

ERASMUS UNIVERSITY ROTTERDAM

Erasmus School of Economics

Bachelor Thesis [International Bachelor Economics and Business Economics]

Major: Financial Economics

Shareholder value creation in Mergers and Acquisitions into emerging markets: Determinants of acquirer's performance

Name student: Frederick Christian Lieb

Student ID number: 455938

Supervisor: Dr. Ruben de Blik

Second assessor: Dr. Sjoerd van den Hauwe

Date final version: July 22nd 2019

Word Count: 12,214

The views stated in this thesis are those of the author and not necessarily those of Erasmus School of Economics or Erasmus University Rotterdam

Table of Contents

ABSTRACT	3
1. Introduction.....	4
2. Theoretical Framework	7
2.1 <i>Definition and Purpose of M&As.....</i>	7
2.2 <i>The impact of M&As on firm performance</i>	9
2.3 <i>The determinants of M&A performance</i>	11
2.4 <i>Context: Emerging Markets</i>	13
3. The Data	17
3.1 <i>Data selection and screening</i>	17
3.1 <i>Mergers & Acquisition Data.....</i>	19
3.2 <i>Additional Explanatory Variables</i>	20
4. Methodology	23
4.1 <i>Market-model: Abnormal returns and its deviations</i>	23
4.2 <i>Regression specification</i>	25
5. Results	27
5.1 <i>Stock markets reaction to the M&A announcements and its variation across groups.</i>	27
5.2 <i>The determinants of acquirer's abnormal returns</i>	29
5.3 <i>Context emerging markets: Internalisation hypothesis and influence of country differences on acquirers abnormal returns.....</i>	33
6. Discussion and Conclusion.....	39
6.1 <i>Limitations and suggestions for future research.....</i>	41
7. References.....	42
8. Appendix	46

ABSTRACT

This study analyses the abnormal returns generated by developed market acquirers, from 22 different countries, in M&A transactions for emerging target firms, with focus on the determinants causing these abnormal returns. The sample entails 1412 M&As involving target firms from 26 different countries in the time period of 1995 to 2018. At the day of the announcement and the day afterwards, abnormal returns for developed market acquirers accumulate to a statistical significant 0.75%. Nonetheless, acquirers destroy the initial shareholder value generated within the two-day event window, measured by a three months window after the announcement, indicating a significant value destruction of -1.8%. Explanatory for the initial anomalous returns generated for shareholders to acquiring firms are the percentage of shares acquired, transaction value of the deal and acquirer size. These determinants being significant, despite measures of robustness and controlling for target industry and regional effects. Further, the paper complements these determinants by finding a positive effect of information asymmetry and heterogeneity, between acquirer and target country, on acquirer's stock performance, nonetheless, this being limited to economic and institutional differences.

Keywords: Mergers and Acquisitions, M&As, developed market acquirers, emerging market target, acquirer's shareholder value creation, acquirer's (cumulative) abnormal returns.

1. Introduction

The need for organisations to manifest themselves as a competitive participant in their respective market while simultaneously building up reputation and expanding brand coverage is an essential necessity in the modern economy. One way to quickly expand the organisational empire and market coverage is the activity of undergoing a merger or acquisition with another, commonly smaller, organisation. Hereby, the notion of mergers refers to a mutual agreement to integrate two organisations into one operational entity, often described as a friendly merger. In contrast the term acquisition describes the involuntary alignment of two entities into one, resulting due to the acquiring firm purchasing sufficient shares to obtain corporate control over the target company. The latter is often expressed as hostile takeovers in common literature and media sources. In accordance with the motivation to expand the organisational coverage, the main underlying reason for M&As is to capture possible synergy effects resulting from this corporate integration. Whereas synergy effects are present if the resulting value of the firm after the M&A is greater than the value of the two independent firms added together.

The concept of value creation through M&As for firms has been analysed before by researches in the field of economics and business. However, a current trend in M&As for emerging country targets majorly grew in recent years. Such can be illustrated by the increase of M&A deal activity, involving emerging countries, of 25% in the first quarter of 2019 compared to last quarter of 2018 (Refinitiv, 2019). Specifically, this increase is caused by certain emerging markets rise in total M&A deal value in dollars in the recent past. BRICS countries faced an increase in total M&A transactions from \$415 billion in 2010 to over \$730 billion in 2018 (IMAA, 2019). Especially the total M&A deal value in India, which reached its all-time high in 2018 of over \$100 billion compared to \$62 billion in 2017 (Financial Times, 2018) contributed to this immense rise. Hence, it presents an interesting topic to study and analyse if these M&As differ in their nature as to whether they generate similar value in emerging countries compared to developed ones.

The challenge the acquirer faces is to efficiently align both entities resources and make use of country specific knowledge from the respective target firm. Achieving this the acquirer is able to create shareholder value as shown by Chari, Ouimet, and Tesar (2009) who find positive M&A returns for firms from developed economies acquiring targets located in emerging economies. However, the determinants of this return can be different from the ones driving M&A returns in developed markets. This is due to different institutional frameworks and

maturity of the target economies within emerging countries. Hence, as shown by Agarwal and Bhattacharjea (2006), institutional and economic development of the target country causes variation in acquiring firms return to some extent. But also characteristics of the acquirer itself can drive their returns if they possess certain attributes. In particular, for the case of acquiring cross border targets, intangible assets and R&D intensity have a beneficial effect on M&A returns for bidders (Francoeur, 2006). In addition, pointed out by previous research is that certain deal characteristics determine M&A returns for the acquirer, such as the percentage of shares acquired in the transaction (Chang, 1998). However, most of these findings were analysed for either a mixed sample of M&As or cross border ones in general, but only few have researched this in a framework where target firms only stem from emerging economies.

Thus, uncertainty exists to whether these determinants will explain returns for acquirers from developed countries when the target stems from an emerging country. By revealing the determinants that have most explanatory power and hence are more pronounced within this context, the study will contribute to the ongoing discussion of M&A returns.

Despite differences in the research design, the results of this thesis can be compared to past findings of determinants of acquirer's performance for M&As within developed countries. In addition, I expect from theories and literature that the method of payment, deal type and firm size will affect, to some extent, acquirer's performance where the target belongs to an emerging market. This can be expected as these determinants are persistently evaluated for their importance on acquirer returns in the past literature (Heron & Lie, 2002; Loughran & Vijh, 1997; Moeller, Schlingemann, & Stulz, 2004). In particular, explanatory power is expected within the factors of percentage of ownership acquired, R&D intensity, intangible assets, institutional setting and degree of development from the target country. This is the case as these are more relevant to emerging countries and thus are increasingly influential on acquirer's performance. Therefore, the main research question for this thesis is concentrating on the determinants and to what extent certain factors will explain acquirer's performance in M&As into emerging markets. The central research question throughout the thesis is formulated as:

Which determinants are the most influential for acquirer performance in M&As into emerging countries?

A complementing sub-question supporting the central research question is:

How do these determinants affect the acquirers return at the announcement date?

To be able to answer the central research question, matching databases are needed. Thus, Thomson Reuters Mergers and Acquisitions database will be used to screen and select the data. From this database announcement dates and effective dates of the M&As will be extracted. In addition, variables about specific deal details and firm characteristics are included. These consist of, but are not limited to, percentage of shares acquired, value of transaction, size of acquirer to target firm, method of payment, country of origin of target firm and industry category of the acquirer and target. The data however, will be restricted to developed countries for acquirers, such as Western European countries and US firms. For the targets the firms considered will be restricted to all countries that are identified to be an emerging country. Regarding security price information and security index prices, Bloomberg Professional database, accessed via the Bloomberg Terminal and DataStream will be used. The methods employed to determine abnormal returns for the announcements date and post-acquisition period is the standard event study methodology by Brown and Warner (1980). Thereafter, inferences will be drawn based on the significance and influence of the determinants via parametric statistical tests and several regression specifications.

Finally, the construction of the analysis paired together with the examined theories and earlier empirical research allows to induce expected outcomes. Some of these are that method of payment and deal type will have explanatory power to some extent for announcement return as well as post-acquisition performance. Secondly, firm size is expected to be a significant determinant, at least based on theory, as larger firms will be likely more experienced in M&A transactions and have superior resources to handle the obstacles induced by such transactions in emerging markets. Nevertheless, the intensity of R&D and intangible asset availability will likely result in positive effects, both for the announcement return and post-acquisition performance for the acquirer. Similarly, institutional development of the target industry or development level of the country will also be expected to influence shareholder value creation.

2. Theoretical Framework

2.1 Definition and Purpose of M&As

Before I consider the existing literature and build up the framework for the scope of this research, it is essential to become familiar with the concepts of M&As. It is important, in the first place, to understand in which context the research of the topic of M&As is conducted. Since the scope of this report is to identify specific determinants of stock price reactions and developments due to the transaction, the context of this research is limited mainly to the financial aspects.

A legal definition of Mergers and Acquisitions is given as the "Methods by which corporations legally unify ownership of assets formerly subject to separate controls" (West's Encyclopaedia of American Law, 2008). This rather vague definition can be more specified with regards to the fields of interest in consideration. Accordingly, the financial definition describes the term M&A as any process by which two independent companies become one legal entity due to integration of their operations, management, stocks and assets (Farlex Financial Dictionary, 2009). However, the term is twofold and may refer to a variety of processes or methods by which firms utilise M&As. Since mergers differ in their nature from acquisitions, I firstly provide a brief description of both concepts.

