>Focus on specialized product needs of customers.</td>
<td>Yes/no</td>
</tr>
<tr>
<td>DELIVERY</td>
<td>Target customers with tight delivery schedules.</td>
<td>Yes/no</td>
</tr>
<tr>
<td>PSTRATEGY</td>
<td>Firm’s primary product strategy: Emphasize product quality.</td>
<td>Yes/no</td>
</tr>
</tbody>
</table>

This study uses multi-item measures for the perceptual data. However, this survey also follows the lead of prior research in using single item measures to represent the objective data, such as the different strategies that are employed by the firm (Beamish & Inkpen, 1995; Brouthers, et al., 2005; Brouthers, et al., 2000).
Some scholars argue that multi-item measures should be used instead of single item measures (Churchill Jr, 1979). However, single item measures used to collect objective data rather than perceptual data are found in previous studies (Brouthers, et al., 2005). Moreover, several previous studies have examined and support the predictive validity of single item measures (Bergkvist & Rossiter, 2007; Wanous & Hudy, 2001; Wanous, Reichers, & Hudy, 1997). For instance, in their study of two widely used constructs in advertising, Bergkvist and Rossiter (2007) measure the predictive validity of multi-item versus single-item measures. They found that the single item measures demonstrated equally high predictive validity as the multiple-item measure (Bergkvist & Rossiter, 2007). Finally, the use of single-item measures for the independent variable in conjunction with a multi-item dependent variable can help to avoid common methods variance (Bergkvist & Rossiter, 2007; Podsakoff & Organ, 1986).

**Control Variables**

This study includes four control variables: firm experience (EXPERIENCE), the size of the firm (FIRM_SIZE); a firm’s level of technology (TECHNOLOGY), and its financial resources (RESOURCES). Similar to prior research, experience is measured in terms of the number of years since the firm was founded (Chung, et al., 2010); while the size of the firm is measured by the number of employees (Goerzen & Beamish, 2005; Nakos & Brouthers, 2008). Prior studies have shown that the level of technology affects the performance of a firm (Isobe, Makino, & Montgomery, 2000; Li, Lam, & Qian, 2001). In this study, the respondents were asked to select the level of technology the firm embeds in their products. Respondents are given three choices: low technology, medium technology, and high technology.
Similarly, access to financial resources can be a contributing factor in how well a firm performs (Hitt, et al., 2004). As with Borch, et al. (Borch, et al., 1999), a self-reported item on a seven-points Likert-type scale was used to measure financial resources. Using the metric 1 equaling “strongly disagree” and 7 equaling “strongly agree”, the respondents were asked to indicate their level of agreement with the statement, “My firm has access to substantial financial resources” (Borch, et al., 1999).

Analysis

The first step of the analysis examines the correlations between the variables to check for multicollinearity (Hair, et al., 2010). All the variables, including the control variables, are used in the correlation matrix. Hair et al. (2010) suggests that the maximum limit for VIF should be 10. An analysis of all the variables showed that the maximum variance inflation factor for the variables is 1.423, well below the recommended limit. Hence, common methods variance appears not to be an issue in this study. Additionally, results from a bivariate correlations analysis shown in Table 5 revealed that the maximum correlation coefficient is 0.49 (2-tailed test), well under 0.8, the potentially harmful level of multicollinearity threshold, suggested by Hair et al. (2010).

Common Methods Variance

There is some concern about the occurrence of common methods variance, because both the dependent and independent variables were gathered from the same respondents (Nakos & Brouthers, 2008). Common methods variance is also a concern when both the dependent and independent variables are subjective (Brouthers, Nakos, Hadjimarcou, & Brouthers, 2009). In this study, the independent variables are objective,
while the dependent variable is subjective. For this reason, common methods variance should not be an issue. However, a single factor method is used to ensure that common methods variance does not occur (Podsakoff & Organ, 1986). According to Podsakoff & Organ (1986), common methods variance does not occur if all the variables in the study do not load into one factor, and a single factor cannot explain the majority of the variance. Using all eight variables of interest, an exploratory factor analysis showed that the variables loaded into three factors, the largest of which accounted for only 26.7% of the variance. This also supports the claim that common methods variance does not appear to be an issue with this study.

