Are Pure Strategies Better in Transition Economy Environments?

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ABSTRACT

One of the dominant views in strategic management is the superiority of a pure strategy. In this view, better outcomes result from pursuing a single business-level strategy of cost leadership or differentiation rather than a mixed strategy. However, this claim is founded on the implicit assumption of a developed market economy. We explore how well this view applies in the context of transition economies. We use Porter’s generic strategy framework and economic institutional theory to frame our arguments. We test our hypotheses on firms in Central and Eastern Europe. We find that firms with a mixed strategy set are more successful. We also find that firms with pure strategies become more successful when economic institutional environments are more market oriented.

Key words: Strategic Management, Generic Strategy, Economic Institutions

INTRODUCTION

A dominant view in the field of strategic management is that pure business strategies result in better outcomes than mixed strategies (Campbell-Hunt 2000; Porter 1980; White 1986). In this view, the pure strategy choices are cost or differentiation. In contrast to a pure strategy, a mixed strategy is argued to produce the unsatisfactory result of being ‘stuck-in-the-middle’ (Porter 1980), since the underlying systems needed to specialize in each pure strategy are fundamentally different and are often in conflict. This dominant view has been called the “purity hypothesis” (Thornhill & White 2007: 555). Following Porter’s compelling admonition not to get ‘stuck in the middle’; there has been much controversy about the effects of strategy purity (Karnani 1984; Campbell-Hunt 2000; Thornhill & White 2007). The intent of our study is to explore one of the boundaries of Porter’s generic strategy framework.

The generic strategy framework was established from observations of firms in developed, free-market environments. We ask how such relationships will differ in developing economies. Strategy-performance relationships have been studied in developing economies. For example, Khanna and his colleagues have argued that emerging markets may not adhere to developed economy perspectives regarding corporate-level strategies, such as diversification and strategic groups (Khanna & Palepu 1997; Khanna, Palepu & Sinha 2005; Khanna & Rivkin 2001). To date, no one has examined if the same limitations apply to business level strategies. Namely, is pursuing a pure business strategy of cost
leadership or differentiation better than pursuing a mixed strategy in developing markets where market-based institutions are not yet established. In this study, we seek to address the question of whether a pure or mixed business strategy will lead to desired performance outcomes in the transition economies of former Communist countries.

We believe this work makes three contributions to the literature. First, our study expands the understanding of generic strategies by theorizing and empirically testing the importance of pure versus mixed business strategies across institutional environments. Contrary to general expectations, we find that a mixed business strategy is beneficial rather than detrimental to firms in a transition economy environment. In so doing, we show the limits of the strategy purity hypothesis. Second, our study contributes to the economic institutions literature. We theorize and test the influence of the institutional environment. We find that more market-oriented environments promote successful organizational performance. This is interesting in that more competitive and risky environments appear to be beneficial regarding performance. This insight expands our understanding of how economic institutions influence the behavior and performance of firms. Furthermore, our results provide theoretical and empirical insight on the effects of institutional environments and competitive context. In sum, our analysis contributes to the institutional-based view of strategy by showing the evolution of appropriate strategies given the firm’s institutional environment.

The remainder of the paper is organized in the traditional manner. We provide theoretical background, develop hypotheses, explain our methodological approach, review the empirical results, and discuss implications.

THEORETICAL BACKGROUND

Strategic management theory is largely grounded in a developed economy context (Pearce, Dibble & Klein 2009; White 2000). This grounding implicitly assumes a relatively stable, free-market institutional environment and an institutional environment that allows firms to freely choose and implement their choices (White 2000). These traditional free-market assumptions are not necessarily valid in all global business circumstances – particularly in transitioning economies (Lin, Peng, Yang &
Sun 2009; Pearce, Dibble & Klein 2009). Our study considers competitive strategy choices and economic institutional forces on the success of firms in the transition economy context. Thus, we briefly review these aspects before developing our hypotheses.