In contrast to acquisitions, mergers are mostly described as being friendly in their attitude and occur based on a voluntary decision of both firms to integrate their operations. Acquisitions, on the other hand, describe the takeover of control of a target firm by buying sufficient amount of shares to exercise corporate control over the target. Essentially M&As are categorised into horizontal, vertical or conglomerate, which are based on the relation and competitive environment between the two merging entities (Cantwell & Santangelo, 2002). As stated by Cantwell and Santangelo, a merger is categorised as horizontal, if both companies operate in the same industry and their industrial output is similar. In addition, they specify vertical mergers if it involves firms which are located at different levels of the production process within a certain industry. And lastly, conglomerates define any merger in which the two parties in question have no distinct similarities in terms of business operations or geographical coverage (Tremblay & Tremblay, 2012).

The types of M&As utilised are commonly dependent on the firm's motivational reason in line with their business goals. I, therefore, firstly explicate the most prominent reasons behind

M&As, since these often provide substance to the later discussed influences of M&As on firm's ability to create value.

Market Power

The most common explanation, especially for horizontal mergers, is the purpose to obtain increased market share and hence increase the competitiveness of the firm. In competitive markets a firm can thereby strengthen their position through M&As to attain increased monopoly power. The market power motive behind M&As has been widely accepted throughout literature and identified to be a key driver considering competitive motivational reasons (Kim & Singal, 1993; Lanine & Vennet, 2007).

Synergy Effects

The term synergy effect refers to the concept that after the M&A is completed the resulting firm value is greater than the standalone value of the firms before the transaction. This can arise due to economies of scope and scale. Economies of scale lead to synergy effects as combining two firm's operations, cost savings can be achieved while generating greater firm output, which is due to the dilution of fixed costs (Stigler, 1958). Whereas economies of scope arise due to the more efficient use of common inputs when similar product lines are aligned. In this context synergies exists if the two merging firms can combine their competences to increase innovations and establish value adding activities (Teece, 1980).

Managerial Hubris

The fact that M&As always result in synergy effects and value creation within the firm has to be spectated with severe conservatism. In the case of non-prudent management decisions, reaching back to solely hubris motivational reasons, the decision to merge or acquire is based on manager's desire to control a larger organisation. The underlying purpose of this M&A transaction is therefore not based on maximising wealth of stakeholders, on the contrary it is solely employed by managers to manifest themselves in the growing entity. This motive is commonly identified in financial literature and allows the management to utilise increased power within the organisation (Roll, 1986).

Transaction and Information costs

Reduction in costs, regarding transaction and information, is feasibly attained in vertical mergers, as the two firms now cooperate at an increased rate by integrating their coordination

and planning (Goldman & Gorton, 2000). Thus, firms often undergo vertical mergers to benefit from such reductions in costs by replacing these transactions in the market by private inter-firm agreements after they have merged (Cantwell & Santangelo, 2002). This will ensure a more fundamental exchange of information promoting information symmetry and effectively results in more efficient transactions.

2.2 The impact of M&As on firm performance

The different motives of M&As described above are directly linked to certain strategic goals the acquirer is seeking, such as increase in market share, expansion of business operations, entering a new market, eliminating close competition, diversification or achieving synergistic effects for the firm and shareholders (Lebedev, Peng, Xie & Stevens, 2015). While most of these motives are classified under the objective of market power and synergies, it would be premature to assume that value creation is the conclusion, since anticipating the outcome of M&As is reliant on several other features. Therefore, dependent on the above mentioned long run objectives, the market will anticipate all available information regarding the outcome and firm ability to achieve value creation and react accordingly.

Hence, the effects of M&As for the acquiring company in terms of value creation can be analysed through the respective companies' stock performance, once the M&A is announced, followed by its long run stock development after the implementation. This is due to the efficient market hypothesis (EMH), which states that asset prices are always based on their fair value and incorporate all available information at the given time. An explanation for the validity of this hypothesis lies in the following reasoning: Competition among market participants implies that current prices of securities will incorporate the effect of information on past events as well as anticipate the events future outcome (Fama, 1960). This hypothesis is of high relevance in the field of financial economics and research as it enables to conceptualise current and expected changes in the fundamental value of a company, following a corporate decision, by its stock price development.

Therefore, beneficial and suboptimal M&As should be reflected in a, respectively, positive or negative stock price development once the information is publicly available. It is therefore anticipated that different motivational backgrounds for M&As induce varying stock price reactions on the financial markets. Thus, the creation of value and beneficial firm performance due to M&As is dependent on the motivational background driving the M&A decision.

Regarding the objective of achieving higher market power, the result is influenced by the degree of institutional development of the target country, as corporate government reforms have influences on the decision as well as the performance after the acquisition. In this case the acquirer is seeking to merge with a good performing target firm in a weaker institutional country to gain not only knowledge spill overs about the respective local market, but more importantly, gain market power in an effective way (Kim & Lu, 2013). The ability of the acquirer to efficiently incorporate its target and coordinate their operations will thus be decisive of a beneficial or suboptimal stock return performance.

Motivations based on synergy effects and reduction in information and transaction costs are mainly determined by the degree to which the acquirer can internalise the country specific resources and the firm's specific resources to create shareholder value.

This is supported by the finding that cross border M&As create value when the acquirer controls a sufficient amount of intangible assets but fails to add firm value in absence of them (Morck & Yeung, 1992), which is in agreement with the internalisation theory of Buckley and Casson (2009) and Rugman (1986). The explanation for this lies within the ability of intangible assets to approximate a firm's capability to efficiently exploit and integrate its targets superior local knowledge advantage. Intangibles also can determine the degree to which acquirers can absorb any proprietary assets, necessary to generate excess value for the firm.

Lastly, the contrary is the case where the firm fails to incorporate and internalise its target efficiently, which is often indicative for motives of managerial hubris. Hence the anticipated outcome will unlikely result in value creation, in contrary, diminish shareholder value as well as firm value, leading to a negative stock price development following the merger or acquisition. This is shown by the study of Jiang et al. who identified and provided evidence for a negative firm profitability due to managerial overconfidence regarding M&A transactions (Jiang et al., 2011).

As it is outlined above M&As can have a two-way effect on the acquiring firm's performance. Therefore, it is in interest for researchers and managers to shed light into the determinants of stock return performance for M&As in an emerging country setting. Thereby being able to identify whether M&As in emerging countries will have similar determinants that create or distort firm value. Subsequently, fully understanding these possible determinants that drive value creation is beneficial to investors as they can anticipate the future outcome and take actions accordingly. In addition, an efficient firm can create shareholder value by merging or acquiring a target company, while completely internalising and implicating the determinants in the long run.

2.3 The determinants of M&A performance

To be able to discuss the determinants of acquirer's stock return performance in the context with targets from emerging countries, I first screen the past empirical literature for M&As in general to give their most important findings. Later on these findings are evaluated for their importance in the context of this research.

The empirical results of this larger literature framework present several influencing factors, however, the final outcome is inconclusive. Many past empirical studies find evidence that M&As will either not impact or distort shareholder value in the short term and long term (Seth, Song, & Pettit, 2002). Nevertheless, for cross border M&As involving emerging market economies, several studies have shown that firms are able to generate favourable returns for their shareholders (Bhagat et al., 2011; Bhaumik & Selarka, 2012; Chari et al., 2010; Chi et al., 2011; Gubbi et al., 2010; Nicholson & Salaber, 2013). Moreover, Lebedev et al. (2015) have conducted a detailed literature review assessing the studies who engage in the topic of acquirer's returns in M&As in and out of emerging countries. They give support to the claim of positive acquirer returns for cross border M&As involving emerging countries, as they evaluated that the majority of studies, named above, identified favourable stock market valuations of these transactions. Thus, I will favour the notion that developed countries acquiring firms are able to generate positive returns for their shareholders in M&A transactions into emerging markets, which the stock market will react upon in a positive manner. This is going to be evaluated through the first hypothesis of this paper, stating that:

H1: Stock markets favourably value M&A transaction of developed market acquirers for emerging market targets, indicated by positive abnormal announcement returns.

However, several factors determining acquirer's ability to generate abnormal returns consistently appear in past literature and have been evaluated for their effect on acquirer stock performance. Therefore, I will present relevant empirical results for these factors and discuss their importance and possible implications for the emerging market context. Afterwards, distinct concepts and past empirical findings for emerging markets are explicitly considered to identify determinants of acquirer stock returns that may be unique to such acquirers from developed economies targeting emerging market firms.

Means of Payment

A consistent reoccurring factor determining the returns for acquirers is the method of payment. This refers to whether the acquiring firm's consideration to pursue the transaction is paid in stock or cash. Under the means of payment hypothesis, a payment not in stock signals firm's private information on the beneficial future performance after the acquisition, hence the firm will pay in cash to retain its own shares as they are anticipated to increase in monetary value in the near future. Thus a payment mainly in cash should positively affect acquirer's stock returns. However, Chang (1998) finds no significant average abnormal return for cash offers, although interestingly under stock offers he states significant abnormal returns of 2.64% for privately held targets.

In contrast, da Silva et al. (2004) reports positive mean excess returns of 3.26% for bidders under cash offers which turn out to be insignificant for stock offers, in line with the means of payment hypothesis. His sample included only Australian listed acquirers bidding for privately held targets. In agreement with this are the positive post-acquisition excess returns found by Loughran and Vijh (1997), which turn out to be negative under stock offers.

