INTERNALIZATION STRATEGIES AND VALUE IMPLICATIONS OF LATIN AMERICAN EMERGING MARKET MULTINATIONALS

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ABSTRACT

This study investigates the Internationalization strategies and their value implications of Latin American Emerging Market Multinationals (LAEMMs). We examine 66 mergers and acquisitions (M&A) announcements, 20 joint venture (JV) announcements and 9 Strategic Alliance (SA) announcements associated with LAEMMs during the sample period of 1991-2005. First, the paper explores the effects of cross-border expansion patterns on firm value creation. Second, it examines market reaction to the announcements of cross-border expansion patterns. Third, it evaluates firm performance in relation to the cross-border expansion activities. This study finds that most LAEMMs do not earn significantly positive abnormal returns during the event windows defined in this study. However, it is generally evident that there is value creation in international expansion activities. According to the event-study results, value creation is mostly associated with SAs. This finding is consistent with previous research. It is also indicated that most SA announcements are received by the market positively. JVs also experience value creation during the event windows utilized in this study. However, value creation of JVs is not to the extent that of SAs. Market reaction to JV announcements is also positive, but not to the degree of SAs.

Keywords: internalization strategies. strategic alliance. research. companies. multinationals.

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1 INTRODUCTION

This study examines the valuation effects of cross-border expansion patterns of a distinct group of firms - Emerging Market Multinationals (EMMs) that originate from the emerging markets (EMs) of Latin American Countries. The study commits its analytical foci on Mergers and Acquisitions (M&As), Joint Ventures (JVs), and Strategic Alliances (SAs) given that LAEMMs (Latin American Emerging Market Multinationals) achieved to build multinational service and production networks akin to their developed country counterparts by internationalizing their operations through regional or global configurations with the utilization of these three specific types of expansion patterns. LAEMMs diffusion into the global economic system signals formation of relatively complex organizational structures with potentially distinct characteristics. As a result of their dynamic international activities, these new players with regional and global focus have become a significant mechanism for the transfer of capital, technology, management and various other assets within and between developing and developed countries, and created new engines of growth in emerging markets.

The cross-border expansion patterns of LAEMMs, which initially began or came to be recognized in the late 1970s, were launched with exporting activities. These activities are constantly evolving and stimulating modification in the way LAEMMs conduct their business operations. Although LAEMMs have been going through varying levels of transformation for several decades, their renowned transformation gained pace since the early 1990s in the face of intensified integration of their home markets to the world economy, which was inaugurated with the beginning of the new era of globalization. Owing mostly to their home market integration to the global market, domestic companies located in these markets adopted increasingly outward oriented postures and included M&As, JVs, and SAs into their global operations as opposed to focusing solely on export activities. It was inevitable for them to diversify their expansion strategies since they either had to take advantage of regional or global business opportunities or needed to respond to increasing competition from foreign companies. However, despite their growing regional and global importance, our knowledge of various attributes of these firms is limited and most work conducted in this area gives

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conflicting results on value creation effects of cross-border expansion activities of LAEMMs. Therefore, the primary objective of this study is to examine the valuation effects of LAEMMs’ cross-border expansion patterns. Therefore, the research problem can be presented in the form of a question: Do cross-border expansion activities that involve M&As, JVs and SAs, create value for LAEMMs?

This study includes a sample size of 32 Latin American emerging market multinational firms drawn from the *Top 50 non-financial Emerging Market Transnational Corporations*. UNCTAD’s World Investment Report. The internationalization events take place between 1991 and 2005. These transaction announcements entail 66 mergers and acquisitions, 20 joint ventures and 9 non-equity strategic alliances. In this study event-study methodology is utilized to capture the market reaction to expansion announcements as well as to examine the impact of each announcement on the firm value around the announcement date.