The Transition Economy Context

The transition economy environment provides a natural experimental setting for our study. Transition economies of our study are the former Communist countries of Central and Eastern Europe (CEE) that experienced a centrally-controlled government through 1990 but since then have been moving towards a market-based economy (Peng & Heath 1996; Svejnar 2002). While the transition economies have begun to move toward market-oriented institutions, they are doing so using different approaches and maintaining some level of government involvement in the economy (Hoskisson et al. 2000; Makhija 2003; Svejnar 2002). The difference in the pace of transition results in each CEE country having institutional environments with different degrees of market orientation. Thus, this environment provides different institutional environments in which to test the performance effects of strategy choices.

Competitive Strategy Choices – Pure or Mixed

It is generally accepted that pure business level strategies result in better outcomes than mixed strategies (Campbell-Hunt 2000; Porter 1980; Thornhill & White 2007; White 1986). Pure strategies are viewed as resulting in higher performance because they: 1) allow simple and clear direction – avoiding organizational complexity, conflict, and confusion, 2) avoid mutually exclusive trade-offs, 3) provide a clear market position which reduces competitor attacks from two flanks, and 4) reduce organizational conflict for scarce resources (Miles & Snow 1978; Thornhill & White 2007; Treacy & Wiersema 1995). Nonetheless, there are examples of contradictory evidence (Karnani 1984; Campbell-Hunt 2000; Thornhill & White 2007). This contradictory perspective suggests that mixed strategies may also be beneficial because, in general, businesses seek to reduce costs and improve their products – at least to some extent (Thornhill & White 2007; Treacy & Wiersema 1995). For example, Karnani (1984: 378) argues that successful strategies may consist of doing both - low cost and high differentiation - or
“emphasizing one dimension without neglecting the other.” Overall, after almost thirty years of research the field still has not arrived at a consensus regarding the superior choice – pure or mixed strategies (Campbell-Hunt 2000; Thornhill & White 2007).

**Economic Institutions**

Economic institutions establish powerful forces which shape the formal and informal rules of the game (North 1990, 1994). Economic institutions are widely accepted as affecting firm behavior and performance (Cuervo & Villalonga 2000; Meyer 2001; North 1990; Peng 2003; Scott 1995, 2008). This literature suggests that firms will adapt to the policies, incentive structures, and enforcement mechanisms in the institutional environment (Dunning & Lundan 2008; Hodgson 2003; North 1990, 1994). This result is accomplished by institutions constraining or motivating certain actions and behaviors by affecting their value or their cost (Dunning & Lundan 2008). Institutions create and enforce numerous conditions which may affect both the behavior and the performance of firms. Institutional environments may influence the level of freedom regarding business operations, trade, access to capital, government involvement, fiscal responsibility, property rights, investment, finance, corruption, and labor regulations (Makhija 2003; North 1990; Park & Luo 2001; Peng 2003). Through these various aspects; institutions influence incentives, action-outcome relationships, and the level of competition (Newman 2000; Shinkle & Kriauciuunas 2010).

**HYPOTHESIS DEVELOPMENT**

**Strategy Purity and Performance Outcomes**

In contrast to a stable competitive arena, transition economies have organizations that are striving for survival in a shifted and changing competitive context (Peng 2003; Peng & Heath 1996). In this environment, it may not be clear what strategy will be most appropriate or successful. In this shifted environment firms may need a different approach and a mixed strategy set offers several potential advantages. In the shifted environmental situation of transition economies, a mixed strategy set may: 1) allow improvement in both cost and differentiation to better meet market requirements and catch-up to
potential foreign competitors (Child & Rodrigues 2005; Karnani 1984), 2) open options to pursue future strategies in more areas since the appropriate strategy may be unclear (Jiang, Aulakh & Pan 2009; Trigeorgis 1996), 3) allow experimentation and learning across multiple areas and activities of the firm (Bartlett & Ghoshal 2002; Lee, Beamish, Lee & Park 2009; Levitt & March 1988; March 1991; Raynor 2008), and 4) allow more of the organization to be involved across multiple strategic activities thus gaining broader support for change / improvement within the organization (Dutton, Ashford, O’Neill & Lawrence 2001; Hamel 1996; Pfeffer 1998). We also believe that this environment may be more forgiving of a mixed strategy since there will likely be few pure strategy competitors. These advantages of a mixed strategy set are expected to result in a higher performance in a transition economy context.