Due to the large occurrence in literature of the type of payment effecting acquirer's returns and these not being consistent with the selection of target firms, I will test the means of payment hypothesis in this research as followed:

H2: Increasing the percentage of the consideration paid in cash in the M&A transaction will positively affect acquirer's stock return.

Deal Type

The type of deal, referring to either mergers or tender offers (acquisitions) is another determinant appearing throughout the M&A literature. This has been analysed, among several others, by Loughran and Vijh (1997) for both pre-acquisition and post-acquisition period. Their findings conclude that there is no significant difference in excess returns for the announcement period between mergers and tender offers. Interestingly, however, is their evidence that tender offers outperform mergers in the period of up to five years after the M&A. This is also confirmed by Rau and Vermaelen in 1998 who report 8.85% significant abnormal returns for tender offers over a three-year post-acquisition period. These findings are in line with the agency cost theory, stating that mergers often include higher agency costs after the acquisition as incumbent management is often inefficient and has to be adjusted to the acquirer's

expectations. Whereas under tender offers, inefficient incumbent management is often changed for more efficient managers to create wealth gains for the shareholders, resulting in abnormal stock returns for the post-acquisition period (Martin and McConnell, 1991). As this might not always be the case for targets from emerging countries, since incumbent management may have superior information about the country and institutional characteristics, I will test for this via the following hypothesis:

H3: There exists a significant difference in abnormal returns for the acquirer between tender offers and mergers, where tender offers cause higher abnormal returns.

Percent of shares acquired

Moreover, acquirer's stock returns in M&As can be partly determined by the amount of shares that are acquired, signalling the acquirer's commitment and anticipated ability to integrate its target, while more importantly reducing agency costs in the merged entity. The results are cost savings and thus give rise to positive stock return for the acquirer. This is due to the easier access of capital for the target firm through the acquirer linked with the transfer of technology, knowledge and know-how. However, reduction in agency costs and resulting cost savings are only realised if the acquirer obtains at least a majority stake or full corporate control over its target (Chari, Ouimet & Tesar, 2009). Accordingly, the percentage of shares acquired is descriptive on how much the acquirer has controlling interest in the target, with a higher percentage indicating increased corporate control and higher probability of transfer of intellectual property, thus reducing agency problems (Bhaumik & Selarka, 2012). This in turn is leading to value creation in the long run and increased abnormal returns. This is confirmed by the significantly positive excess returns that Chari, Ouimet and Tesar (2004) find if the bidder acquires sufficient amounts of shares to obtain corporate control over its target. I will therefore test the agency cost hypothesis in the context of emerging market targets, as such effects should be at least of similar relevance than for developed market M&As. Hence the following is hypothesised:

H4: An increased percentage of shares acquired in the M&A transaction will result in higher positive abnormal returns for the acquirer.

2.4 Context: Emerging Markets

Nonetheless, there are certain aspects in the value creation process which are of particular relevance for cross border M&As into emerging countries. To understand the specific challenges acquirer's face to create value in M&A transactions in emerging countries, it is prerequisite to have an understanding of the distinguished settings within such markets. Commonly referred to characteristics of emerging markets are mainly subjective to the context on which they are compared to. Thus, compared to developed markets, emerging economies have certain attributes in common which allows them to be classified as emerging and not underdeveloped. These include their transitional character in regards to economic, social-economic and political dimensions (Mody, 2004). These points in accordance with a high anticipated growth rate of their economy marks them to be under the process to 'emerge' from an underdeveloped market towards a developed one. However, also included and decisive for their nature are the lack of intellectual property rights, shareholder protection, institutional development as well as higher levels of corruption (Ioana-Cristina & Gheorghe, 2014). Nevertheless, these suboptimal character traits of emerging countries are balanced by an equally high beneficial growth rate of their economy paired with a progressive development of institutional and capital market frameworks. Hence, they are considered to be promising investment areas with high anticipated future returns.

In light of the ongoing globalisation trend and ever increasing pressure for international competitiveness, firms seek to overcome this pressure by pursuing M&As into emerging countries and exploiting their promising opportunities. Despite these countries divergences in institutional developments and regulatory systems, however, their impact on acquirer's stock return and underlying determinants are not always foreseen.

Besides the earlier mentioned motives for M&As, the mode of entry theory has particular relevance for M&As involving emerging country targets, and thus I will briefly present it before considering the acquirers determinants within this context.

Mode of Entry

The mode of entry theory is one of the most prominently mentioned reason for acquirers from developed economies to engage in cross border M&As in emerging countries (Meyer et al., 2009). It facilitates an easier method of entering an unknown market than Greenfield investments, as the acquiring firm can utilise existing local market knowledge and networks of the target firms, while providing and using most of their own resources and expertise. Therefore efficiently combining both firms' superior competences to achieve synergies. This theoretical concept is referred to as "brownfield" investments and has been examined previously by Meyer

and Estrin (2001). They argue that brownfield acquisitions are the preferred type of M&A into emerging economies if there exists a need for local specific resources like political ties and networks as well as brands. However, the targets technological and managerial capabilities are insufficient, hence extensive restructuring is the result. Effectively the acquirer will only incorporate the targets local information advantage and utilise it to create value by employing this advantage with the supremacy of their competences and institutional know-how. Decisive of the outcome for M&As under this motive is the firm's ability to efficiently integrate these resources and employ them in an effective manner.

In addition to the earlier considered determinants that are evaluated for their impact on value creation for bidders, I consider additional factors that are unique to this context and possibly give explanations to the value creation within emerging countries. Their uniqueness for acquirer's ability to create value stems mainly from the distinctive nature of emerging countries, and are evaluated below.

Intangible assets

How the degree to which intangible assets can determine acquirer's stock returns in M&As is explained by the internalisation theory in section 2.2. The assessment of this theory is vital, due to its high relevance within the context of M&As into emerging countries. As described earlier, the percentage of shares acquired in a transaction gives support to this theory as it promotes the transfer of intangible and proprietary assets, necessary for the acquirer to successfully integrate its target and exploit firm and country specific resources. Thus leading to a higher likelihood of value creation. This is confirmed by Chari et al. (2009) who find evidence for positive announcement returns for acquirers from developed economies and targets from emerging markets. Their findings indicate announcement returns of up to 3.05%, indicating the markets approval of value creation in these cross border M&As. They also conclude that such positive effects are stronger in case of weaker contract environment and within industries including high degree of asset intangibility, which is in line with the internalisation theory. Especially in this context, the acquiring of majority interest and hence exercising control will increase the acquirer's ability to create shareholder value, as they can impose better corporate and institutional governance for the target and thus enforce contracts and higher standards. In addition, acquirers will be more likely to share and transfer proprietary and intangible assets leading to increased value in the long run (Feito-Ruiz & Menéndez-Requejo, 2011). It is therefore necessary to test for this hypothesis by examining the following:

H5 (A): Higher levels of intangible assets positively effects acquirer's stock return performance.

H5 (B): The positive effect of intangible assets will be of higher magnitude with the acquisition of majority control of the target firm.

Information asymmetry and Heterogeneity

Especially for mergers and acquisitions, in the context of emerging markets, the effects of institutional, economic and social-economic differences between the acquirer's country and target country can have influence on bidder's stock return. This necessitates the acquirer to have a broader and deeper understanding about the targets host economy, especially its institutional uncertainty as this can influence acquirer's stock return (Chalencon & Mayrhofer, 2018). Supporting this, Chalencon and Mayrhofer (2018) find evidence for value creation within emerging countries of up to 0.61% which is different from the 0.79% for mature economies. Their study was based on 285 cross border M&A announcements between 2010 and 2012 conducted by French SBF 120 Index companies. A possible reason provided in their research is information asymmetry pertaining to the heterogeneity of local economic environments. Furthermore, this has been complemented by scholars throughout the recent literature. Institutional and cultural characteristics are provided to be a decisive point regarding minority or majority acquisition of targets (Contractor et al., 2014). Another study by Jandik and Kali (2009) indicates that the targets legal systems quality contributes towards information asymmetry. It is therefore of importance to test for targets host country characteristics as they increasingly affect the decision of cross border M&As. Such differences in country characteristics can provide opportunities for acquirers from developed markets, as they can exploit the inferior target market development to their advantage by reducing costs associated with bureaucracy and regulations such as red tape formalities. In turn, acquirer's ability to create shareholder value through the acquisition of an emerging market target shall be positively valued by the market. As the notion of this is accentuated throughout recent literature, I will examine the impact of information asymmetry and country heterogeneity by the hypothesis:

H6: Information asymmetry and heterogeneity between the acquirer's and target country significantly effects acquirer's stock return for M&As into emerging countries, where a higher difference leads to increased acquirer's abnormal returns.

3. The Data

3.1 Data selection and screening

The construction of a reliable and representative sample requires the selection of a matching database for this topic, in order to find applicable data satisfying the scope of this thesis. Therefore, in this section, I firstly provide additional information about corresponding databases which have been used to extract data. Thereafter, the data screening process will be described to obtain the sample from the population of all M&A transactions listed within the Thomson One Banker's M&A database. Lastly, variables from Thomson One used in the analysis, and additional explanatory variables that have been computed, are provided with a brief explanation and their according methodology, paired with a short discussion of the characteristics of the data.