Table 5: Essay #2 – Descriptive Statistics and Correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>30.41</td>
<td>43.52</td>
<td>2.39</td>
<td>0.44</td>
<td>4.61</td>
<td>0.74</td>
<td>0.44</td>
<td>0.69</td>
</tr>
<tr>
<td>StdDev</td>
<td>7.41</td>
<td>26.38</td>
<td>0.93</td>
<td>0.50</td>
<td>1.70</td>
<td>0.44</td>
<td>0.50</td>
<td>0.46</td>
</tr>
<tr>
<td>PERFORMANCE</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXPERIENCE</td>
<td>-0.05</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIRM_SIZE</td>
<td>0.16</td>
<td>0.35***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TECHNOLOGY</td>
<td>0.44***</td>
<td>-0.25**</td>
<td>0.12</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RESOURCES</td>
<td>0.49***</td>
<td>0.08</td>
<td>0.24**</td>
<td>0.45***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNEED</td>
<td>0.21*</td>
<td>0.13</td>
<td>0.22*</td>
<td>0.00</td>
<td>0.03</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DELIVERY</td>
<td>-0.10</td>
<td>0.22*</td>
<td>0.01</td>
<td>-0.08</td>
<td>-0.02</td>
<td>0.14</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>QUALITY</td>
<td>0.31***</td>
<td>-0.06</td>
<td>0.14</td>
<td>0.10</td>
<td>0.24**</td>
<td>0.12</td>
<td>0.10</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Sig. (2-tailed): * p < .05; ** p < .01; *** p < .001; N=98

Results

The relative influence of the three independent variables on the dependent variable is evaluated using hierarchical linear regression models (Hair, et al., 2010). A regression model with the four control variables (EXPERIENCE, FIRM_SIZE,
TECHNOLOGY, and RESOURCES) is tested to establish a baseline adjusted $R^2$ value. Results in Model 1 indicate that the control variables for experience and firm size were not significant, while high technology products ($\beta = 0.261; p < .01$) and access to substantial financial resources ($\beta = 0.365; p < .01$) are both significant, and positively related to satisfaction with performance (1-tailed test). Model 1 explains 30.6 per cent of the variance in satisfaction with performance. Model 1 was found to be significant ($p < .01$).

Four additional models that included the controls variables were used to test the significance of the independent variables (PNEED, DELIVERY and PSTRATEGY) both individually and collectively, to determine if SMEs in industrial markets that use niche strategies based on local market knowledge have higher levels of performance than those that do not.

Model 2 indicates the results for the variable PNEED, which was used to assess H1: SMEs in industrial markets that use a strategy targeting customers that require specific product needs typically have higher performance than SMEs that do not; results were positive ($\beta = .205$) and significantly related to the satisfaction with performance variable ($p < .05$). These results support H1 and fall in line with prior research, which indicates that those companies with superior knowledge of the market conditions and needs of the buyer can better adjust to changes and demands of the local market (Lu & Beamish, 2001; Zhang & Morrison, 2007).

The second hypothesis, H2: SMEs in industrial markets that use a niche strategy targeting customers that require tight deliver schedules typically have higher performance than SMEs that do not, tested in Model 3 was not supported.
Table 6: Essay #2 – Hierarchical Regression

<table>
<thead>
<tr>
<th>Results</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPERIENCE</td>
<td>-0.03</td>
<td>-0.05</td>
<td>-0.01</td>
<td>-0.01</td>
<td>0.02</td>
</tr>
<tr>
<td>FIRM_SIZE</td>
<td>0.06</td>
<td>0.02</td>
<td>0.05</td>
<td>0.03</td>
<td>-0.02</td>
</tr>
<tr>
<td>TECHNOLOGY</td>
<td>0.26 ***</td>
<td>0.26 ***</td>
<td>0.26 ***</td>
<td>0.28 ***</td>
<td>0.28 ***</td>
</tr>
<tr>
<td>RESOURCES</td>
<td>0.037 ***</td>
<td>0.37 ***</td>
<td>0.36 ***</td>
<td>0.31 ***</td>
<td>0.32 ***</td>
</tr>
<tr>
<td>PNEED</td>
<td></td>
<td>0.21 **</td>
<td></td>
<td></td>
<td>0.20 **</td>
</tr>
<tr>
<td>DELIVERY</td>
<td></td>
<td>-0.08</td>
<td></td>
<td></td>
<td>-0.13</td>
</tr>
<tr>
<td>QUALITY</td>
<td></td>
<td></td>
<td>0.20 **</td>
<td></td>
<td>0.20 **</td>
</tr>
<tr>
<td>R²</td>
<td>0.306</td>
<td>0.345</td>
<td>0.311</td>
<td>0.344</td>
<td>0.391</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.276</td>
<td>0.310</td>
<td>0.274</td>
<td>0.308</td>
<td>0.344</td>
</tr>
<tr>
<td>Change in R²</td>
<td>0.040 **</td>
<td>0.005</td>
<td>0.038 **</td>
<td>0.086 ***</td>
<td></td>
</tr>
<tr>
<td>F-value for change in R²</td>
<td>5.570</td>
<td>0.726</td>
<td>5.352</td>
<td>4.213</td>
<td></td>
</tr>
<tr>
<td>F-value significance</td>
<td>0.010</td>
<td>0.199</td>
<td>0.012</td>
<td>0.004</td>
<td></td>
</tr>
</tbody>
</table>

Sig. (1-tailed): * p < .10; ** p < .05; *** p < .01; N = 98

The third variable (PSTRATEGY), shown in Model 4, was used to test H3: U.S. SMEs in industrial markets that emphasize a quality product strategy typically have higher performance than U.S. SMEs that do not. H3 was also supported with positive results (β = .204), indicating that it too was significantly related (p = < .05) to satisfaction with performance. Prior research suggests that those firms that are able to determine and produce the level of quality that industrial buyers prefer, tend to perform better (Calantone & Knight, 2000), which the results for H3 support. Model 5 was used to test the three independent variables, together with the control variables. Similar to the individual analyses (Model 2 and Model 4), H1 and H3 are both positive (β = .201; β = .200) and statistically significant (p < .05).

