WHEN DOES CROSS-BORDER ACQUISITION OF INSURANCE FIRMS LEAD TO VALUE CREATION?

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WHEN DOES CROSS-BORDER ACQUISITION OF INSURANCE FIRMS LEAD TO VALUE CREATION?

Abstract: The gradual evolution of the insurance industry from a largely multi-domestic to a global industry has driven many insurers to acquire firms globally. This study focuses on international acquisitions that took place in the insurance sector by U.S.-based firms in the years 1997-2003 and their impact on shareholder wealth. Overall results of this study show that firms undertaking overseas acquisitions face statistically insignificant negative market returns, indicating the market neither rewards nor penalizes such firms. The market returns faced by firms during such acquisitions tend to vary by the degree of wealth of the host country, amount of bilateral trade between host and home country, and extent of potential liabilities of foreignness faced by the firm.

Introduction

International acquisition activity by insurance firms has been a consistent phenomenon over the past decade. For instance, roughly 321 acquisitions of foreign insurance firms by U.S.-based firms have occurred during the period 1994-2003. Among the factors driving this trend is the ever increasing economic integration of nations, cultural homogenization, relaxation of foreign ownership regulations by many countries, and the liberalization of trade and capital markets. These factors allow selling of similar products across several markets, which has resulted in the beginning of a gradual evolution of the insurance industry from a largely multi-domestic industry to a global industry.

International expansion through acquisition offers an important benefit for insurers relative to independent greenfield operations. An acquisition gives quick control of an established firm in the host country to the foreign insurer. This allows the usage of the acquired firm’s resources and capabilities as well as its established customer base, thereby overcoming industry and institutional entry barriers which might exist in the host country. However, there are many potential pitfalls to such transactions, including overpaying for the acquired asset, increased management costs due to organizational cultural dissimilarities, acquisition of undesirable assets associated with the transaction, and the ability of the insurer to successfully integrate operations (Balakrishnan and Koza, 1993; Hennart and Reddy, 1997).

Two studies exist which have tested the impact of domestic mergers and acquisition decisions of insurance firms on shareholder wealth. Madura and Picou (1993) analyzed the merger and acquisition
transactions of insurance firms during the years 1980 to 1989. They report that shareholders anticipate future benefits, and such transactions lead to wealth creation for shareholders. A second study on this topic was conducted by Kusnadi and Sohrabian (1999), who analyzed fifty transactions that took place during the period 1993-1996. They found that acquiring firms do not post any significant abnormal returns, while the target firms experience significant positive abnormal returns. Both of these studies were concerned with insurance firm acquisitions, and it should be noted that they focus on domestic transactions. While there are similarities between domestic and international mergers and acquisitions, there are also significant differences between them. For example, international mergers and acquisitions offer greater potential for risk reduction and market diversification due to the diversity of market conditions compared to domestic transactions. On the other hand, international mergers and acquisitions often increase the risk of failure of such transactions due to cultural, currency, and other differences inherent in international operations. Therefore, previous findings on domestic insurance mergers and acquisitions cannot be extrapolated to international mergers and acquisitions. For instance, Shaked, Michel, and McClain (1991) and Harris and Ravenscraft (1991) report that targets earn higher returns from foreign merger announcements compared to domestic merger announcements.

Despite the dearth of specific studies on international mergers and acquisitions in the insurance industry, many studies exist which test the impact of international acquisitions on wealth creation using cross-sectional samples.1 Doukas and Travlos (1988) conducted one of the earliest studies on international acquisitions by U.S. firms. They reported that when a firm is not operating in the target’s home nation, the bidding firm experiences positive returns. A study conducted by Harris and Ravenscraft (1991) found that target firms gain in a merger when the buyer’s home country currency is relatively stronger compared to the target firm’s home country currency. Cebenoyan, Papaioannou, and Travlos (1992) reported that the intensity of foreign acquisition activity in the target’s industry was the most important factor in explaining the difference in wealth gains during foreign takeover by U.S. firms. Using a sample of foreign acquisitions of U.S. firms, Cakici, Hessel, and Tandon (1996) report the country of

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1 The sample used in these studies could potentially include insurance firms’ international mergers that took place during the period.
origin of the bidder plays a significant role in determining the extent of gains in the transaction. Seth, Song and Pettit (2000) find support for the synergy hypothesis for international acquisitions by U.S. firms.