The paper is structured as follows: Part II focuses on the methodological literature review based on value creation, and M&A, JV and SA activities in cross-border expansion patterns. The reminder of the study is organized as follows: Part III discusses the data and methodology; Part IV presents the empirical results; and Part V concludes the study with final remarks and discussion.

2 METHODOLOGICAL LITERATURE REVIEW

The concept of the international operations of firms from developing nations (most are now identified as emerging market nations) is not a novel phenomenon. The first recognizable emerging market firm operations dates all the way back to the pre-World War I period. However, this was only actualized within the Latin American region. Although, some Latin American firms experienced international expansion in the 1920s, it was too little to account for. In fact, expansion activities began in the 1960s and increased vigorously during the 1970s. The time lag was mainly due to the restrictive government policies of the 1930s - 1960s. Government restrictions, mainly exchange controls and inward-looking foreign trade policies of Latin American countries hampered Latin American firms for geographically
wide-scale expansion.iii For this reason, the expansion activities of the Latin American firms stayed only within Argentina and Brazil; hence, they were regional.

When the expansions began to increase and spread to outside of the region in the 1960s and the 1970s, they were mainly executed by private investors that historically invested in liquid form or in real estate, purchasing available stocks and securities. Furthermore, some investments can also be characterized as capital flight rather than as FDI. In the late 1970s, however, the decisions to expand were induced by cultural, political pressures and instability.iv Such factors as risk diversification in unstable political systems, avoidance of domestic tax obligations, labor laws, and foreign exchange restrictions also provoked Latin American EMMs to internationalize. In later years (1980s and 1990s), changes in government policies, the economic growth within various Latin American countries, the improvement of their balance of payments, and implementation of interregional programs as well as the consequence of industrialization put together facilitated the interregional and international investments of Latin American firms.v

In the early years of LAEMM expansion, geographic preference mostly depended on host countries’ geographic proximity, and ethnic/cultural closeness to their home countries.vi However, in recent years, the strategic significance of geographical location, geographic reach, as well as transnationality rather than cultural/ethnic ties came to be more important in making expansion decisions.vii While in the early stages of international expansion, LAEMM activities were mainly based more on labor intensive, low cost and technologically small-scale manufacturing operations, in recent years, their operations and technological adaptations have begun to display a more innovative outlook, which are more in line with rapid technological and industrial changes.viii

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iii See Diaz-Alejandro (1977)


v White (1981).

vi See Wells (1981), and Ting and Shive (1981).


These changes also triggered changes in the modes of international expansions of LAEMMs. In the early years of expansions, exports were favored for international operations. Theys carried out trade-related export strategies and/or export led growth strategies and thereby established export businesses as incremental commitments throughout the 1980s. In the early 1990s, however, joint ventures and strategic alliances began to dominate the expansion seen. Besides these activities, the operations of LAEMMs have come to include, cooperative arrangements, strategic alliances, firm networks, and M&A activities. Although M&A activities have minimally been experienced since the mid-80s, in recent years, they have become more apparent. Today, M&A activities are becoming popular strategic tools for LAEMMs looking to expand their market reach or to develop new sources of material. In addition, the accumulation of ownership advantages is motivating and increasing M&A activities of LAEMMs. Due to these changes, LAEMMs are also modifying their internal operations at intra- and inter-firm levels in a wider geographic access and focusing on efficient use of capital and resource as well as to their geographical reach.

Yet, LAEMMs face a set of transaction costs, risks and opportunities more than they previously experienced. They also confront such issues as geographic dispersal of assets and liabilities across the globe and access to capital markets of different locations with variable exchange rates and differing regulations in further intensity. Hence, an understanding of the cross-border expansion patterns is one key to understanding the impact of LAEMMs on international business and a channel in understanding LAEMM value creation.