**Hypothesis 1**: In transitioning economy environments, the greater the strategy purity, the lower the performance outcome.

**Economic Institutions and Performance Outcomes**

As the degree of market-orientation increases in the institutional environment, numerous aspects change which may affect both the behavior and the performance of firms. We believe that a fundamental aspect of institutional environments which will influence performance is the incentive structure. The incentive structure is multi-faceted, but includes: rewards and punishments, detriments and benefits, and other such reinforcing mechanisms to motivate behavior (Cuervo & Villalonga 2000; Dunning & Lundan 2008; North 1990). The incentive structure is expected to be influenced by both the business freedom of the macro-environment and market competition (Cuervo & Villalonga 2000; Dunning & Lundan 2008; North 1990).

High levels of business freedom and competitive activity in market-oriented environments are expected to motivate firms to increase performance to ensure survival or to increase rewards (North 1990; Peng 2003). In more market-oriented environments, the actions of firms matter in terms of performance since market exchange is largely free of government involvement (Hoskisson et al. 2000; Makhija 2003). This incentivizes firms to take actions that they believe will be successful in terms of performance and survival. The opposite situation exists in institutional environments with a low degree
of market orientation. The limited competition, limited business freedom, lack of economic rewards, and lack of firm failure are expected to constrain organizational motivation toward competitive performance (North 1990; Peng 2003; Peng & Heath 1996; Zahra, Ireland, Gutierrez & Hitt 2000). In such environments, government intervention in economic exchange is expected to constrain motivation toward performance because firms’ choices are less likely to result in desired performance outcomes (Makhija 2003; Shinkle & Kriauciunas 2010). In institutional environments with a low degree of market orientation, firms have limited business freedoms and limited competition. Integrating these perspectives regarding the incentives established by economic institutions, we posit the following prediction:

Hypothesis 2: The higher the degree of market orientation of the institutional environment, the higher the performance outcome.

Moderating Effects of Institutions and Competition

To identify the possible limits regarding the benefits of a mixed strategy, we consider how the strategy purity and performance relationship may vary with the degree of market-orientation in the institutional environment. When the degree of market orientation is high, competition will be high, and thus limited resources to implement strategies will be available. For a given amount of resource and capability within a firm, focusing on one core strategy allows more progress in a given area (Thornhill & White 2007). To the extent that a more market-oriented institutional environment allows clarity of appropriate strategies, firms can select a strategy that best matches their market environment and their capabilities. Thus, a pure strategy selection will result in more success because it better enables the firm to achieve the specific requirements of targeted markets. This logic proposes that a pure strategy will be more successful when the institutional environment is more market oriented. This is because customers will have choices due to high levels of competition and less government involvement in economic exchange. Therefore, we propose:

Hypothesis 3: Firms with a high degree of strategy purity will exhibit increasing performance with increasing market orientation of the institutional environment.
DATA AND METHODS

Our analysis is based on a survey of firms in four transition economy countries: Belarus, Bulgaria, Lithuania, and Ukraine. The four Central and Eastern European countries provide a wide variance in institutional progress toward free markets within the region, with Lithuania and Bulgaria having higher market orientation than Ukraine and Belarus. We use survey data that is available at the William Davidson Institute at the University of Michigan and has been previously explained in Kriauciunas (2004). The survey data set includes 656 firms, and had a 39.5% response rate. The response rate by country was Belarus (81%), Bulgaria (15.8%), Lithuania (18.6%), and Ukraine (68.9%). We adjust for the different response rates in our analysis procedure as explained in the Methods section. The survey examined a parallel set of questions for four operational areas identified to be important to firms in the region - quality assurance systems, human resource management, marketing, and technology. This reduced response bias concerns and increased reliability of our predictions. In total, our analysis is based on approximately 543 firms. This consists of 442 firms which provided complete data and 101 firms where we mean replaced missing control variables by industry\(^2\) nested in country.