While previous studies support the notion with some caveats that international acquisitions lead to wealth creation, it is not clear if this applies to insurance firms. As noted earlier, the above studies were conducted using a cross-sectional sample of firms from various industries. The usage of a cross-sectional sample brings in the assumption that the relationships tested are homogeneous across every industry. This assumption is questionable, as international insurance operations are characterized by four major differences. One, significant regulatory requirements exist for insurance firms seeking entry relative to other industries. Two, unlike other industries, insurance purchases are made by customers on explicit trust that the insurer will fulfill the promise at a later date. This requirement creates unique problems in overseas markets, as customers have to trust an unknown firm from an overseas country. Three, the insurer may find the quality of institutional support to collect information and control fraud to be varied across countries. Finally, profits gained or cost incurred in certain segments of insurance operations are referred to as "long tailed", making it difficult to predict cash flow precisely and bringing in additional risk which is not common with many sectors of the service economy.

Cebenoyan, Papaioannou, and Travlos (1992) also report that industry-specific factors like intensity of foreign acquisition activity influence market returns. Therefore, it is not evident that these findings will hold for the insurance industry. This study seeks to address this void in the literature by focusing on international mergers or acquisitions in the insurance sector by U.S.-based firms. Therefore, it will be based on a sample of international acquisitions of publicly listed U.S.-based insurance firms during the years 1997-2003. In particular, this study seeks answers to two questions: 1) Does an international acquisition by insurance firms lead to greater shareholder wealth? and, 2) Are there any differences in wealth gains (or losses) to acquiring firms with respect to the location of the target firms? Its findings will serve to increase the understanding of mergers within the context of international strategy for the insurance industry and have significant implications for managers, regulators, and investors in the insurance sector.
THEORY AND HYPOTHESIS DEVELOPMENT

An international merger/acquisition can be viewed as a form of foreign direct investment by the firm. This particular type of foreign direct investment has been explained by Hymer (1976), who proposed that firms possess unique resources and skills which they seek to exploit by operating in overseas markets. The argument here is that firms gain the benefits of synergy by operating in multiple countries using the resources and competencies which exist within the firm. This view of international operations, which has been well-established in the literature, has also been extended in recent years. In this view, it has been proposed that firms seek international acquisitions not only to exploit resources, but also to acquire resources it might not have. While the earlier approach called for exploiting internal resources in overseas countries, in the latter approach, a firm internalizes an external resource through acquisition or merger (Elango, 2003a). When an insurer internationalizes operations, several benefits are likely to accrue to it. While many benefits to insurers (such as new market opportunities; economies of scale and scope; factor advantages; exploiting distinctive capabilities; learning; flexibility; risk reduction; cross-subsidization, as well as many other competitive benefits such as foreclosing entry by rivals, avoidance of intense competition in home markets, etc.) have been argued in the literature (Elango, 2000), most of them can be categorized into three groups, briefly elaborated below.

*Scale and Scope Advantages:* Economies of scale and scope accrue to an insurer in a number of ways by operating internationally. Scale advantages arise from cost efficiencies gained by firms due to optimal size in operations, and scope advantages arise from the ability to share costs over similar product lines (Jones and Hill, 1992). For instance, an insurer operating in many countries will not be constrained by the size of the domestic market. Insurers operating in multiple countries have greater opportunities to grow to a size required for optimal operations in their product segments, as well as the potential luxury of avoiding marginal or high risk customers. Insurers with international operations will also benefit from interrelationships between products sold across various countries by sharing (Porter, 1985).

*Risk Reduction:* Insurers reduce both market and catastrophic risk by operating in multiple countries. Diversification of a firm’s operations over a variety of nations may help reduce the total business risk for a firm, as it allows risk pooling of a firm's operations (Shaked, 1986). For instance, an
insurer’s profitability with operations in just one country is limited by the characteristics of that particular market. In such cases, the impact of pricing cycles, macroeconomic factors (e.g., growth rate), catastrophic events, and degree of market saturation related to that particular country are likely to have drastic effects on the insurer. On the other hand, insurers operating in multiple markets will have the freedom to shift organizational resources to markets most deserving of their attention. This enables them to optimize organizational effort and absorb costs related to catastrophic events more easily, since customers will not be from a single market. A firm with international operations could benefit from “coinsurance” (Stein, 1997; Stulz, 1990), because the combined cash flow and loss ratios across various markets would be less volatile due to its ability to offset gains and losses.