Transaction Cost Economics and internalization perspectives in international business literature suggest that firms extract above normal returns from cross border investments by internalizing market imperfections when their firm specific assets cannot be sold for their internal value due to market imperfections. Therefore, rents derived from internalization are expected to be capitalized into a higher value of the firm. Consequently, when LAEMMs first initialized their

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ix Sec, e.g., Caves (1971), Williamson (1975), Hymer (1976), Buckley and Casson (1976), and Morck and Yeung, (1992).
international expansion activities as manufacturing firms, they gained their initial advantage through internalizing market imperfections.

Similarly, Market Structure Approach - The Industrial Organization Approach states that multinational firms are organizations of international production rather than international capital movement. Here, ownership advantages are seen as a net cost advantage of foreign owned firms in local markets. In order for a firm to invest abroad, it should have specific advantages to compensate for the advantages of local firms. Hence, firm specific advantages may be due to such reasons as market imperfection caused by product differentiation and marketing skills, imperfections in factor markets, economies of scale, and government intervention in the marketplace. To obtain these advantages, however, the production needs to be home-based; in this way value creation may be attained.\textsuperscript{xii}

Hymer’s theory can also explain some of the reasons for cross-border expansion and for their existence in the international frontier. In the early years, Latin American firms gained special assets through horizontal investments. This was mainly as a result of knowledge accumulation. In this way, firms adapted foreign technology to a specific small-scale operation and applied it to new markets at low marginal costs. This emerged as a necessary condition for the firms’ cross-border expansion activities and value creation. Even “when tariff barriers are held constant, the desire to be closer to an important market previously serviced by exports motivated investments by Latin American firms from the largest semi-industrialized countries of Latin America”\textsuperscript{xiii} (Diaz-Alejandro, 1977: 22).

In most cases, however, the decision for international expansion is determined by ownership, internalization, and locational advantages, which are available to the EMMs. This has especially been the case in recent years. Dunnning’s (1981) macro level study on both the Brazilian firms indicates that the net outward investment from these countries increased over time. Dunnning ascribes this increase to the rising ownership advantages. Hence, LAEMMs gained ownership advantages in two perspectives: the technologies they utilized for FDI were more labor intensive and appropriate for host

\textsuperscript{xii} Market Structure Approach/ The Industrial Organization Approach: First proposition of this approach comes from Hymer (1960, 1970).

\textsuperscript{xiii}Diaz-Alejandro (1977).
countries; and they developed production processes as their factor endowments. Therefore, for LAEMMs ownership advantages and value creation arise from making technologies adaptable to smaller market sizes and factor endowments of other developing countries. Overall, the existence of ownership advantages suggests that value creation had to exist for firms to expand abroad in the past.

The Multinational Network Hypothesis is one of the contemporaneous theories that can explain LAEMM activities since LAEMMs began to exploit M&A, JV and SA patterns for their cross-border expansion activities in more recent years. The hypothesis postulates that foreign investment decisions improve the expanding firm’s ability to benefit from the systemic advantages inherent in a multinational network. The valuation effects of strategic actions leading to creation of a multinational network stem from the firm’s ability to arbitrage institutional, and the informational externalities captured by the firm. The cost savings gained by economies of scale in production, marketing and finance also have a role – to the extent that these options can be exercised by the acquiring firm and cannot be traded and acquired by other investors because the value of the firm should increase to reflect the incremental value of these options.xiv

However, it should also be realized that cross-border investments of Latin American firms did not necessarily emerge as a deliberate effort to promote joint ventures or other types of FDI. Not all EMM cross-border activities fall in clear categories.

As it can be observed from previous studies, mergers and acquisitions, joint ventures and strategic alliances are strategic tools for firms operating in international markets. They are also a growing phenomenon in cross-border expansion activities of LAEMMs with which firms respond to globalization of various industries and a rapidly changing international business environment.

3 DATA AND METHODOLOGY

LAEMM sample data are obtained from the United Nations’ UNCTAD world investment report on transnational corporations and export competitiveness. Merger and acquisition as well as

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joint ventures transactions data for 1991-2005 are extracted from the Securities and Data Corporation’s (SDC) Worldwide Mergers and Acquisitions database.