**Dependent Variable**

*Performance*. In this study, we view the success of change as an indicator of the organization’s ability to meet the shifted environmental requirements in a transition economy context. We believe that success of change is a good proxy for performance since financial performance in the transitional economy context is difficult to assess. Financial measures have been reported to be misleading in this time period (1999 to 2001) for these transition economies due to currency changes and inflation levels (Baum and Wally, 2003; Hoskisson *et al.*, 2000). Further, the transition economy setting required firms to undertake frequent change across most, if not all, of their functions to ensure survival (Peng, 2003; Zhou, Tse, and Li, 2006). Thus, we consider the firm’s self-reported success of change as a proxy for

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\(^1\) This statement assumes that resources and capabilities are fungible across strategy options.
firm performance. The survey question regarding results of change asked the respondent to: indicate the success of changes implemented in <your function> from January 1999 to December 2001. The Cronbach alpha was 0.83 for the aggregation of the scores from the four functions. This exceeds the minimum recommended level of at least 0.70 (Nunnally 1978), increasing confidence in using this average response as a proxy for firm level performance.

**Independent Variables**

*Strategy purity.* Our measure for strategy purity (H1 and H3) is a Herfindahl type measure. Our calculation for each strategy choice measure is the average of seven point Likert scale ratings from each of the four functions of the firm: quality assurance, human resource management, technology, and marketing. Incorporating responses across the four functions helps to ensure a measure that reflects the firm-level strategy choice. We consider two items for cost leadership business strategy and two items for differentiation business strategy. For cost, we consider cost reduction and improving productivity. The survey questions asked the respondent to indicate the importance of ‘to reduce costs’ and ‘to improve productivity’ for implementing changes to the <function> system from January 1999 to December 2001. In this way, the survey question provides an indication of the level of importance, or focus, on a particular strategy choice. For differentiation, we consider improving product and service quality and satisfying customer requirements. The survey questions asked the respondent to indicate the importance of ‘to improve product/service quality’ and ‘to satisfy customer requirements’ for implementing changes to the <function> system from January 1999 to December 2001. Our measure of strategy purity is calculated: $Strategy\ Purity = 1 - \left\{ \sum (CIR/7)^2 \right\}/T$ where CIR is the choice importance rating (a continuous variable from 1 to 7) and T is the number of terms summed. This approach provides a rating between 0 and 1, with 1 indicating a high degree of purity in strategy.

*Institutional environment.* Our hypothesis development is based on the market orientation of the institutional environment. We evaluate both the macro-environment to capture general business freedom

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2 In this case we use four industry categories as not all industries have substantial sample sizes by country. The four categories were service (wholesale, retail), processing (light industry, heavy industry, food processing), capital intense (utilities, chemicals, petroleum), and other (Khanna & Rivkin 2001).
and the firm-level view of the environment to capture the level of competition. First, our institutional environment measure of *market orientation* (H2 and H3) indicates the level of business freedom in market exchange (Blumentritt & Nigh 2002; Meyer, Estrin, Bhaumik & Peng 2008). For this variable, we quantified the degree of market orientation in the economic institutional environment using the World Bank regulatory quality indicator of governance and freedom (Kaufmann, Kraay & Mastruzzi 2008). We utilized the average of the scores for 2000 and 2002 (0.904 for Lithuania, 0.375 for Bulgaria, -0.631 for Ukraine, and -1.829 for Belarus). Second, our institutional environment measure of *competitive context* (H2 and H3) captures the firm-level perspective of competition (Barney 2001). Our competitive context measure addresses the concern that macro-environmental factors may influence specific firms in different ways, and the firm perspective may be critical in understanding firm behavior (Hambrick, Cho & Chen 1996; Walsh 1995). Our survey instrument asked the respondents to indicate the importance of increasing competitive position as a reason for implementing change to the firm’s functional area from January 1999 to December 2001 on a seven point Likert scale. We utilize the average response across the four organizational functions to represent the competitive context as viewed by the firm.

