SHAREHOLDER BENEFITS OF INTERNATIONAL DIVERSIFICATION

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International diversification has become ever important in corporate strategy as pressures to globalize increase. This paper looks to explore the resulting gains in shareholder value for international acquisitions compared to their domestic counterparts by analyzing announcement returns for international and domestic acquisitions from 2003-2013. In addition, the study explores past research to explain the benefits and rationale behind buying a firm abroad. Contrary to past research, the study determines that international acquisitions have a higher mean and median return than their domestic counterparts, although not at a significant level. In addition, the study finds that R&D Intensity has a negative relationship with announcement returns for all acquisitions in this time period. Given these findings, holding equity in firms that acquire internationally does not benefit investors.
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Chapter 1

Introduction to Acquisitions

In corporate strategy, several avenues exist to grow business. At the highest level, growth is defined in one of two ways: organic or inorganic. Organic growth is that which comes from existing business, and is driven by market growth or increasing market share. Inorganic growth results from expanding outside of the company’s current operations by strategies such as mergers, acquisitions, or joint ventures. This paper will focus on the latter and particularly inorganic growth through international acquisitions. (Kuntz, 2014)

The basic idea behind a merger or acquisition is that “one plus one is three.” When buying a company, the acquirer is hoping to create more shareholder value than if the two companies remain separate. This happens through synergies, which are revenue increases or cost savings as a result of the combined businesses. Some examples of synergies are economies of scale, new market reach, or in some cases staff reductions. There are a variety of strategies when choosing a company to merge with or acquire. Some firms acquire a horizontal firm, which is a direct competitor, while others acquire a vertical firm, a supplier or customer of the acquirer. There are also market-extension and product-extension mergers. These are acquisitions of companies that sell the same products in different markets or different products in the same market, respectively. Last on the list is a conglomeration merger, where a company acquires or merges with a completely unrelated firm. (McClure, 2014)
While extremely similar in nature, it is important to note that there are several key differences between a merger and an acquisition. Although the motivations and goals are generally the same, one firm purchases another in an acquisition while firms exchange stock and consolidate in a merger. In addition, mergers are usually more congenial and friendly, while acquisitions are more likely to be hostile and unwanted by the target company. (McClure, 2014)

By acquiring a firm, CEOs’ and managers’ ultimate goal is to boost shareholder value, as evident through stock returns. While an acquisition’s effect on a firm’s financial performance is sometimes not felt or seen for years, the main proxy for measuring value creation in literature is through announcement returns. This means that although announcement returns may be negative, reflecting a value destroying acquisition, many of these acquisitions result in value creation. (Bayazitova, Kahl, and Valkanov, 2012)

Unfortunately for managers, there is no set archetype for a successful acquisition. In the sample from 2003-2013 used in this paper, upwards of 45% of all acquisitions underperformed the S&P 500 Index when announced. However, there are several strategies that typically result in successful acquisitions as determined by McKinsey & Co. The most consistently successful acquisitions typically are those that seek to improve the target’s performance, consolidate to remove excess capacity from the industry, boost market access for both firms, or to gain skills and technologies. Another successful strategy for risk taking firms is to acquire early winners. When looking at international acquisitions, the two most applicable strategies of these are to increase market access and to gain skills and technologies that the acquirer is lacking. (“The Five Types of Successful Acquisitions”, 2014)
Recent History

As one of the main reasons to expand via an acquisition is to gain market share, international acquisitions have become popular in recent merger waves. (Lipton, 2006) While acquisitions are constantly occurring, large “waves” of acquisitions have occurred throughout time with each wave having certain characteristics. The fifth merger wave, which lasted from 1992 – 2000, was considered by many to be the first international merger wave. (Black, 2000) As many of the world’s economies globalized and stock markets became more linked, an increasing number of cross-border acquisitions arose. A great example of this can be seen by looking at the percentage of US-only takeovers as a percentage of worldwide acquisitions. In 1985, 83% of acquisitions comprised of a US based acquirer and target. By 1999, this figure more than halved to 41%. In addition to international acquisitions increasing in frequency, the fifth merger wave also contained mega deal, overvaluation, and value destruction for shareholders. (Alexandritis, Mavrovitis, and Travlos, 2011)