Here, the standard event study methodology is utilized to evaluate the impact of each expansion announcement on the firm value. The event-study methodology is inspired by the efficient market hypothesis that capital markets are efficient instruments to evaluate and process the impact of new information available on firms. The market model assumes a linear relationship between the return of any security and the return of the market portfolio. For each security $i$, market model assumes that returns are given by:

$$ R_i = \alpha_i + \beta_i R_m + \epsilon_i, $$

where,

$$ E[\epsilon_i] = 0 \quad \text{and} \quad VAR[\epsilon_i] = \sigma^2 \epsilon_i $$

(1)

and where $R_i$ is the return on security $i$ at time $t$. The subscript $t$ indicates the time, the subscript $i$ indicates a specific security, and the subscript $m$ indicates the market. $R_m$ is the return on the market portfolio during period $t$. The model’s linear condition arises from the assumed normality of returns.

The $\epsilon_i$ is a random error term for security $i$ at the time of $t$, and the $\beta$s are firm specific coefficients to be estimated.

Equation (1) is estimates a 255 - day estimation period from $t = -11$ to $t = -265$ where $t = 0$ is the event day. In this study, the window is defined as the period between 10 days prior to the event to 10 days after the event. The abnormal return (AR) due to the announcement on any given day of the event window is therefore equal to the actual return minus the predicted normal return, given by the prediction error:

$$ AR_{it} = R_{it} - \alpha_i + \beta_i R_{mt} $$

(2)

According to previous researchers suggest that that abnormal performance measures such as standardized cumulative abnormal returns (SCARs) are less likely to generate false rejections of

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market efficiency. In addition, distributional properties and test statistics for cumulative abnormal returns are better understood.\textsuperscript{xvi}

4 ANALYSIS AND RESULTS

The results indicate that all international expansion events, on average, show negative abnormal returns during pre- and post- event day and on the actual event day. \textit{SCARs – EMMs’ Region Latin America (M&As)}. A total of 66 events considered. Since significant for market reaction values are at (-10, +10), (-10, +5), (-5, +5) and (-5, +1), market does seem to react to M&A announcements in longer intervals and not around the announcement day. At the interval (-5, +1), the market reacts positively to 36.36 percent of expansion announcements of acquirers from the Latin American region where the z values for median and positives/negatives are both at 5 percent level. At the interval (-10, +10), the significance level of the mean z value is at 10 percent where market reacts positively to 43.94 percent of all M&A expansion announcements of LAEMMs. Since the market reacts negatively to all announcements at all intervals, and since all SCARs are negative at all intervals. There does not seem to be value creation for EMMs from Latin America that expand internationally through M&As. (See Table 1, Appendix)

\textit{SCARs – EMMs’ Region Latin America (JVs)}. Total of 20 events considered. When JV announcements of LAEMMs from the Latin American region are examined, the results clearly supports value creation and positive market reaction, as most SCAR values are positive and statistically significant except at the interval (-10, +10). The statistical significances of the values are noticeable at the following intervals. At the interval (-2, +1), the market reacts positively to 65.00 percent of all announcements with the significance levels of z values for both the mean and the median are at 5 percent level and the significance level for the z value of positives/negatives is 10 percent. At the interval (-5, +1), positive market reaction is 70.00 percent with the z value significance levels for both the mean and the median at 10 percent and for the positives/negatives at 5 percent.

\textsuperscript{xvi} Fama (1998), and Mitchell and Stafford (1998).
The results indicate that there is definite value creation and positive market reaction, as all statistically significant results are positive. Value creation and positive market reaction are mostly apparent and statistically significant after the intervals (-1, +0) and (-1, +1). Therefore, the value creation and positive market reaction may both be more long-term than immediate. (See Table 2, Appendix)

**SCARs – EMMs’ Region Latin America (SAs).** Total of 9 events included. There is a definite evidence of positive market reaction and value creation for LAEMMs that expand internationally through SAs. Results indicate that all SCARs are positive at all intervals and positive market reaction averages around above 60 percent. At the interval (-1, 0), the market reacts positively to 66.67 percent all announcements where the mean significance value is at 10 percent.