Even though the second hypothesis was not supported, the change in R² from Model 1 to Model 5 was 0.086, which is significant (p < .01), and indicates that there is some merit to the idea that domestic SMEs that pursue strategies which use local market...
knowledge to focus on niche markets will, on average, have a higher performance satisfaction than those domestic SMEs that do not.

Conclusion

I began this study by suggesting that SMEs in developed economies face increasing competition from MNEs (both domestic and foreign) possessing superior experience, financial and managerial resources (Kahn & Mentzer, 1995; Shaked, 1986). This difficulty is compounded by the challenging nature of the industrial marketplace (Kahn & Mentzer, 1995). Some MNEs from emerging markets compete by offering lower prices (Brouthers & Xu, 2002), a strategy that industrial firms find particularly difficult to compete against (Giunipero, Denslow, & Eltantawy, 2005). In spite of these challenges, SMEs still account for more than 99.7% of firms in the USA, and 50% of all firm employment (USSBA, 2010).

I developed a theory suggesting one way SMEs could compete. In doing so, I (1) extended KBV theory to focus on how it specifically applies to SME research; and (2) strengthen the ties between KBV theory and niche marketing (Bierly III & Daly, 2007). More specifically, I proposed that industrial SMEs that use superior local market knowledge to develop niche strategies typically outperform SMEs that do not. I hypothesized that SMEs in industrial markets that use strategies targeting (1) specific product needs, (2) tight delivery schedules, and (3) quality products will have a higher mean performance than SMEs that do not use these strategies. My hypotheses were tested on a sample of 98 manufacturing SMEs in the U.S.
I empirically examined my three hypotheses, two of which were supported by the analysis. I first hypothesized that industrial SMEs that develop a niche strategy that focus on specific product needs are more satisfied with performance than industrial SMEs that do not. This hypothesis was empirically supported. I also found support for the hypothesis that industrial SMEs that emphasize a quality product strategy will be more satisfied with performance than SMEs that do not. I did not find support for the hypothesis that SMEs which develop strategies that focus on tight delivery schedules would have better performance. However, empirical results provide initial support for the notion that SMEs from developed countries can use superior local market knowledge as a basis for increasing firm performance in industrial markets.

Limitations and Future Research

As with any research that attempts to extend the bounds of established theory such as KBV, there are certain limitations and ample opportunity for future research. First, limiting the number of strategies to three, offers a mere taste of the possibilities that exist. There may be several additional niche strategies that could be based on superior market knowledge. For example, utilizing the knowledge of specialized supply networks could entail more than just tight delivery needs; requirements for special types of packaging, or minimizing the number of deliveries, or the size of deliveries, may possibly be ways that specialized supply networks may be employed. I showed that niche strategies that focus on specific product needs of the customer, and a product strategy that focuses on quality, enhances satisfaction with performance. Another strategy that may be investigated could focus on the specific pricing needs of the customer, in addition to a supporting product strategy like quality.
Second, this research focused on the U.S. as a developed economy. Brouthers et al. (2005) have shown that different developed economies have different dominant generic product strategies. Future research could examine whether the quality product strategy works equally well in all types of developed economies; it could also examine how well it works in emerging economies at different stages of development. Does development of niche strategies based on KBV theory apply to SMEs in emerging economies, where the dynamics are different?

Finally, this research focuses only on industrial SMEs. Do the same theories apply to consumer focused SMEs, or to SME service firms? Perhaps there are knowledge based strategies specific to different types of SMEs that create advantages in differing marketplaces.

My findings have at least two managerial implications for industrial SMEs that are facing increased competition. First, this research suggests that SMEs which develop niche strategies that focus on the product needs of the customer, improve firm performance. Second, SMEs that develop product strategies that focus on quality enhance firm performance. Thus, my study provides two potential strategies manufacturing SMEs in developed economies can effectively use in their increasingly globalized business environments.

Finally, the objective of this research was to apply KBV to SMEs and knowledge based niche strategies, and as such is research opening. Three potential strategies were tested: only two were supported. However, other KBV performance enhancing strategies may exist for manufacturing SMEs in developed economies, like the USA, that are facing increased competition. Similarly, other KBV-based strategies may exist for SMEs in
other types of economies and/or different types of industries. Future studies could help to identify and empirically examine these additional strategies. By doing so, scholars can extend the investigations begun in this study.
References