The sixth wave of mergers closely followed the fifth, beginning in 2003 and lasting until 2008. This wave was driven by abundant and easy financing and liquidity, although displayed evidence of much more restraint around overpayment than the fifth merger wave. The end of this merger wave was brought about by managers showing fears about Mortgage Backed Security and credit markets, and there was a definitive drop-off in acquisitions following 2008. Despite corporate governance improvements in the early
2000’s, a dip in CEO overconfidence, and a drop in acquisition premiums, Alexandridis found that deals were not creating any more value than those in the fifth merger wave. (Alexandritis, Mavrovitis, and Travlos, 2011)

**Rationale for International Acquisitions**

There are several main reasons why a firm would want to acquire an international firm as opposed to a domestic firm, falling under three umbrellas: operational, strategic, and financial benefits. (Ittner and Markides, 1994)

At the operational level, firms acquire international firms to gain firm-specific assets and intangibles. Examples of these assets are high brand equity, patent-protected technology, and regulations that have created barriers to entry for others. These operational benefits typically cannot be exploited in any other way than acquiring the firm and then internalizing the target firm’s market. (Ittner and Markides, 1994)

Strategically, a firm benefits from international acquisition by not only gaining a specific set of assets under their control, but also by preempting their competitors and shutting them out of the market. This is especially important for MNCs that acquire a firm in their main competitor’s home market, which decreases the rival’s profitability as importantly as increasing the firm’s profitability. (Ittner and Markides, 1994)

The third category of rationale is financial benefits. Because there are barriers to international capital flows for the average shareholder, investors typically hold more domestic stocks than would be required if they held the global efficient portfolio. These barriers to capital flows include tax structures, accounting standards, securities
regulations, and political and economic risks. By acquiring a foreign firm, MNCs allow investors exposure to international markets indirectly. This, theoretically, should be reflected positively in the MNCs stock price. (Ittner and Markides, 1994)
Chapter 2

Literature Review

Much research has already been committed to exploring the nature of acquisitions, particularly the relationship between foreign acquisitions and abnormal returns. This section outlines the rationale behind different types of acquisitions as well as the results of prior research in the area.

Markides and Ittner (1994) investigated whether international acquisitions create more value than domestic acquisitions. Their sample comprised of deals from 1975-1988 that could be identified in the Wall Street Journal Index, with no confounding announcements within 10 days before or after the acquisition announcement, and the acquiring firms stock on CRSP tapes. Their final sample contained 276 announcements.

Due to international acquisitions providing more operational, strategic, and financial benefits, Markides and Ittner believed they would find international acquisitions result in significantly higher positive abnormal returns than those of domestic nature. The study found that international acquisitions showed significant positive returns while domestic acquisitions showed zero/slightly-negative abnormal returns. They also found that wealth effects were tied to a number of related factors such as the nature of the acquisition (e.g. related industry), the nature of the acquiring firms (e.g. prior experience), and the macroeconomic environment (e.g. strength of USD). (Ittner and Markides, 1994)
Doukas and Travlos (1998) examined corporate multinationalism by looking at international acquisitions and how country and industry diversification would affect share prices. Their sample comprised of all publicly announced acquisitions from 1975-1983 that were listed on NYSE or AMEX. After excluding acquisitions that had a major corporate event for 15 days prior to the announcement, their sample contained 301 acquisitions by 202 firms.

They constructed a “positive multinational network hypothesis,” that posits country and industry diversification would have the greatest positive impact on shares. They found that companies going multinational for the first time experienced insignificant positive returns, while MNCs entering a new country experienced significant positive returns. In addition, they found that MNCs acquiring a firm in a country with existing operations resulted in insignificant negative returns. Their study reflects the notion that investors correctly perceive benefits of a multinational corporate network. (Doukas and Travlos, 1988)

Markides and Oyon (1998) updated Markides and Ittner (1994), with an emphasis on which specific regions generated abnormal returns. Their sample comprised of acquisitions from 1975-1988 that could be identified in the Wall Street Journal Index, with no confounding announcements within 10 days before or after the acquisition announcement, and the acquiring firms stock on CRSP tapes. The final sample had 236 acquisitions, 47 in Canada and 189 in Europe.

Markides and Oyon (1998) expected international acquisitions to do better than their domestic counterparts. The results showed that acquisitions in Britain and Canada created no value, while those in continental Europe created significant value. This falls in
line with their “internalization theory,” which states that acquiring firms can exploit specific intangible assets, although the reason why it applied to Europe and not Canada or Britain was not evident. (Markides and Oyon, 1998)

Bresman, Birkinshaw, and Noble (1999) investigated facilitators of knowledge transfer in international acquisitions. Their sample contained 42 R&D departments acquired by Swedish MNCs, and also analyzed three case studies.