Data is identified and screened, subject to criteria given by the context of this report, through the Securities Database Company (SDC) Thompson's International Mergers and Acquisitions database. This source of data covers global M&A activity since 1970s until the present day. It includes all recorded M&A transactions with acquisitions greater than 5% before 1992 and thereafter any sized transaction are reported.

The database includes among several other variables presence of public and private M&A transactions and their announcement and effective dates, in addition it also states information about specific deal characteristics and equity information about the firms. The data available in the SDC database stems from over 200 International and English news sources in addition to publications about trade, SEC company fillings and surveys including information from law, advisory and investment banks.

The matching security price series for the acquirers are taken from Thomson Reuters DataStream, which covers data in financial and macro-economic dimensions on a global basis. For each acquirer the security price series is downloaded to calculate the market adjusted abnormal returns, explained in the methodology section. To facilitate this computation of abnormal returns, data regarding stock market indices are also obtained from DataStream, and collected for each acquirer country.

Since observations from SDC about the respective mergers in question do not always contain all desired values, due to missing observations or limited information about the transaction, the resulting sample is screened to ensure its completion. The following screening criteria are

utilised to address the validity and completion of the data, aiding the analysis of the earlier mentioned hypotheses.

- Acquirers need to be listed on a stock exchange and have publicly traded securities for which a DataStream code is available in order to obtain their respective security price series. In addition acquirer's market value four weeks prior to the announcement needs to be available.
- The status of the deal must be registered as completed, meaning that the announcement of the M&A transaction is reliable and announced with commitment to carry out the transaction.
- M&A transactions need to contain a valid observation for their total value of the deal and is restricted to a minimum of \$10 million, to ensure the data is representative for common M&A deals and not distorted by any small firm characteristic effects.
- Acquisition of ownership by the acquirer in the target firm has to be at least a 5% stake, to ensure representative observations, filtering out insignificant small transactions.
- Acquirers and target countries are selected based upon the MSCI market classification Framework, seen in appendix A1, where developed countries make up the set of acquirers and emerging countries the targets. The acquirer sample is thus restricted to firms registered in the following countries: Canada, United States of America, Austria, Belgium, Denmark, Finland, France, Germany, Republic of Ireland, Israel, Italy, Netherlands, Norway¹, Portugal, Spain, Sweden, Switzerland, United Kingdom, Australia, Hong Kong, Japan, New Zealand and Singapore. While the target sample firms are restricted to the countries of: Argentina, Brazil, Chile, Colombia, Mexico, Peru, Czech Republic, Egypt, Greece, Hungary, Poland, Qatar, Russia, Saudi Arabia, South Africa,

¹ Norway is no longer present in the sample after deleting transactions containing missing observations and for which no stock data was available from DataStream.

Turkey, United Arab Emirates, China, India, Indonesia, South Korea, Malaysia, Pakistan, Philippines, Taiwan, Thailand.

- Acquiring firms stock prices are available for at least 350 trading days prior to the M&A announcement date to be able to accurately estimate the respective stocks correlation with its market index. This is necessary to ensure that the stocks market model parameters are reliable, to certify the validity of later computed abnormal returns over the test period (announcement period and long term development).

After these criteria are applied to the data and observations containing missing values are deleted the sample reduces from an initial 7486 observations to 1412 M&A deals announced. The time period induced due to this selection criteria covers the period from October 1995 to December 2018. Thus, in total, the dataset sample used in this study incorporates M&A deals spread over more than 23 years and entailing a total M&A deal value of over \$571 billion, which is spent across 26 emerging countries.

3.1 Mergers & Acquisition Data

The data obtained from the M&A database of Thomson One includes relevant information about acquiring and target firms for each transaction. This information includes basic specifications such as the firm's names, macro industry, country and the date where the M&A transaction is announced. In addition, Thomson One also provides data for each transaction regarding the percentage of shares acquired, value of the transaction, percentage of the consideration paid in cash, acquirers market value prior to the acquisition, deal type and acquirers intangible assets. These firm and transaction specific variables² are extracted for each transaction and gives the dataset an increased level of quantitative characteristics. Lastly, additional variables are added to the dataset to use as control variables in the analysis of regression models. This is to ensure the validity of the results drawn by preventing possible omitted variable bias. The following paragraph briefly describes the characteristic of the M&A data and according summary statistics are given in appendix A2.

² For detailed information and definitions of variables used and available from SDC Thomson One's M&A database refer to <https://deals.ib.thomsonone.com/DealsWeb/help/def.htm>

In total, out of the 1412 acquisitions made by developed market acquirers in emerging countries, 319 (22.6%) of all transactions involve publicly traded targets. This induces that the majority of transactions entail private targets, namely for 1093 (77.4%) transactions. The dominance of private target firms in the dataset is not surprising since emerging markets often have less developed equity markets and shareholder protection rights, causing a lower frequency of publicly listed firms than in developed equity markets. The acquisitions in the sample period entail emerging target firms from 13 different Industries, however, in 72.1% (1018) of total transactions acquirer and target stem from the same industry.

Moreover, 82 (5.81%) of the total M&As covered are tender offers and each acquirer made on average 2.8 acquisitions throughout the sample period. The average size of the acquiring company, measured as market value, is 24.5 billion with an average value in intangible assets of 6.5 billion. Acquiring companies paid an average of 404 million for the M&A transactions, while the average shares acquired amount to 66.2%. This means that on average over half of the 1412 M&As resulted in the acquisition of majority control, in fact 867 (61.4%) acquirers gained majority control. Payment of the M&A transactions is made in cash, stocks, other considerations or a mixture of these. Lastly, out of all transactions 481 (34.1%) are paid only in cash, while the average share of the consideration paid in cash is 40.2%.

3.2 Additional Explanatory Variables

To state inferences about the effect of differences in country settings between acquiring and target countries, conceptualised in hypothesis six (H6) in section 2.4, it is first necessary to operationalise these concepts. As stated earlier the terms information asymmetry and heterogeneity are used to put meaning into these concepts. However, the measurement and approximation of these concepts demand some further explanation to understand their underlying ability to account for these country differences. Overall, the concepts of information asymmetry and heterogeneity between two countries are operationalised within three dimensions. Firstly, by considering the difference in economic development and stability, the economic dimension is evaluated and differences are computed. Secondly, the institutional and social/cultural dimension are utilised to also capture socio-economic differences between countries. I will therefore give a brief explanation on the variables selected within each dimension to approximate the country differences for this dimension, next to their measurement and transformation.

The country differences, which are measured by several underlying variables, are computed based on the absolute difference of their average value. That is, taking the absolute difference between the average value of the respective variable in the period (T) for the acquiring country and average value of that same time period and variable for the target country, as stated by formula (1). Where $X_{i,t}$ denotes the variable of interest of the respective country (i) and year (t) and is averaged by dividing the sum of these $X_{i,t}$ by their total observations in the period ($T_2 - T_1$). Further, the subscripts ACQ and TAR indicate whether the values of $X_{i,t}$ belong to acquirer or target countries, respectively. Thus the absolute difference can measure the degree of difference within each dimension where a higher value indicates that the acquiring country and target one are dissimilar with respect to that variable.

$$(1) \text{ Absolute difference of average} = \left| \frac{\sum_{t=T_1}^{T_2} X_{i,t,ACQ}}{(T_2 - T_1)} - \frac{\sum_{t=T_1}^{T_2} X_{i,t,TAR}}{(T_2 - T_1)} \right| \quad \text{for } t \in \{T_1, T_2\}$$

Economic Dimension

The difference in country settings with regards to economic development and stability is measured by the absolute difference of the average GDP per capita, inflation and total trade over the period 1995-2017. The data for this time period is obtained from the public databases of the World Bank, who measures GDP per capita as total sum of gross domestic product adjusted by the midyear population. In regards to GDP, their measurement is defined as total sum of gross value added by resident producers in the economy plus net effect of product taxes and subsidies, which excludes depreciation, depletion and degradation. It is measured in current USD. Inflation is stated as the annual percentage change in the consumer price index (CPI). The CPI measures the annual change in the average cost to buy a basket of goods and services and is calculated by the Laspeyres formula. Lastly, total trade is given as sum of exports plus imports expressed as a percentage of GDP.

Institutional Dimension

To measure the quality and more important the reliability of the institutional setting within each country, a corruption perception index value is used. It measures the perceived level of the degree to which the public sector is corrupt by means of expert assessments and opinion surveys. The index is published on a yearly basis by Transparency International since 1995 and again the absolute difference of the average index value, according to formula 1, for acquirer and targets is computed based on the years for which data was available. The corruption

perception index ranks countries due to their corruptness of the public sector by assigning each country a value from 0 (extremely corrupt) to 100 (no corruption).

Socio-cultural dimension

Again within this setting, ultimately three variables are used to measure the country differences, namely, Political rights and civil liberty, main language spoken as well as major religion practised. Regarding political rights and civil liberty, the data stems from Freedom House's Freedom in the World annual report and is recognised as the most widely accepted measurement of political rights (PR) and civil liberties (CL). Each countries numerical PR and CL score is added and averaged over the period 1995-2018, the most recent year for which data is available. Scores are assigned from 1 (highest freedom) to 7 (lowest freedom). Once again the absolute difference of the average is used to measure the relatedness of political and civil freedom between two countries.