**Competitive Parity:** Insurers seek to operate internationally to gain competitive parity with rivals who also operate internationally. This phenomenon has been referred to as “oligopolistic reaction” (Knickerbocker, 1973), referring to a firm diversifying overseas in a countermove to the competitive actions of other firms. For instance, rival firms that are diversified internationally have the ability to engage in intense competition with a firm who operates in just one country. Internationally diversified firms can initially sacrifice profits to gain market share in certain markets, while sustaining operations with profits from other countries. Previous research findings indicate that in such instances, the only effective deterrent for a besieged firm is to set up operations in countries where its rivals have large operations (Graham, 1990). This way, insurers gain competitive parity with rivals in competitive battles, while also being exposed to opportunities and new learning (e.g., products/process) that may take place in other markets.

It is assumed that international operations bring in the above benefits, resulting in higher performance to firms, which in turn will be recognized by investors, ultimately leading to higher share prices for firms planning operations in international markets. However, the benefits of international operations come with significant risks to the firm setting up operations through acquisitions. A significant risk is the notion of “liabilities of foreignness” (LOF), which refers to the propensity of managers to make mistakes and face higher operating costs in unfamiliar environments (Zaheer, 1995). The reasons for LOF include the relatively higher costs of transportation, coordination, and monitoring due to operations being
spread across large distances (Hitt, Hoskisson, and Ireland, 1994); increased costs and risk due to lack of roots in an unfamiliar environment, changing political situations in the host country, economic risks, differences in legal systems, and fluctuations in currency exchange values (Bae and Jain, 2002; Elango, 2003b); and costs due to the lack of legitimacy and economic nationalism in the host country, reducing freedom of operation for foreign firms (Zaheer, 1995). A second risk such mergers bring is that of “managerial hubris” (Roll, 1986), referring to the situation where managers overestimate the benefits of the acquisition while underestimating the inherent difficulties in integrating two firms, thus tending to overpay for the target firm. In such acquisitions, even if the synergy gain is positive for the combined firm, the end result could be a situation wherein the buying firm’s shareholders do not benefit. If investors see greater risk and relatively minimal benefits from such transactions, they might sell their shares, leading to lower share prices for firms planning new operations in international markets. Therefore, based on the above discussion, the following three hypotheses (one null and two opposing) are proposed:

**Null Hypothesis**: International acquisitions by insurers will lead to no change in wealth for shareholders.

**Hypothesis 1a**: International acquisitions by insurers will lead to wealth creation for shareholders.

**Hypothesis 1b**: International acquisitions by insurers will lead to wealth destruction for shareholders.

**Host Country Characteristics**: Previous research on international acquisitions has indicated that extent of wealth gain (or loss) by acquiring firms is influenced by the country in which the target is located. For example, Kiyamaz (2003) reports that U.S. firms had positive wealth gains for acquisitions in Europe, but negative wealth gains for acquisitions in Asia/Pacific and the Americas. One would expect such an outcome, as the degree to which a firm can profit from such international acquisitions is circumscribed by the extent of potential and restrictions imposed by the host country on the acquiring firm. Hence,

**Hypothesis 2**: The extent of wealth creation (or destruction) incurred by insurance firms in international acquisitions will be influenced by the characteristics of the target’s home country.
METHODOLOGY AND SAMPLE

The event study methodology will be used to verify the impact of international acquisition announcements on an insurance firm’s shareholder wealth. Briefly, in this approach, the changes in the share price of the firm during the announcement period (1 day prior to and 20 days after) is compared with a prior control period (1 to 247 trading days before the announcement). The logic behind this approach is that the market reacts quickly to news and offers an unbiased but not necessarily accurate picture of the long-run cash flow and benefits of the international acquisition (Linn and Rozeff, 1984).

The underlying assumption with such an approach is that markets are reasonably efficient, implying that a firm’s share price incorporates all currently available information and stock prices are reflective of new information released. This methodology is widely accepted in the finance (e.g., Brown and Warner, 1985; Fama, 1976) and insurance literature (e.g., Madura and Picou, 1993; Akhigbe and Madura, 2001). The various steps used in the methodology are elaborated below and are based on previous research on this topic (Prathner and Min, 1998; Markides and Ittner, 1994).