Bresman, Birkinshaw, and Noble (1999) found communication, visits, and meetings to be significant predictors of technological knowledge transfers. They also found that the impact of articulability of knowledge and time elapsed varied depending on the type of knowledge transferred. In the case studies, they found that the amount of knowledge transferred increased over time, as well as the quality and type of knowledge. In addition, they noted that the transfers became two-way, with the acquiring firm eventually lending knowledge to the acquirer. The study was somewhat written off, however, due to a small sample of only Swedish MNC R&D acquisitions. (Bresman, Birkinshaw, and Noble, 1999)

Alexandridis, Fuller, Terhar, and Travlos (2013) examined the relationship between deal size and acquisition premia. The primary data used in this paper included completed deals announced between 1990 and 2007. The targets were publicly listed on NYSE, AMEX, or NASDAQ and the acquirers were both private and public. In addition, the deals were all at least $1 million, with the acquirer owning <10% before and >10% after. The data was pulled from CRSP and Compustat, and the final sample comprised of 3,691 acquisitions.
Alexandridis, Fuller, Terhar, and Travlos (2013) conducted this study to examine the trend of large acquisitions and the associated value destruction, with the hypothesis being that negative returns are due to relative size as opposed to deal premium. The primary conclusion was that firms pay a smaller premium for larger firms than for smaller firms, although large acquisitions destroy more value than smaller acquisitions. The general idea was that because there is more “value at stake” with large acquisitions, managers are focused on getting a more accurate valuation and are more hesitant to pay a lofty premium. They also attributed this to the fact large firms have less concentrated shareholders, who are thus more likely to accept a small acquisition premium. (Alexandridis, Fuller, Terhar, and Travlos, 2013)

Jansen, Sanning, and Stuart (2013) investigated deal size and how relative size amplifies wealth effects. This paper used a sample from 1980-2008, and eliminated acquisitions that fall under seven criteria. These criteria are: 1) incomplete acquisitions 2) acquisitions involving foreign companies 3) acquisitions which result in the acquirer owning less than 100% of the target 4) acquisitions where the acquirer previously owned more than 50% 5) acquisitions less than $1mm 6) acquisitions less than 1% of the acquirers market value of assets and 7) acquisitions where the acquirer stock price data is not available on the CRSP database. Their sample comprised of 18,872 transactions. The data was taken from the US Mergers and Acquisitions Database, which is published by the Securities Data Company (SDC).

Contradicting the ideas of several papers, Jansen, Sanning, and Stuart (2013) hypothesized that most large and small acquisitions have the potential to create abnormal returns. They found that only value creation or destruction impacts the abnormal returns
on an acquisition, and the relative size of the acquisition amplifies that effect. They also broke up analysis of public vs. private firms, concluding that gains of acquisitions of private targets increase with relative size and losses from acquisitions of public companies also increase with relative size. (Jansen, Sanning, and Stuart, 2013)

Ferris, Jayarman, and Sabherwal (2013) took a look at CEO overconfidence and how it affects various aspects of international acquisitions. The sample for this paper comprised of the Fortune 500 companies from 2000-2006, specifically companies that make the Fortune 500 at least once over those seven years excluding financial firms and SOEs. Only acquisitions where the acquirer obtains control (51%) of target shares and deals where the target holds less than 50% of the target were used. They also omitted acquisitions less than 5% of the acquirer value. They also collected data on the CEOs, including their age as of 2006 and their education. They factored in data on country culture, religion, and language. The data for this paper came from a wide variety of sources, including the Fortune 500 list, firm websites, Stulz and Williamson (2003), Hofstede (1980, 2001), Compustat, and SDC database.