In addition to this, I computed dummy variables for language and religion, indicating a value of 1 if the majority language in both countries is the same or similarly, if the majority of the population practises the same religion, and a value of zero otherwise.

Summary statistics regarding these additional variables are given in appendix A2, together with earlier mentioned M&A data variables. However, since the variables used are absolute and sometimes grow at different rates for each country, their difference can vary significantly and causes the distribution of these variables to be skewed, e.g. not conforming to normality.

To control for the non-normality of this data, I take the natural logarithm of the differences, formula (2), to standardize the absolute differences of the variables and reduce their variance before using them in the later analysis of regression models. This allows to control for relatively high variances and normalize the distribution of these variables due to the central limit theorem. The logarithmic transformation is reasonable in this case since the variables obtained to measure the country differences are not endogenous to the M&A transactions. Thus, the transformation will merely affect the interpretation of these variables without altering the inferences regarding their effect for explaining abnormal returns.

$$(2) \text{ Natural log of absolute difference: } \ln \left(\left| \frac{\sum_{t=T_1}^{T_2} X_{i,t,ACQ}}{(T_2-T_1)} - \frac{\sum_{t=T_1}^{T_2} X_{i,t,TAR}}{(T_2-T_1)} \right| \right) \quad \text{for } t \in \{T_1, T_2\}$$

Altogether, the above mentioned dimensions and their respective variables computed will be used to operationalise the heterogeneity and information asymmetry between the acquirer and target country necessary for testing hypothesis six. Thus, these are used as additional explanatory variables which are not provided by SDC Thomson One's M&A database.

4. Methodology

4.1 Market-model: Abnormal returns and its deviations

Regarding the methodology to analyse and draw inferences from the sample, a multi-step analysis will be employed. This includes the calculation of abnormal returns to be able to test their significance via standardised parametric tests as well as non-parametric tests. The methodology used to operationalise abnormal returns for the analysis of announcement returns ($t = 0$) of acquirers is the classic event study methodology of Brown and Warner (1980). This methodology uses the securities degree of correlation with the market to estimate its market-model parameters. The market-model method of predicting normal returns is fairly reliable for a short event period, since all stocks have a common dependence on the market. Thus, every stock co-varies with the market trend (systematic risk) and makes the assumption of linear relationship between a security return and the market return highly realistic. Hence, an estimation period starting from 350 trading days until 30 days prior to each M&A announcement is selected, to estimate each acquirer securities relationship with the market-model. Formula (3) shows the market-model equation for each security (i) and its respective market index (Mi), which is used to estimate each securities parameters α_i and β_i , based on the estimation period.

$$(3) \text{ Market model: } R_{i,t} = \alpha_i + \beta_i R_{Mi,t} + \varepsilon_{i,t} \quad \text{for } t \in \{-350, -30\},$$

$$\text{With } E[\varepsilon_{i,t}] = 0 \text{ and } \text{VAR}[\varepsilon_{i,t}] = \sigma_{\varepsilon_i}^2$$

The estimation period ends 30 days prior to an announcement to eliminate any possible effects of information leakage and insider trading which would influence the firm's stock price before the announcement of the M&A becomes public. Thus, I have controlled for this possible effect to ensure that market model parameters are estimated based on standard conditions in

absence of the M&A event by: (i) selecting the last day of the estimation period to be one month before the announcement of the M&A and (ii) using non-overlapping estimation and test periods. In addition, the market indices used for each acquirer nation to compute acquirer's market-model parameters are given in appendix A3.

Based on these market-model parameter estimates from the estimation period; the normal returns are then computed for the event period thereafter. Formula (4) below describes the computation of the normal returns of each stock in absence of the M&A event. This is obtained by predicting the securities price for the event period based on its market model parameter estimates from formula (3).

$$(4) \text{ Estimated normal return: } E[R_{i,t}] = \widehat{R}_{i,t} = \widehat{\alpha}_i + \widehat{\beta}_i R_{Mi,t} \quad \text{for } t \in \{-10, 10\}$$

Thus, $\widehat{R}_{i,t}$ is the estimated normal return of security (i) for day (t) of the test period $t = \{-10, 10\}$, where $\widehat{\alpha}_i$ and $\widehat{\beta}_i$ represent the firms estimated market-model parameters resulting from formula (2). Based on the estimated normal return formula, the normal return for each acquirer's security is computed for every day within the test period. Based on these pseudo-out-of-sample forecasts, it is now viable to calculate abnormal returns. Therefore, abnormal returns are defined by subtracting the estimated normal returns from the realized (actually observed) returns on the stock market. This is illustrated by formula (5) below.

$$(5) \text{ Abnormal return: } AR_{i,t} = R_{i,t} - \widehat{R}_{i,t} \stackrel{or}{\Leftrightarrow} R_{i,t} - (\widehat{\alpha}_i + \widehat{\beta}_i R_{Mi,t}) \quad \text{for } t \in \{-10, 10\}$$

The abnormal returns will then be tested for their significance to examine if they induce any patterns or signs of insider trading, e.g. significant abnormal returns several days prior to the announcement date $t = 0$. Based on the significance of abnormal returns, an according event window from the test period $t = \{-10, 10\}$ is specified for the computation of cumulative abnormal returns (CAR), which is later utilised in the regression specifications. The evaluation of abnormal returns is carried out via a t-test and Wilcoxon's sign test to determine if these are significantly different from zero. The selection of the short term CAR window for the analysis of announcement returns based on significance of abnormal returns allows to capture only the most significant abnormal return days. By employing this method, I prevent that insignificant abnormal returns are selected for the CAR window. Since they would otherwise dilute the announcement effect as they induce random noise leading to a misrepresentation of the actual abnormal returns induced by the announcement of the M&A event. For the sake of robustness,

I will also employ a second non-parametric test, namely, the Wilcoxon sign test. Based on the findings of significance of abnormal returns, the short term event window is selected and cumulative abnormal returns within this window are calculated via formula (6). Ultimately, the computation of cumulative abnormal returns allows to capture the complete net announcement effect and operationalise this within one variable. Hence, enabling the use of cross sectional analysis for large samples of M&As via effective use of several univariate and multivariate regressions. Additionally, I compute a second CAR window capturing the development of abnormal returns from the announcement date until three months after the announcement. The sake of this is to verify the initial market reaction to the announcement and examine if the effect continues to be present, vanishes or even reverses in the short term future. Thereby I examine if the market efficiently incorporates the announcement of the M&A.

$$(6) \text{ Cumulative abnormal return: } CAR_{i,\{T_1, T_2\}} = \sum_{t=T_1}^{T_2} AR_{i,t} \quad \text{for } t \in \{T_1, T_2\}$$

Lastly, the cumulative abnormal returns can be averaged, to aid the comparison of cumulative abnormal returns between subsamples and among different categories within the sample. The average cumulative abnormal returns (ACAR) are given in formula (7), and is simply the average value of several firms' $CAR_{i,\{T_1, T_2\}}$. They will be utilised for comparison purposes by illustrating subgroups ACAR over the event period, e.g. examining the effect of tender offers, as compared to mergers, on abnormal returns.

$$(7) \text{ Average cumulative abnormal return: } ACAR_{i,\{T_1, T_2\}} = \frac{\sum_{t=T_1}^{T_2} CAR_{i,\{T_1, T_2\}}}{(T_2 - T_1)} \quad \text{for } t \in \{T_1, T_2\}$$

4.2 Regression specification

The use of multiple linear regression models allows the analysis of cross sectional variation in cumulative abnormal returns due to M&As. Linear regressions estimate the relationship between the dependent and independent variable as a linear function, where the variation of the dependent variable (CAR) can be explained as a linear function of the independent variables in the model. The determinants of this variation, which is the main research question for this thesis, are able to be identified and measured by this statistical method. The regressions that I use to examine these determinants are multivariate of type, and will be employed interchangeably to accurately isolate the explanatory forces causing the variation in announcement returns.

The regression method utilised is the Ordinary Least Squares (OLS) regression, given in formula (8). The OLS regression is accurate for the scope of this analyses, since the data is of cross sectional type and does not include extensive time series variables. The regression is therefore able to reliably model the linear relationship between the dependent variable and the independent variable, by means of minimizing the sum of squared errors.

$$(8) \text{ OLS regression: } Y_i = \alpha_{i,j} + \beta_j X'_{i,j} + C'_{i,k} + \epsilon_i \quad \forall (j,k) \in \mathbb{N} \text{ and } (j,k) \neq 0$$

- where $E[\epsilon_i] = 0$
- (i) varies with each M&A transaction
- (j) denotes the number of independent variables, where $j \in \{1, J\}$
- (k) denotes the number of control variables, where $k \in \{1, K\}$

The regression specification can therefore vary between univariate form ($j = 1$) and multivariate form ($j > 1$). The dependent variables (Y_i) are the different $CAR_{i,\{T_1, T_2\}}$ which are determined based on their significance as explained in the previous section. The cumulative abnormal return window, thus, represents our variable of interest, e.g. the announcement return due to the M&A transaction. The variables trying to model the variation in CAR's are the independent variables denoted by $(X_{i,j})$. The set of explanatory variables is given by $(X_{i,j})$, which is a $j \times 1$ vector, consisting of the variables explained in section 3.1 and 3.2. Moreover, $(C_{i,k})$ is a $k \times 1$ vector, illustrating different control variables to adjust for the possibility of omitted variable bias (OVB).