The first step in this methodology (commonly referred to market model) is determining the Abnormal Return ($AR_{it}$) for Stock $i$ on day $t$. The Abnormal Return for a stock is the difference between the Observed Return during the control period (event day -1 to -247) and Expected Returns of a firm during the announcement period (event day -1 to +20).

$$AR_{it} = R_{it} - \{a_i + b_iR_{mt}\} \quad (1)$$

where,
- $R_{mt}$ = return on market portfolio at time $t$;
- $R_{it}$ = return on the security of firm $i$ at time $t$;
- $a_i$ and $b_i$ are the parameters of the relationship between the return on the individual security during the control period whose value is derived from Equation 2

$$R_{it} = a_i + b_iR_{mt} + e_{it} \quad (2)$$

The second step is to calculate Cumulative Abnormal Return (CAR), the abnormal return at various intervals (D) within the 20 day period (event day -1 to +20) represented by Equation 3. We use two different methods to predict market return. In the first method we used a combination of the NYSE and AMEX composite index to compute market returns. Both NYSE and AMEX have been widely used in previous literature to represent the aggregate market value of stocks in the U.S. economy. In the second
method, we used the NASDAQ insurance index (Symbol: ^IXIS) to capture market returns. We felt the first method would allow us to capture the performance relative to the U.S. market, while the second method would allow us to capture the returns relative to the insurance sector stocks.

\[
\text{CAR}_{i(-2, D)} = \sum_{t=-1}^{247} \text{AR}_t
\]  

(3)

Therefore, the Average Cumulative Abnormal Return (ACAR) would be:

\[
\text{ACAR}_{i(-2, D)} = \frac{1}{N} \sum_{i=1}^{N} \text{CAR}_{i(-2, D)}
\]  

(4)

where \( N \) = Number of firms in the sample.

The third step is to use the CARs to determine if the acquisitions create statistically significant shareholder wealth using t-statistics (Equation 5). For this study, we define seven different time periods [D]: 1) one trading day prior to the event (t-1) to the announcement day (t=0); 2) one trading day prior to the event (t-1) to the day after the announcement (t=+1); 3) one trading day prior to the event (t-1) to two days after the announcement (t=+2); 4) one trading day prior to the event (t-1) to five days after the announcement (t=+5); 5) one trading day prior to the event (t-1) to ten days after the announcement (t=+10); 6) one trading day prior to the event (t-1) to fifteen days after the announcement (t=+15); and, 4) one trading day prior to the event (t-1) to twenty days after the announcement (t=+20). Positive CARs with statistically significant results would indicate that international acquisitions create value, indicative of support for Hypothesis 1a. On the other hand, statistically significant negative CARs would indicate that international acquisitions destroy value, indicative of support for Hypothesis 2a. A scenario where the t-test results are non-significant for the CAR values would mean failure to reject the null hypothesis.

\[
t = \frac{\text{ACAR}_{i(-2, D)}}{\text{StdDev ACAR}_{i(-2, D)} / \sqrt{N}}
\]  

(5)

***********

Insert Table 1 Here

***********

In the final step, we use cross-sectional regression analysis to determine the importance of country factors. Therefore, we attempt to locate the most important country characteristics based on previous research findings in the international insurance literature (e.g., Elango, 2003b). The goal was to
capture the degree of attractiveness of the target firm's home country using a few from a plethora of variables which can be used to measure country characteristics. The first variable we chose was the host country’s market size, as it has been deemed as one of the most important determinants of foreign direct investment (Trevino, Daniels, and Arbeláez, 2002). The second variable we use is the extent of trade that takes place between the host country and the U.S. We felt this variable a good indicator of the market potential, as it not only indicates the depth of trade relationship between the two countries but also the level of trade barriers between the two countries. For reasons of competitive parity mentioned earlier in the theoretical section, the third variable we chose was the degree of international competition in the host country’s insurance sector. All of these variables are conceptually and empirically supported in Elango's (2003b) study of U.S. reinsurance firms operations. While these three variables represented market potential in economic terms, they do not factor in the degree of cultural and institutional heterogeneity between countries which could create pitfalls for firms seeking to gain from international operations. Therefore we added a fourth variable to capture the extent of liabilities of foreignness between the home and host country. This variable serves as a proxy for the potential risks and related costs of foreign operations a firm faces due to differences in culture, legal system, and environment, as well as the geographic distance between home and host country. The reliability coefficient (Cronbach’s Alpha) for this variable was .712, which is higher than .7 recommended by Nunally (1978) for internal consistency. The operationalization of the variables and data sources used is presented in Table 1. In the regression model, the CAR_{i(-2, D)} will be used as the dependent variable, and the country variables will be used as independent variables as follows (Equation 6):

\[
ACAR_{i(-1, 10)} = \alpha_i + \beta_1(\text{Market Size})_i + \beta_2(\text{Bilateral Trade})_i + \beta_3(\text{International Competition})_i + \beta_4(\text{Liabilities of Foreignness})_i + \epsilon_i
\]  