**Control Variables**

We control for other factors which may provide alternative explanations for success of change. In general, we utilized the average variable values for 1998 to 2001 - one year in advance of our period of interest from 1999 to 2001- given the likely delay for organizational interpretation and integration into choices (Roth & Kostova 2003). We control for private ownership (average percent privately owned from 1999 to 2001), foreign ownership (average percent foreign ownership from 1999 to 2001), export experience (dummy variable indicating whether a firm did (1) or did not (0) have export sales during our evaluation period), foreign relationships (importance rating (1 to 7) of foreign business partners as a source of ideas), R&D density (number of employees in R&D divided by the total number of employees averaged over 1999 to 2001), R&D utilization (dummy with 1 = possessing R&D resources and 0 = reporting no R&D resources), firm size (natural log of the number of the average number of employees from 1999 to 2001), firm age (natural log of the age of the firm), founding condition (dummy variable
with 1 = founded in a free-market environment and 0 = founded during Communist control), GDP growth (1998 to 2001 average growth in country GDP valuations from the European Bank for Reconstruction and Development, EBRD, (www.ebrd.com)), industry diversity (Herfindahl-type measure which accounts for the number of industry segments and the importance of each in terms of share of the company’s business), and industry (dummy variables for 15 industry categories).

**Estimation Method**

To test our hypotheses, we utilized a double censored Tobit analysis. Our dependent variable is a continuous variable ranging from 1 to 7. It is measured on a scale of success (low to high) and is thus limited or censored. When the dependent variable in a model is censored at upper and/or lower bounds, Tobit analysis is an alternative to ordinary least squares (OLS) that is often used (Ramanujam, 2003; Tobin, 1958). We also utilize weighting by country in order to account for the variation in response rates across countries (Heston, Summers & Aten 2006).

**EMPIRICAL RESULTS**

The means, standard deviations, and correlations for all variables are reported in Table 1. The results of the double-censored Tobit models are shown in Table 2. Model 1 contains only control variables. Model 2 contains the direct effects model specification for the macro-institutional environment - market orientation. Model 3 contains the strategy purity and market orientation interaction. Model 4 contains the direct effects model specification for firm perspective of the competitive context. Model 5 contains the strategy purity and competitive context interaction. Model 6 contains the direct effects of both market orientation and competitive context, simultaneously. Model 7 contains the full specification with both direct effects and both interactions.

[Insert Tables 1 and 2 about here]

Overall, the addition of the strategy purity and institutional environment variables and their interactions improved the models’ predictive capability for the success of change. This is supported by the lower Tobit sigma values in sequential models. We found support for H1 in Model 2, Model 4, and in
Model 6. We performed two tests of Hypothesis 2 using both an environment-level and a firm-level measure of market orientation. We found support for Hypothesis 2 using both measures (Models 2 and 4). Hypothesis 3 considers the interactions. We found support for Hypothesis 3 using both measures of market orientation in Models 3, 5 and 6. We graphed the interactions of Models 3 and 5 in Figures 1 and 2 for easier understanding.

DISCUSSION

The goal of this study was to examine the impact of strategy purity and economic institutions on the performance of firms in transition economies. Our analysis considers over 540 firms from the transition economies of Central and Eastern Europe. We found support for the importance of both a mixed strategy and institutional environments in their direct effects and in their interaction effects.

We found support for Hypothesis 1 which predicted that strategy purity will have a negative relationship with performance. These findings are consistent with the arguments of Khanna and Palepu (1997) that emerging economies are different than developed economies owing to their institutional environments. We believe that these direct effects are due to the need for transition economy firms to improve in many, if not all, aspects of their businesses in order to be competitive (Child & Rodrigues 2005).