The results indicate that the value creation and market reaction are both immediate and long term and mostly positive. All SCARs are positive and statistically significant at all intervals. (See Table 3, Appendix)

**CONCLUSION**

This study investigates the cross-border expansion implications on value creation of LAEMMs for the period between 1991 and 2005. First, the paper explores the effects of cross-border expansion patterns on firm value creation. Second, it examines market reaction to the announcements of cross-border expansion patterns. Third, it evaluates firm performance in relation to the cross-border expansion activities.

This study finds that most EMMs do not earn significantly positive abnormal returns during the event windows defined in this study. However, it is generally evident that there is value creation in cross-border expansion activities. According to the event-study results, value creation is mostly associated with SAs. This finding is consistent with previous research.\(^{\text{xvii}}\) It is also indicated that most SA announcements are received by the market positively. JVs also experience value creation

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\(^{\text{xvii}}\) Shao-Chi Chang and Nicole L. Kuo. “Equity Participation and the Wealth Effect of Strategic Alliances: Evidence from Taiwan.” (2001)
during the event windows utilized in this study. However, value creation of JVs is not to the extent that of SAs. Market reaction to JV announcements is also positive, but not to the degree of SAs.

On the other hand, when M&As are considered, value creation seems insignificant during the intervals utilized in the event-study. Yet, value creation is mostly achieved in the long-run. Similarly, market reaction to M&A announcements are not necessarily positive. However, M&A announcements experience more immediate market reaction as opposed to that of SAs and JVs. Still, market reaction to SA announcements seems to be more immediate than JV announcements.

Through these findings, it can be assumed that M&A pattern of expansion is more recent for most LAEMMs than that of JVs and SAs. They are still new in venturing through M&As.

The results attained are consistent with previous research. For example, a number of research suggests that cross-border M&As often decrease the acquirer’s shareholder wealth. Previous research also suggests that the announcements of joint ventures are associated with positive market reaction. This positive effect is especially apparent a few days prior to the announcement in informationally-efficient markets. Therefore, this study shares the view of previous work, as JVs can be considered as value creation mechanisms. Furthermore, this study is also consistent with previous research on the value creation effects of SAs, as the previous expresses that establishing SAs creates significant value for the shareholders of all the partnering firms. The positive effects on value creation are more noticeable within technological alliances where firms experience greater abnormal returns.

Although value creation may not be apparent in the short-term for most expansions as in the case of M&As, it is certainly ostensible in the long-run. Hence, the study is consistent with previous research as the findings suggest the focus of LAEMMs is now mostly related to efficient use of capital and resource.

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Kaplan and Weisbach (1992) Markides and Ittner, 1994; Morck and Yeung, 1992
Hanvanich and Cavusgil (2000), and Kogut (1991)
Das, Sen and Sengupta (1998), (Chan, Kensinger, Keown and Martin, 1997), and Cahng and Kuo (2001)
Chan, Kensinger, Keown and Martin (1997), and Das, Sen and Sengupta (1998)
REFERÊNCIAS


**APPENDIX**

**EVENT STUDY TABLES**

**Table 1:** Daily and Standardized Cumulative Abnormal Returns of Cross-Border Expansion MA Announcements (EMM Region –Latin America)

The table presents the Daily and Standardized Cumulative Abnormal Returns (SCARs) of 66 cross-border MA expansion announcements by Latin American Emerging Market Multinationals (LAEMMs) originate from Latin America over the 1991-2005 period. Daily Standardized Cumulative Abnormal Returns (SCARs) are computed from the market model as prediction errors. Day 0 refers to the announcement day of acquisitions as reported SDC Database. Z-statistics [Wilcoxon Sign-Rank Test] is used to test for the statistical significance of mean [SCARs]. The statistical significance of mean [median] difference between groups is computed by One-Way ANOVA [Mann–Whitney Test for unmatched pairs]. Z statistics (Doukas’ test) is used to test for the statistical significance of positives/negatives. ***, **, and * denote statistical significance at the 1%, 5%, 10% levels, respectively.