\text{(6)}

Sample: The study sample is based on international acquisitions undertaken by U.S. firms in the insurance industry during the years 1997-2003. The initial sample was collected from the listing of international mergers and acquisitions reported in the SDBC database. As this study’s focus is to test the value creation (or destruction) of international acquisitions, to be included in the final sample, each
acquisition needed to satisfy the following three criteria: a) The date for the transaction can be identified in the above mentioned database; b) No other acquisition or major announcement was made by the same firm during the announcement period (event day -2 to +20) which could confound the results; c) The insurer is publicly listed and its stock price was available at Yahoo! Financial, d) We were able to cross-check announcement information through a library search, and, e) Target firm’s country characteristics are available in World Bank publications. This resulted in a final sample of 52 acquisitions in 24 countries (Argentina, Australia, Brazil, Bulgaria, Canada, Chile, China, Colombia, Denmark, Egypt, Finland, France, Hong Kong, India, Indonesia, Israel, Italy, Japan, Lithuania, Mexico, Norway, Spain, Sweden, United Kingdom).

**STUDY RESULTS**

***********
Insert Table 2 Here
***********

To test Hypothesis 1, cumulative average abnormal returns were computed for each of the seven periods defined for this study. Results in Table 2 indicate the returns to acquiring firms were negative using the NYSE/AMEX Index (Method 1) as well as the Insurance Index (Method 2) across each of the seven periods. The t-test results indicate that these returns were not statistically significant for any of the 14 periods tested, therefore failing to reject the null hypothesis. While the claim may be unexpected that insurance acquisitions at the aggregate level do not lead to any change in shareholder wealth, one important reason exists as to why this may be the case. For instance, the diversity of countries in which international acquisitions were made by firms in this study sample could have contributed to the positive and negative returns in the study sample, canceling each out and leading to the statistical results being insignificant. In this regard the regression results presented in Table 3 may provide additional insights.

***********
Insert Table 3 Here
***********

In order to capture the influence of country characteristics, four country variables were regressed over the average of the market returns computed through both methods. The regression model was significant and explained about 19.3% of the variance (F=10.20, p <.05). Study findings indicate that
country characteristics influence market returns, in line with the assertion made in Hypothesis 2. Of the four country variables used in the model, three were statistically significant. Market size and Bilateral Trade loaded positively on market returns, indicating that firms making acquisitions in countries with high GDP or extensive trade relationships with the U.S. benefited from higher returns (beta loading = .215 and .096 and $p = .05$ and .1, respectively). The degree of international competition did not seem to have any impact on the market of firms making acquisitions. Liabilities of foreignness loaded negatively, indicating that firms making acquisitions in countries where there was a potential for making managerial errors were penalized by the market with negative returns (beta loading = -.109, $p < .01$).

Three limitations need to be incorporated while applying this study’s findings in other settings. First, while the role of industry was controlled for by sample selection, bidder and target characteristics were not incorporated in the testing of the models. The primary reason for this choice was the sample size would be too small to add any more variables to the regression models. Second, the returns to acquiring firms were only considered; returns to target firms were not. Third, this study is based on U.S.-domiciled insurance firms. Replicating this study’s findings in other environments, with larger samples and firm characteristics will increase confidence in study findings.

**CONCLUSION**

This study sought to determine if international acquisitions by insurance firms led to greater shareholder wealth and how the wealth gains (or losses) to acquiring firms varied with respect to the location of the target firms. Empirical examinations of 52 acquisitions of insurers showed that these acquisitions have no statistically significant impact on market returns, which is quite consistent with domestic acquisition of insurers (Kusnadi and Sohrabian, 1999). However, this is not in line with some of the earlier studies reviewed, which indicate that international acquisitions create value for firms, validating the need to study insurance firms separately. One reason could be that the market does not see such acquisitions to be beneficial or harmful to future cash flows of the insurer. Limited support for this inference can be had from Oetzek and Banerjee (2005), who report that there is no performance differential between foreign and local firms in the insurance sector. Another possible reason for this
relative difference in findings could be that this study used the average of NYSE and AMEX markets and an industry specific index which is unique compared to earlier studies. An important contribution of this study is that it indicates how these returns are influenced by country characteristics. Insurers are likely to face relatively higher positive returns while seeking entry into countries with large size markets and which have extensive trade relationships with the U.S. Insurers are also likely to face negative returns when entering markets that have potential pitfalls of liabilities of foreignness. The market does see higher risk in acquisitions made in countries characterized by differences in culture, environment and legal systems or greater geographic distance. Therefore the conventional phrase "look before you leap" would be apt for insurers planning acquisitions in overseas markets.