Ferris, Jayarman, and Sabherwal (2013) asked whether or not country patterns or distributions are evident when examining CEO overconfidence, as well as if characteristics of mergers made by overconfidence US CEOs hold internationally. They found that CEO overconfidence plays a role in the characteristics of international mergers, specifically the number of offers, the frequency of offers, and the decision to use cash instead of equity. They also addressed cultural differences and how they affect CEO overconfidence. Their research shows that CEOs in Christian countries are more
likely to exhibit such behaviors, as these cultures typically value individualism. (Ferris, Jayarman, and Sabherwal, 2013)
Chapter 3
Hypothesis

This paper aims to examine whether international acquisitions do, on average, result in higher abnormal returns than their domestic counterparts. I suggest this hypothesis for three reasons: international firms (1) offer increased market access, (2) offer differentiated firm intangibles, and (3) offer investors indirect geographic portfolio diversification. International firms offer increased geographic market access that serves both as a strategic tool against competitors in their home markets and other MNCs in foreign countries. International firms also offer brand equity or technology that cannot be found in domestic markets, and would be more expensive to generate from the ground up. In the case of brand equity, this would typically allow an acquirer to gain brand equity that can be used to compete in a foreign market against local competitors or other MNCs. With R&D or technology, an acquisition would allow an acquirer to take the target’s knowledge to the home country to compete against existing competitors. Lastly, an international acquisition gives investors geographic portfolio diversification without needed an in-depth knowledge of foreign markets and the risks associated with them.

Although nearly all prior research has shown international acquisitions offer significantly higher abnormal returns than domestic acquisitions, there are several reasons why this may no longer be the case. The study could fail due to information asymmetry. Ragozzino (2009) found that geographically proximate targets resulted in higher returns than geographically distant targets. This means that acquisitions outside of
Canada and Mexico could have poor announcement returns due to information asymmetry. (Ragozzino, 2009) My hypothesis could also be disproved because of the changing nature of the globalized marketplace. Several high profile companies have gone international since the fourth and fifth merger waves to mixed results. For example, Walmart’s international segment has grown considerably since the mid 1990’s, although their flawed strategy and failure to adapt to local markets caused them to withdraw from major markets such as Germany and South Korea. As a result, investors have been much more cautious about MNCs, especially those that are acquisition hungry. (Boyle, 2014)

Prior research leads me to believe international acquisitions will ultimately have a significant effect on abnormal returns. Markides and Ittner (1994) have twice analyzed the relationship between the two and have found significant results both times. As most of the firms in the sample are MNCs, Doukas and Travlos’s (1988) findings also lend to my hypothesis, as they found that MNC acquisitions lead to significant abnormal returns. Although these papers reflect older samples, I do not think there is enough rationale for these results to change since the dot-com bubble and global financial crisis.

The above rationale and prior research on the topic should lead to international acquisitions generating higher abnormal returns than domestic deals.
Chapter 4

Data & Methodology

The sample used to determine the relationship between international acquisitions and returns contained 239 individual acquisitions from the years 2003-2013. These were obtained from the SDC database on ThomsonOne, and the sample included the date of the acquisitions as well as acquirer names and target names. Results were limited to completed acquisitions made by a public US acquirer with a 50% stake sought. In addition, financial firms were disregarded due to the high leverage nature of those businesses which may affect the results in a different way than other firms would. The resulting sample contained 144 domestic deals and 76 international deals, with two clusters of deals made in 2003 and in 2008. Although the sixth merger wave only lasted from 2003-2008, the study used the ten year period from 2003-2013 for several reasons. Not only does five additional years add more data to the sample, but it also allows for the study to reflect on the most recent acquisitions in the market. The ten year time period also allows this study to be more closely compared with prior studies, which used ten or more years when analyzing deals.
For return analysis, this study took adjusted stock returns of the acquirer from t-1 to t+1. To determine abnormal returns, this study uses Cumulative Abnormal Returns (CAR) measured as:

\[
    \text{CAR} = \frac{(1+R_1)(1+R_0)(1+R_1) - (1+\text{Mkt}_1)(1+\text{Mkt}_0)(1+\text{Mkt}_1)}{}
\]

where “R” is the adjusted stock return of the acquiring firm and “Mkt” is the corresponding return of the overall market measured by the S&P 500 Index.