<table>
<thead>
<tr>
<th>Interval</th>
<th>Mean</th>
<th>Z-Value Mean</th>
<th>Median</th>
<th>WSRT Z for Median</th>
<th>Positive: Median</th>
<th>Negative: Median</th>
<th>Doukas Z for Positive: Negative</th>
<th>Negative: Negative</th>
<th>Total Number of Events</th>
<th>Positive Market Reaction %</th>
</tr>
</thead>
<tbody>
<tr>
<td>(-10,+10)</td>
<td>-0.15316 *</td>
<td>-1.34307</td>
<td>-0.16887</td>
<td>-1.0732</td>
<td>29 : 37</td>
<td>-0.98473</td>
<td>66</td>
<td>43.94%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(-10,+5)</td>
<td>-0.17695 *</td>
<td>-1.59262</td>
<td>-0.3164 **</td>
<td>-1.94836</td>
<td>24 :42 **</td>
<td>-2.21565</td>
<td>66</td>
<td>36.36%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(-5,+5)</td>
<td>-0.14748</td>
<td>-1.21587</td>
<td>-0.23063 *</td>
<td>-1.62257</td>
<td>26 :40 **</td>
<td>1.72328</td>
<td>66</td>
<td>39.39%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(-5,+1)</td>
<td>-0.10433</td>
<td>-0.8692</td>
<td>-0.13587 **</td>
<td>-1.69923</td>
<td>24 :42 **</td>
<td>-2.21565</td>
<td>66</td>
<td>36.36%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(-2,+1)</td>
<td>-0.01311</td>
<td>-0.13056</td>
<td>-0.07726</td>
<td>-0.6963</td>
<td>28 :38</td>
<td>-1.23091</td>
<td>66</td>
<td>42.42%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(-1,+1)</td>
<td>-0.05229</td>
<td>-0.51824</td>
<td>-0.03514</td>
<td>-0.37051</td>
<td>31 :35</td>
<td>-0.49237</td>
<td>66</td>
<td>46.97%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(-1,+0)</td>
<td>-0.05137</td>
<td>-0.52941</td>
<td>-0.00744</td>
<td>-0.35454</td>
<td>32 :34</td>
<td>-0.24618</td>
<td>66</td>
<td>48.48%</td>
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</tr>
</tbody>
</table>

**Table 2:** Daily and Standardized Cumulative Abnormal Returns of Cross-Border Expansion JV Announcements (EMM Region –Latin America)

The table presents the Daily and Standardized Cumulative Abnormal Returns (SCARs) of 20 cross-border JV expansion announcements by Latin American Emerging Market Multinationals (LAEMMs) originate from Latin America over the 1991-2005 period. Daily Standardized Cumulative Abnormal Returns (SCARs) are computed from the market model as prediction errors. Day 0 refers to the announcement day of acquisitions as reported SDC Database. Z-statistics [Wilcoxon Sign-Rank Test] is used to test for the statistical significance of mean [SCARs]. The statistical significance of mean [median] difference between groups is computed by One-Way ANOVA [Mann–Whitney Test for unmatched pairs]. Z statistics (Doukas’ test) is used to test for the statistical significance of positives/negatives. ***, **, and * denote statistical significance at the 1%, 5%, 10% levels, respectively.

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The statistical significance of mean [median] difference between groups is computed by One-Way ANOVA [Mann–Whitney Test for unmatched pairs]. Z-statistics (Doukas’ test) is used to test for the statistical significance of positives/negatives. ***, **, and * denote statistical significance at the 1%, 5%, 10% levels, respectively.