REFERENCES:


Table 1: Variable Definition & Data Sources

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bilateral Trade</td>
<td>Average of imports and exports to and from the U.S. and the target firm’s home country. Data Source: U.S. Department of Commerce.</td>
</tr>
<tr>
<td>Liabilities of Foreignness</td>
<td>Σ (Cultural Distance, Geographic Distance, Emerging Market Dummy, Legal System dummy)</td>
</tr>
<tr>
<td></td>
<td>Cultural Distance = Sum of the absolute values of the differences between the target firm’s host country and the U.S. with respect to the four dimensions of Hofstede (Kogut and Singh, 1988). Countries culturally different from the U.S. in terms of the four dimensions will have high cultural distance scores, while countries similar to the U.S. will have low cultural distance scores. Data Source: Hofstede (2000).</td>
</tr>
<tr>
<td></td>
<td>Geographic Distance = Distance in miles between U.S. (New York City) and the host country’s capital city Data Source: Distance Worldwide [<a href="http://www.etn.nl/distance.htm">http://www.etn.nl/distance.htm</a>].</td>
</tr>
<tr>
<td></td>
<td>Emerging Market Dummy (Dummy variable = 1 if emerging economy, 0 otherwise). Data Source: World Bank.</td>
</tr>
<tr>
<td></td>
<td>Legal System Dummy (Dummy variable = 1 if civil law based system, 0 if common law based system). Data Source: Elango (2003b).</td>
</tr>
</tbody>
</table>

Table 2: Average Abnormal Returns for Various Event Periods

<table>
<thead>
<tr>
<th>Event Periods</th>
<th>ACAR (Method 1)</th>
<th>T-values</th>
<th>ACAR (Method II)</th>
<th>T-values</th>
</tr>
</thead>
<tbody>
<tr>
<td>[-1, 20]</td>
<td>-1.2706</td>
<td>-.908</td>
<td>-2.977</td>
<td>-.479</td>
</tr>
<tr>
<td>[-1, 15]</td>
<td>-1.077</td>
<td>-.908</td>
<td>-3.068</td>
<td>-.531</td>
</tr>
<tr>
<td>[-1, 10]</td>
<td>-0.5333</td>
<td>-.543</td>
<td>-2.161</td>
<td>-.408</td>
</tr>
<tr>
<td>[-1, 5]</td>
<td>-0.4946</td>
<td>-.536</td>
<td>-2.820</td>
<td>-.532</td>
</tr>
<tr>
<td>[-1, 2]</td>
<td>-0.4294</td>
<td>-.479</td>
<td>-4.135</td>
<td>-.779</td>
</tr>
<tr>
<td>[-1, 1]</td>
<td>-0.4329</td>
<td>-.479</td>
<td>-5.070</td>
<td>-.940</td>
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<tr>
<td>[-1, 0]</td>
<td>-0.4335</td>
<td>-.478</td>
<td>-5.965</td>
<td>-1.088</td>
</tr>
</tbody>
</table>

*** = p<.01, ** = p<.05, *= p<.1.
### Table 3: Regression Analysis of Country Characteristics Variables

<table>
<thead>
<tr>
<th>Country Variables</th>
<th>Standardized Beta Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Size</td>
<td>.215**</td>
</tr>
<tr>
<td>Bilateral Trade</td>
<td>.096*</td>
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<tr>
<td>International Competition</td>
<td>.062</td>
</tr>
<tr>
<td>Liabilities of Foreignness</td>
<td>-.109***</td>
</tr>
<tr>
<td>R-Square</td>
<td>.193</td>
</tr>
<tr>
<td>F Value</td>
<td>10.20**</td>
</tr>
</tbody>
</table>

*** = p<.01, ** = p<.05, *= p<.1. All independent variables were mean centered in the regression models to remove non-essential multicollinearity.