To control for other factors, various metrics related to the acquisition were pulled from CRSP and Compustat. Variables used in the regression fell into one of four categories: industry characteristic, nature of acquisition, acquirer characteristics, and relationship with US market. The study captures industry effects by including “R&D Intensity” as measured by R&D Expenditures/Sales for the acquirer. The nature of the acquisition was controlled by a “Related” (first two digits of SIC code match) variable,
an “Equity Stake” variable, a “Cash or Stock” payment variable, and a “Relative Size” (Target Sales/Acquirer Sales) variable. Acquirer characteristics were controlled with an “Acquirer Profitability” variable (Net Income/Sales) and “Log Size” (Natural Log of Acquirer Total Sales). Lastly, the target firm’s relationship with the US Market was controlled by an “English Speaking” variable. Due to incomplete data in the CRSP and Compustat databases, the study was limited to analyzing 220 of the original 239 deals. To analyze returns and their relationship with firm characteristics, the CAR for each firm was regressed against the target firm’s country as well as the control variables listed above.
Chapter 5

Empirical Results

The above analysis showed that for acquisitions from 2003-2013, international acquisitions yielded higher mean and median returns than their domestic counterparts. Mean announcement returns for international acquisitions outperformed those of domestic acquisitions by 0.71% while median announcement returns for international acquisitions outperformed those of domestic acquisitions by 0.98%. With a sample size N=220 and a t-statistic of 0.9615, however, these results are insignificantly different.

Below is both a table and chart summarizing performance:

<table>
<thead>
<tr>
<th>Announcement Return Performance</th>
<th>US</th>
<th>INTL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Return</td>
<td>-0.24%</td>
<td>0.47%</td>
</tr>
<tr>
<td>Median Return</td>
<td>-0.03%</td>
<td>0.96%</td>
</tr>
<tr>
<td>t-statistic</td>
<td></td>
<td>0.9615</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>220</td>
</tr>
</tbody>
</table>
The regression analysis also helped provide some insight into what else was affecting announcement returns, and why the “international vs domestic” variable yielded insignificant results. With N=220, the regression showed no significant positive or negative relationships between the variables and CARs, except for R&D Intensity. The R&D Intensity variable had a negative relationship with CARs, and was significant at the 95% confidence interval. The following table summarizes key values in the regression:
Although the primary focus of the study is to examine the relationship between the country of the target and CARs, the relationship of the control variable R&D Intensity needs to be examined further to determine if it significantly affects CARs when analyzed in a standalone regression.

The analysis on R&D Intensity showed that for acquisitions from 2003-2013, acquirers with less than 10% R&D Intensity (Low) as measured by R&D Expenditures/Sales yielded higher mean and median returns than acquirers with 10% or greater R&D Intensity (High). Mean announcement returns acquirers with less than 10% R&D Intensity outperformed those of acquirers with 10% or greater R&D Intensity by 1.30% while median announcement returns for international acquisitions outperformed
those of domestic acquisitions by 0.91%. With a sample size N=220 and a t-statistic of -2.5043, these results are significant and show a negative relationship between R&D Intensity and announcement returns. Below is both a table and chart summarizing performance:

<table>
<thead>
<tr>
<th>Announcement Return Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D Intensity</td>
</tr>
<tr>
<td>Mean Return</td>
</tr>
<tr>
<td>Median Return</td>
</tr>
<tr>
<td>t-Statistic</td>
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<tr>
<td>N</td>
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</tbody>
</table>

![Announcement Returns Chart](chart.png)
Conclusion

The results of this thesis show that although international acquisitions result in 0.71% higher mean and 0.98% higher median returns than their domestic counterparts, they are not significantly higher. While the rationale to diversify internationally still makes sense theoretically in the sixth merger wave, I believe that both the dot-com bubble and Global Financial Crisis have led investors to be much more cautious of all acquisitions, and particularly those which are cross-border. In addition, information asymmetry that was once overlooked in the fifth merger wave is now taken into greater consideration as cultural, economic, and political differences between the US and foreign countries have caused several international ventures to fail. Thus, holding equity stakes in companies that acquire internationally did not benefit investors in the period from the start of the sixth merger wave to the end of 2013.

Contrary to both past research and intuition, the data shows that the only significant variable controlled for in this study in determining abnormal returns is R&D Intensity. Despite research showing R&D firms benefit from acquisitions due to knowledge and technology transfer, this data shows a slightly negative and significant relationship between R&D spending and acquisition announcement returns. Specifically, firms with less than 10% R&D Intensity outperform those with 10% or greater R&D Intensity by 1.30% on average at the 95% confidence interval. A possible explanation for this relationship could be that firms buying targets to exploit their R&D or technology overpay to lock in competitive advantages against competitors in their home markets.
While this shows that equity stakes in companies with high R&D Intensity does not benefit investors at the time of announcement of an acquisition, this does not mean that firms with high R&D Intensity do not outperform in the long run. The next step of this research would be to determine if firms with either high or low R&D Intensity outperform in the entire time span from 2003-2013.
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