This is an important aspect since such control variables might not be of main interest in the model, however, excluding them from the regression model can lead to severe bias in the OLS estimator (β_j) of the independent variables. This is especially the case if a control variable is correlated with the independent variable and also influences the dependent variable. Disregarding such a variable from the regression model will induce the effect of that variable to be partly expressed through the estimators of the independent variables. This will lead to either upward bias (overestimation) or downward bias (underestimation) of the OLS estimators of the explanatory variables (Stock & Watson, 2003).

To induce further reliability of the inferences drawn from the regression specifications, I adjusted for the likelihood of heteroscedasticity in the residuals (ϵ_i). If residuals are heteroskedastic, the estimated standard errors by the regression model are inaccurate and

statistical inferences drawn from them will be suspect to biases³ (Hayes & Cai, 2007). Due to this reason, I will use heteroscedasticity robust standard errors throughout the analysis. Ultimately, it ensures that inferences drawn from the regression are unbiased and consistent.

5. Results

5.1 Stock markets reaction to the M&A announcements and its variation across groups.

The selection of the appropriate event window for measuring the cumulative abnormal returns is discussed in detail in appendix A4, and lead to the selection of a two-day event window starting from the announcement day $t = 0$, next to the three-month long term event window. For reference purposes I included the distribution of M&A deals among all included target countries in appendix A5, but more importantly I provide the average CARs for different subgroups, regions and industries in table 1.

Pointed out by the total sample row in table 1, the two-day event window shows a positive mean CAR of 0.75%, significant to one percent. Hence acquirers are able to generate positive returns to the announcement of acquisitions for emerging market targets. This would translate to an average value creation for acquiring firm's shareholders of a total \$183.7 million, given the average acquirer market value of \$24.5 billion. Moreover, CARs within this two-day event period vary from as much as 53.7% to a minimum of -42.5%. In addition, the total sample row reports that over the course of three months after the announcement, the initial returns of 0.75% do not only vanish but reverse, meaning, on average, that acquiring firms destroy 1.8% ($p < 0.05$) of shareholder value within three months after the announcement of acquiring an emerging market target, significant at the 5% level.

Table 1, panel A, illustrates that for transactions that are conducted as mixed payments e.g. cash and stock or if majority control is acquired through the M&A, announcement returns are highest relative to the total sample average with 1.45% and 1.06% respectively, significant to one percent. The lowest abnormal returns are given for subgroups in which acquirer and target country have the same main language and if the target is public. For the three months CAR window, again same language points out as it induces the most negative abnormal return over this period of -7.92%, statistical significant at the five percent level. Secondly, mixed

³ The bias is induced as confidence intervals, p-values and t statistics are all computations using the standard errors of the regression, and thus a bias in the standard error will also result in biased inferences.

Table 1

Comparison of average CAR windows across different subgroups and categories.

The table summarizes average cumulative abnormal returns for developed market acquirers and emerging market targets for the sample period of 1995-2018. Acquirers and targets are selected based on the MSCI market classification framework. CARs are calculated based on the market model method of controlling for the stocks common trend with the market. Panel A represents the average CARs for different sub-sample groups by means of dummy variables being equal to one to be included in the subgroup. Panel B gives the average CARs by each target macro industry classified by their respective macro industry codes. Panel C groups the total sample of transactions by target continent regions where target countries are allocated into groups belonging to Asia, Africa, Eastern Europe or South America based on their geographical location. Returns are calculated in local currency gains and standardized to percentages to allow comparison between region and subgroups. Significance tests evaluate the one sided hypothesis that the average is equal to zero.

(1) <u>Subsample/Category</u>	(2) <u>Obs. (N)</u>	(3) <u>ACAR [0,1]</u>	(4) <u>ACAR[0,3M]</u>
<i>Panel A: Different subsamples</i>			
Tender offers	82	0.0048*	-0.0103
Public Target	319	0.0042**	-0.0126*
Cash only	481	0.0064***	-0.0149**
Mixed	158	0.0145***	-0.0363**
Same Industry	1,018	0.0067***	-0.0204**
Majority Control	867	0.0106***	-0.0205**
Same Language	29	-0.0070	-0.0792**
Same Religion	709	0.0099***	-0.0078
<i>Panel B: Target industry</i>			
Consumer Products and Services	107	0.0085***	-0.0112
Consumer Staples	157	0.0060*	0.0037
Energy and Power	133	0.0067*	-0.0284*
Financials	183	0.0058**	-0.0296**
Healthcare	96	-0.0008	-0.0450
High Technology	137	0.0105***	-0.0611***
Industrials	172	0.0057*	-0.0086
Materials	221	0.0091**	0.0001
Media and Entertainment	51	0.0213*	-0.0069
Real Estate	44	0.0161*	-0.0189
Retail	52	0.0134*	-0.0493**
Telecommunications	59	-0.0021	0.0436
<i>Panel C: Target nations by region</i>			
Asia	754	0.0065***	-0.0306**
Africa	71	0.0097**	0.0099
Eastern Europe	239	0.0045*	-0.0011
South America	348	0.0114***	-0.0081
Total Sample:	1412	0.0075***	-0.0177**

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

transactions, which performed above average in the two-day announcement period, reverses significantly to -3.63%.

Panel B in table 1 indicates that most transactions of developed market acquirers for emerging targets are in Material, Financial and Industrial industries which accumulate to 40.1%

of all transactions. Nevertheless, the average announcement returns in these industries do not show any trend or significant deviation from the total sample mean announcement return, except for acquisitions in the media and entertainment industry with 2.13% ($p < 0.1$).

Lastly, from panel C it is clear that most M&As announced in the sample period of 23 years involve targets from Asia which accounts for 754 (53.4%) transactions, followed by South America with 348 (24.65%), Eastern Europe with 239 (16.93%) and Africa with 71 (5.02%) transactions. Acquisitions for South American target firms show the highest average CAR of 1.14% ($p < 0.01$) within two days, given in column 3. The lowest average CARs are found for the announcement involving Eastern European target firms. Comparing column 3 with 4 in panel C, it becomes evident that the initial positive announcement returns fail to be progressing nor are they maintained, significantly.

Based on the results exhibited in table 1, it is clearly presented that equity markets favourably estimate acquirer's ability to generate shareholder value in these cross border M&A transactions into emerging markets. This on the ground that acquirers face on average 0.75% abnormal returns which is highly significant. In line with hypothesis one (H1), stating that stock markets positively react to the M&A transactions of developed market acquirers, I indeed cannot reject this hypothesis based on the above results. In addition, it is noted that these announcement returns are highest for transactions conducted in mixed payments or if majority control is acquired, and varies within industries and regions of targets. Also noted is that the initial positive valuation of the stock market reverses in the following three months after the acquisition.

5.2 The determinants of acquirer's abnormal returns

Stock markets reaction to transactions which are paid in cash

From the comparison of subsamples, in table 1 panel A, I already confirmed that the average CAR for the cash only subgroup is lower than the total sample average of 0.75%. Hence, the regression specifications, shall provide a more detailed examination of the effect of paying an increased percentage of the consideration in cash. I present the results of these different types of multivariate regression models of explanatory variables with controls in table 2, which are discussed in detail in appendix 6. All values in non-scientific notation are rounded to four decimal places.

Table 2
Regression Outcomes of cross sectional analysis of abnormal returns

The table summarizes the outcome of the regression of acquirer's abnormal returns during the two-day and three months event window on independent variables together with controls. All transactions included a developed public market acquirer and an emerging market target in the period of 1995 to 2018. Abnormal returns are denominated in percentage returns and computed based on the market model method. Transaction size and Acquirer size are given in USD million. Public target is a dummy variable taking value one if target is a public firm. Same industry is a dummy variable taking value of one if the acquirer and target are in the same macro industry. Region fixed effects indicates if the regression model is controlling for the regional effect of target countries on the abnormal returns. Industry fixed effects controls for target industries. Regions groups target countries based on their geographical location into four categories e.g. Asia, Africa, Eastern Europe and South America. Standard errors are given in parentheses.

CAR Window / Independent Variables	(1) CAR 0,1	(2) CAR 0,1	(3) CAR 0,1	(4) CAR 0,3M	(5) CAR 0,3M	(6) CAR0,3M
% Cash	5.99e-6 (0.0000)	6.51e-6 (0.0000)	7.12e-6 (0.0000)	0.0001 (0.0002)	0.0001 (0.0002)	0.0001 (0.0002)
Tender Offer	-0.0005 (0.0038)	-0.0004 (0.0043)	0.0001 (0.0044)	0.0051 (0.0188)	-0.0001 (0.0218)	-0.0003 (0.0225)
% shares Acquired	0.0001** (0.0000)	0.0001** (0.0000)	0.0001* (0.0000)	-0.0001 (0.0002)	-0.0001 (0.0002)	-0.0001 (0.0002)
Intangible Assets (\$M)	-1.47e-7** (0.0000)	-1.37e-7* (0.0000)	-9.09e-8 (0.0000)	-4.46e-7* (0.0000)	-6.78e-7*** (0.0000)	-1.27e-6* (0.0000)
Transaction value (\$M)		2.04e-6** (0.0000)	2.07e-6** (0.0000)		3.45e-6 (0.0000)	2.70e-6 (0.0000)
Acquirer Size (\$M)		-3.51e-8** (0.0000)	-3.38e-8* (0.0000)		1.11e-7* (0.0000)	1.60e-7** (0.0000)
Public Target		0.0005 (0.0037)	0.0004 (0.0038)		0.0040 (0.0148)	0.0058 (0.0155)
Same Industry		-0.0026 (0.0035)	-0.0018 (0.0037)		-0.0102 (0.0189)	-0.0149 (0.0175)
Consumer P&S			0.0051 (0.0076)			0.0241 (0.0373)
Consumer Staples			0.0047 (0.0085)			0.0449 (0.0355)
Energy and Power			0.0049 (0.0090)			0.0125 (0.0383)
Financials			0.0055 (0.0083)			0.0126 (0.0365)
Healthcare			-0.0027 (0.0092)			0.0035 (0.0703)
High Technology			0.0088 (0.0083)			-0.0155 (0.0390)
Industrials			0.0033 (0.0081)			0.0329 (0.0337)

Table 2 continued.