We found support for Hypothesis 2 which argued that more market-oriented institutional environments will result in higher performance. In this we find support for the arguments that higher incentives lead to higher performance (Dunning & Lundan 2008; Hodgson 2003; North 1990, 1994). Our results from both the environment-level and the firm-level measure of market orientation provide two implications. First, since both the environment-level and the firm-level variables are significant in Model 6, it is not just competition but also the incentives of market-oriented environments which influence

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3 We do not interpret main effects in models with interactions because these results do not represent tests of our hypotheses. Direct effects in models with interactions are conditional on the opposite interacted term value (Jaccard & Turrisi 2003). In our case, we mean centered all the interacted variables. For example, the significant direct effect for strategy purity in Model 3 is conditional on the degree of market orientation in the institutional environment being at its mean.
performance. Second, as competition increases and protectionism decreases with higher market orientation, firms which strive to improve cost, productivity, quality, and customer satisfaction are more likely to be successful in meeting the competitive requirements of the transition economy environment.

We also find support for Hypothesis 3 regarding the joint effects of strategy purity and institutional environment on performance. Consistent with our arguments; in institutional environments with a low degree of market orientation a mixed strategy is more successful than a pure strategy. And, consistent with Porter’s (1980) arguments, in institutional environments with a high degree of market orientation and/or high competition, a pure strategy becomes more successful. Once again, our interaction tests included both an environment-level and a firm-level measure of market orientation and both simultaneously influenced performance. While our results indicate that both are important to firm performance, the competitive context as viewed by firms exhibits a stronger significance level (see Model 7). Accordantly, the firm-level view of the institutional environment, and the competitive context it establishes, is critical to understanding firm success.

It is interesting that the firms which strived to simultaneously improve multiple aspects were most successful – a mixed strategy. The reduction of this benefit in more market-oriented institutional environments and with higher levels of competition provides insight on the criticality of understanding the influence of economic institutions on firms. Furthermore, our results suggest that existing theory may need to be re-evaluated and extended to address the critical influence of institutional environments.

LIMITATIONS AND FUTURE RESEARCH

Our theoretical and empirical analysis is not without limitations. First, our data set included only four countries with four resulting levels for current degree of market orientation in the institutional environment. The study could be enhanced by increasing the variance in the degree of market orientation of the institutional environment through a larger sample of countries. Further, to better model the dynamic situation and the temporal aspects, we would have liked to have had multiple measures of firm performance over time. Future research should consider increased cross-country comparisons over longer
time periods in order to enhance our understanding of firm performance in dynamic institutional environments.

CONCLUSION

Overall, this research supports the institutions-based view of business strategy (Meyer & Peng 2005; Peng 2002, 2003; Peng et al. 2009). This research adds economic institutions as an important contributor in the strategy-performance relationship. This work also begins to address the understudied area of firm-level strategies in transition economies (Peng 2003; Zhou, Tse & Li 2006). In sum, our results support the contention that the developed-economy theories of strategic management need re-evaluation and extension in light of emerging, developing, and transition economy institutions.

REFERENCES:


## TABLE 1: Descriptive Statistics

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† p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Size and age statistics are shown here as reported (these variables are logged in the statistical models)
TABLE 2
Double Censored Multivariate Tobit Model Results for Performance

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<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
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† p<0.10, * p<0.05, ** p<0.01, *** p<0.001, tests are two-tailed. (Standard errors for independent variables in parentheses)

a Mean-centered to reduce the risk of multicollinearity in interactions (Aiken and West, 1991).
FIGURE 1
Interaction Plot – Strategy Purity and Market Orientation
(At plus and minus 1 std. dev. for strategy purity and at max. and min. range for market orientation)

FIGURE 2
Interaction Plot - Strategy Purity and Competitive Context
(At plus and minus 1 std. dev. for strategy purity and at max. and min. range for competitive context)