<table>
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<tr>
<th>Interval</th>
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<th>Median</th>
<th>WSRT Z for Median</th>
<th>Positive/ Negative</th>
<th>Doukas Z for Positive/ Negative</th>
<th>Total Number of Events</th>
<th>Positive Market Reaction %</th>
</tr>
</thead>
<tbody>
<tr>
<td>(-10,+10)</td>
<td>-0.00334</td>
<td>-0.02393</td>
<td>0.09936</td>
<td>0.417092</td>
<td>11: 9</td>
<td>0.447214</td>
<td>20</td>
<td>55.00%</td>
</tr>
<tr>
<td>(-10,+5)</td>
<td>0.263065</td>
<td>* 1.466297</td>
<td>0.302428</td>
<td>1.77264</td>
<td>14: 6</td>
<td>1.78854</td>
<td>20</td>
<td>70.00%</td>
</tr>
<tr>
<td>(-5,+5)</td>
<td>0.331771</td>
<td>** 1.861926</td>
<td>0.338254</td>
<td>1.668367</td>
<td>13: 7</td>
<td>1.341641</td>
<td>20</td>
<td>65.00%</td>
</tr>
<tr>
<td>(-5,+1)</td>
<td>0.273875</td>
<td>* 1.222586</td>
<td>0.158313</td>
<td>1.251275</td>
<td>14: 6</td>
<td>1.78854</td>
<td>20</td>
<td>70.00%</td>
</tr>
<tr>
<td>(-2,+1)</td>
<td>0.371548</td>
<td>** 1.802263</td>
<td>0.3909</td>
<td>1.598852</td>
<td>13: 7</td>
<td>1.341641</td>
<td>20</td>
<td>65.00%</td>
</tr>
<tr>
<td>(-1,+1)</td>
<td>0.227136</td>
<td>1.024957</td>
<td>0.152863</td>
<td>0.59088</td>
<td>11: 9</td>
<td>0.447214</td>
<td>20</td>
<td>55.00%</td>
</tr>
<tr>
<td>(-1,+0)</td>
<td>0.114247</td>
<td>0.54207</td>
<td>0.135024</td>
<td>0.59088</td>
<td>11: 9</td>
<td>0.447214</td>
<td>20</td>
<td>55.00%</td>
</tr>
</tbody>
</table>

Table 3: Daily and Standardized Cumulative Abnormal Returns of Cross-Border Expansion SA Announcements (EMM Region –Latin America)

The table presents the Daily and Standardized Cumulative Abnormal Returns (SCARs) of 9 cross-border SA expansion announcements by Latin American Emerging Market Multinationals (LAEMMs) originate from Latin America over the 1991-2005 period. Daily Standardized Cumulative Abnormal Returns (SCARs) are computed from the market model as prediction errors. Day 0 refers to the announcement day of acquisitions as reported SDC Database. Z-statistics [Wilcoxon Sign-Rank Test] is used to test for the statistical significance of mean [SCARs]. The statistical significance of mean [median] difference between groups is computed by One-Way ANOVA [Mann–Whitney Test for unmatched pairs]. Z statistics (Doukas’ test) is used to test for the statistical significance of positives/negatives. ***, **, and * denote statistical significance at the 1%, 5%, 10% levels, respectively.
| (-5, +1) | 0.794753 ** | 1.628149 | 0.237824 | 1.243933 | 5: 4 | 0.333333 | 0 | 55.56% |
| (-2, +1) | 0.917221 ** | 1.912319 | 0.423228 * | 1.480872 | 6: 3 | 1 | 0 | 66.67% |
| (-1, +1) | 0.732094 ** | 1.687354 | 0.412045 * | 1.599342 | 6: 3 | 1 | 0 | 66.67% |
| (-1, +0) | 0.689751 * | 1.462561 | 0.341026 | 1.243933 | 6: 3 | 1 | 0 | 66.67% |