CAR Window / Independent Variable	(1) CAR 0,1	(2) CAR 0,1	(3) CAR 0,1	(4) CAR 0,3M	(5) CAR 0,3M	(6) CAR0,3M
Materials			0.0061 (0.0089)			0.0393 (0.0333)
Media&Entertainment			0.0186 (0.0128)			0.0353 (0.0494)
Real Estate			0.0132 (0.0126)			0.0158 (0.0398)
Retail			0.0105 (0.0111)			-0.0135 (0.0442)
Telecommunications			-0.0013 (0.0087)			0.1178 (0.1246)
South America			0.0014 (0.0063)			-0.0173 (0.0244)
Asia			-0.0035 (0.0060)			-0.0360 (0.0254)
Africa			0.0032 (0.0060)			0.0321 (0.0221)
Eastern Europe			-0.0054 (0.0061)			0.0001 (0.0253)
Target Industry FE	NO	NO	YES	NO	NO	YES
Target Region FE	NO	NO	YES	NO	NO	YES
Constant	0.0015 (0.0030)	0.0036 (0.0049)	Nocons.	-0.0089 (0.0140)	-0.0062 (0.0257)	Nocons.
Observations	1412	1412	1412	1412	1412	1412
R ²	0.75%	1.17%	3.69%	0.10%	0.20%	1.61%
F-Statistic	2.76**	2.89***	2.28***	1.25	1.34	1.51*
P-value	0.0263	0.0034	0.0005	0.2894	0.2214	0.0569

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Column 1 of table 2 presents the basic regression of abnormal returns on variables of interest, and indicates an insignificant near to zero coefficient for percentage of cash, which is also highly insignificant with the addition of controls (column 2). However, from column 2, certain aspects can be identified. Firstly, the control variables transaction value and acquirer size are both significant at the five percent level, respectively. Whereas transaction value seems to positively affect acquirer's abnormal returns, the contrary is the case for acquirer's size, measured as total market value four weeks prior to the announcement in million USD. Secondly, these coefficients are significant even when controlling for regional and industry

fixed effects in column 3⁴ and induces that transaction value and acquirers size partly determine bidding firms announcement returns.

Percentage Cash, in column 3, still shows an insignificant coefficient, despite increasing further in magnitude, after controlling for fixed effects. When comparing these results to column 4-6, where the three months CARs are used as the dependent variable, it seems like percentage of cash again cannot explain the positive average acquirer's abnormal returns as the coefficient is insignificant. Interestingly, acquirer's size positively affects abnormal returns over the three months after the announcement, shown in column 5 and 6, which is statistically significant. Nonetheless, since percentage of cash, even though showing a positive coefficient, is insignificant, it cannot be regarded as a reliable estimate for acquirer's abnormal returns in M&A transactions for emerging target firms. Therefore, leading to the rejection of hypothesis 2, stating that percentage of cash positively influences acquirer's stock return.

The effect of tender offers on acquirers abnormal returns

The type of the M&A deal is analysed through the same regression specifications in table 2. Once again, similar for percentage of cash, the coefficient of tender offer is insignificant in the basic model of column 1 and remains insignificant once controls are added and adjusted for industry and regional effects. Noticeable here is that the effect of tender offers on acquirers' abnormal returns changes from negative 0.05% in the simple model of column 1 to positive 0.01% in the unrestricted model of column 3. This includes, that the true effect of tender offer is likely to be positive in sign but fails to hold at the ten percent significance level. Hence, tender offers fail to be explanatory for acquirer's abnormal returns in the two-day event window of announcement returns.

When looking at the CARs over three months (column 4-6), tender offers seem to also not be able to explain the variation in abnormal returns, illustrated by the insignificant coefficient of the unrestricted model in column 6. Therefore, I am obliged to reject the deal type hypothesis (H3) of section 2.3, which hypothesised that: 'There exists a significant difference in abnormal returns for the acquirer between tender offers and mergers, where tender offers cause higher abnormal returns'.

⁴ The regression model in column 3 is estimated without constant to prevent perfect multicollinearity between categorical variables. For robustness reasons, I run the same regression with constant and omitting Eastern Europe, but the coefficients of transaction value and acquirer neither changed in their significance nor in their coefficient estimate.

Does percentage of shares acquired positively influence acquirers stock performance?

Based on the theoretical background provided in section 2.3, the percentage of shares acquired can proxy for the acquirer's anticipation to successfully integrate the target firm which reduces agency costs and supports the transfer of technology if more shares are acquired in the transaction. This in turn shall positively influence acquirer's ability to create shareholder value. From table 2, it is clear that the theory is supported by the regression outcomes. The coefficient of '% shares acquired' is positive and significant at the 5% level in the basic model in column 1. Its coefficient shows a magnitude of 0.0001, translating to an average increase in abnormal returns of 0.01% for each additional share acquired in the target firm. On average, this means that developed market acquirers can create additional total shareholder value of \$2.4 million by increasing the percent of shares acquired by one percent. Despite adding controls and adjusting for fixed effects, neither the magnitude nor the sign of the coefficient changes, meaning that this effect is robust to these control measures and not diluted through other deal and firm characteristics, see column 1-3. Over the three month after the announcement, the effect of shares acquired reverses to negative 0.0001, this not being significant though. Due to these results, I cannot reject hypothesis four (H4) and conclude that on average abnormal returns are 0.01% higher for each marginal percentage stake acquired in the target firm.

5.3 Context emerging markets: Internalisation hypothesis and influence of country differences on acquirers abnormal returns

Intangible assets as a proxy for successful target firm integration

The importance of the internalisation theory, in the context of emerging market M&As, has been outlined in section 2 and is hypothesised via the aid of intangible assets in section 2.4. The influence of intangible assets is hypothesised to have a positive effect on acquirer's stock return performance, and this effect being more pronounced given the acquisition of majority control. For the regressions considering majority control transactions, refer to table 3.

Table 1 in the previous section already confirmed that the average CAR over the two-day event window, for all acquisitions in which majority control is acquired, is 1.06%. This is statistically significant at the 1% level and well above the total average sample of 0.75%. In contrary to this and the strong theoretical background in favour for this hypothesis, table 2 column 1 shows a negative coefficient for intangible assets, significant at the 5% level. Even though no controls are added intangible assets seem to have the contrary effect than suggested by theory and past empirical research. After adding the firm and deal characteristic controls,

Table 3

Regression outcomes of abnormal returns for majority control acquisitions

The table summarizes the outcome of the regression of acquirer's abnormal returns during the two-day and three months event window on explanatory variables and controls for all transactions resulting in majority control. All transactions included a developed public market acquirer and an emerging market target in the period of 1995 to 2018. Abnormal returns are denominated in percentage returns and computed based on the market model method. Transaction size and Acquirer size are given in USD million. Public target is a dummy variable taking value one if target is a public firm. Same industry is a dummy variable taking value of one if the acquirer and target are in the same macro industry. Region fixed effects indicates if the regression model is controlling for the regional effect of target countries on the abnormal returns. Regions groups target countries based on their geographical location into four categories e.g. Asia, Africa, Eastern Europe and South America. Standard errors are given in parentheses.

CAR Window / Independent Variables	(1) CAR 0,1	(2) CAR 0,3M
% Cash	-6.71e-6 (0.0000)	0.0000 (0.0003)
Tender Offer	-0.0008 (0.0075)	0.0124 (0.0414)
Intangible Assets (\$M)	5.68e-8 (0.0000)	-1.51e-6 (0.0000)
Transaction value (\$M)	2.83e-6*** (0.0000)	4.19e-6* (0.0000)
Acquirer Size (\$M)	-1.20e-7*** (0.0000)	9.38e-8 (0.0000)
Public Target	0.0040 (0.0061)	0.0148 (0.0272)
Same Industry	-0.0063 (0.0045)	-0.0045 (0.0219)
Consumer P&S	-0.0068 (0.0137)	0.0220 (0.0429)
Consumer Staples	-0.0070 (0.0138)	0.0306 (0.0369)
Energy and Power	-0.0065 (0.0142)	0.0135 (0.0430)
Financials	-0.0119 (0.0138)	-0.0105 (0.0402)
Healthcare	-0.0195 (0.0147)	-0.0184 (0.0987)
High Technology	-0.0004 (0.0138)	-0.0117 (0.0432)
Industrials	-0.0133 (0.0141)	0.0351 (0.0352)
Materials	0.0002 (0.0139)	0.0389 (0.0384)
Media & Entertainment	0.0108 (0.0222)	0.0333 (0.0556)
Real Estate	-0.0002 (0.0138)	0.0034 (0.0410)
Retail	-0.0047 (0.0172)	-0.0063 (0.0414)
Telecommunications	-0.0209 (0.0138)	0.1860 (0.2143)

Table 3 continued.

CAR Window / Independent Variables	(1) CAR 0,1	(2) CAR 0,3M
South America	0.0276* (0.0144)	-0.0282 (0.0374)
Asia	0.0211 (0.0145)	-0.0565 (0.0413)
Africa	0.0226 (0.0160)	-0.0025 (0.0470)
Eastern Europe	0.0183 (0.0135)	-0.0072 (0.0396)
Target Industry FE	YES	YES
Target Region FE	YES	YES
Majority control (% shares acquired \geq 50%)	YES	YES
Constant	Nocons.	Nocons.
Observations	867	867
R^2	6.49%	1.79%
F-Statistic	2.90***	1.30
P-value	0.0000	0.1615

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

the coefficient stays relatively stable, however, the full model (column 3) shows a slightly less negative coefficient, after fixed effects have been controlled for. Even though this coefficient is not significant anymore at the 10% statistical level, compared to the model of column 2, it is somewhat puzzling since theory suggests otherwise. Even more puzzling is that this trend continues when considering the regression specifications of columns 4-6, which regresses the three-month stock return development from the announcement of the M&A. In all three regression models the coefficient of intangible assets is negative and significant to 10%. Especially in the unrestricted model of column 6, the coefficient of intangible asset would translate to an average shareholder value destruction of roughly 0.0001% (\$31k) for each additional million in intangible assets controlled by the acquirer. This is certainly not in line with the internalisation theory of Buckley & Casson (2009) and Rugman (1986), which pressures me towards the rejection of hypothesis five part A (H5A) stating that intangible assets positively effects acquirers abnormal returns, e.g. stock return performance.

From table 3, discussed for validity in appendix A6, it comes forth that intangible assets indeed generate positive abnormal returns for acquiring firms in the two-day event window, given majority control is acquired, but these returns being close to zero and fail to hold robust

at the 10% significance level. When comparing this to the three-month CAR model of column 2, intangible assets also fail to significantly explain acquirer's abnormal returns over this longer event window ($p=0.437$). The coefficient of intangible assets even more than reverses into a negative effect which is not in agreement with past empirical literature and theory of agency cost. Since the analysis of table 3 lacked significance to prove a positive and more pronounced effect for intangible assets, given the acquisition of majority control, hypothesis five, part B, needs to be rejected on the grounds of these result. In turn, this leads me to completely disregard the applicability of the internalisation hypothesis for this sample.

To which extent can country differences positively explain acquirer's abnormal returns?

The notion that differences in acquirer and target firm countries economic and socio-economic aspects can positively influence the outcome of the M&A, and thus anticipate the future evaluation of the net present value of cash flows by the market, is explained in section 2.4. Ultimately, measurement and transformation of these aspects and the proxies used are described in section 3.2. Hence the CAR windows are regressed on the log of the absolute difference of these variables, given by table 4 and discussed for its validity in detail in appendix A6.

From Table 4, column 1, it is seen that the differences in country settings can partly explain positive acquirer's abnormal returns, illustrated by the positive and significant coefficients of Ln (Trade) and Ln (Corruption Index). However, remaining difference variables are found to be insignificant. Despite controlling and adjusting the regression, the positive effects of Ln (Trade) and Ln (Corruption Index) remain relatively robust and still show significance at the 10% and 5% level, respectively.

Interpretation of these coefficients becomes intuitive, due to the log transformation, for small changes in these difference variables. Thus a one percent increase in the difference between acquirer and target countries total volume of trade reaps 0.0026% (\$640k) higher CARs. This result is in favour for the hypothesised information asymmetry effect, since a higher volume of trade difference anticipates information asymmetry between the countries in question. Similarly, for the coefficient of Ln (Corruption) this translates to an increase in acquirer's abnormal returns, on average, of 0.0052% (\$1.27mln) for an increase of one percent in the difference in corruption between the host countries, measured by the Corruption Index.

When comparing these results to the three-month CAR window of column 4 and 5, it is clear that the effect of Corruption persists and even strengthens, but fails to hold significant at the 10% level. Other difference variables are evaluated to be insignificant, with exception of GDP

Table 4

Regression Outcomes of abnormal returns for acquirer and target country differences

The table summarizes the outcome of the regression of acquirer's abnormal returns during the two-day and three months event window on independent variables together with controls. Variables of interest are natural log of country differences explained in section 3.2. All transactions included a developed public market acquirer and an emerging market target in the period of 1995 to 2018. Abnormal returns are denominated in percentage returns and computed based on the market model method. Transaction size and Acquirer size are given in USD million. Public target is a dummy variable taking value one if target is a public firm. Same industry is a dummy variable taking value of one if the acquirer and target are in the same macro industry. Region fixed effects indicates if the regression model is controlling for the regional effect of target countries on the abnormal returns. Industry fixed effects controls for target industries. Regions groups target countries based on their geographical location into four categories e.g. Asia, Africa, Eastern Europe and South America. Standard errors are given in parentheses.

CAR Window / Independent Variables	(1) CAR[0,1]	(2) CAR[0,1]	(3) CAR[0,1]	(4) CAR[0,3M]	(5) CAR[0,3M]
Ln(GDP per Capita)	-0.0032 (0.0027)	-0.0036 (0.0027)	-0.0036 (0.0027)	-0.0412** (0.0161)	-0.0411** (0.0160)
Ln(CPI)	-0.0023 (0.0018)	-0.0021 (0.0018)	-0.0034 (0.0026)	0.0077 (0.0080)	0.0047 (0.0115)
Ln(Trade)	0.0023* (0.0013)	0.0018 (0.0013)	0.0026* (0.0015)	-0.0007 (0.0067)	-0.0001 (0.0077)
Ln(Enrollment Rate)	-0.0017 (0.0014)	-0.0016 (0.0014)	-0.0011 (0.0013)	0.0029 (0.0070)	0.0038 (0.0065)
Ln(Corruption Index)	0.0042* (0.0025)	0.0045* (0.0025)	0.0052** (0.0026)	0.0141 (0.0104)	0.0143 (0.0100)
Ln(Political and Civil Liberty)	0.0001 (0.0013)	-0.0001 (0.0013)	0.0004 (0.0014)	-0.0022 (0.0063)	-0.0018 (0.0069)
Same Language	-0.0199 (0.0134)	-0.0193 (0.0135)	-0.0166 (0.0135)	-0.0660 (0.0451)	-0.0772 (0.0498)
Same Religion	0.0063* (0.0034)	0.0050 (0.0035)	-0.0018 (0.0065)	0.0137 (0.0166)	0.0056 (0.0301)
% Cash		4.78e-6 (0.0000)	5.98e-6 (0.0000)		0.0001 (0.0002)
Tender Offer		-0.0005 (0.0045)	0.0002 (0.0046)		-0.0045 (0.0230)
% shares Acquired		0.0001* (0.0000)	0.0001* (0.0000)		-0.0001 (0.0002)
Intangible Assets (\$M)		-1.21e-7 (0.0000)	-8.05e-8 (0.0000)		-1.42e-6** (0.0000)
Transaction value (\$M)		1.91e-6** (0.0000)	1.96e-6** (0.0000)		2.32e-6 (0.0000)
Acquirer Size (\$M)		-2.85e-8 (0.0000)	-2.70e-8 (0.0000)		1.71e-7** (0.0000)
Public Target		0.0007 (0.0037)	0.0003 (0.0038)		0.0067 (0.0154)

Table 4 continued.

CAR Window / Independent Variables	(1) CAR[0,1]	(2) CAR[0,1]	(3) CAR[0,1]	(4) CAR[0,3M]	(5) CAR[0,3M]
Same Industry		-0.0022 (0.0034)	-0.0020 (0.0038)		-0.0150 (0.0175)
Consumer P&S			0.0275 (0.0255)		-0.1004 (0.1135)
Consumer Staples			0.0270 (0.0259)		-0.0701 (0.1057)
Energy and Power			0.0276 (0.0254)		-0.1129 (0.1095)
Financials			0.0268 (0.0257)		-0.1083 (0.1045)
Healthcare			0.0208 (0.0252)		-0.1188 (0.1209)
High Technology			0.0311 (0.0259)		-0.1341 (0.1116)
Industrials			0.0261 (0.0256)		-0.0864 (0.1100)
Materials			0.0287 (0.0255)		-0.0815 (0.1070)
Media&Entertainment			0.0385 (0.0268)		-0.0893 (0.1215)
Real Estate			0.0301 (0.0284)		-0.1086 (0.1208)
Retail			0.0317 (0.0268)		-0.1362 (0.1156)
Telecommunications			0.0206 (0.0258)		omitted
South America			0.0012 (0.0070)		0.0122 (0.0386)
Asia			-0.0124 (0.0084)		omitted
Africa			0.0031 (0.0071)		0.0272 (0.0365)
Eastern Europe			-0.0044 (0.0068)		0.0189 (0.0366)
Target Industry FE	NO	NO	YES	NO	YES
Target Region FE	NO	NO	YES	NO	YES
Constant	0.0205 (0.0248)	0.0213 (0.0247)	Nocons	0.3454** (0.1516)	0.4561** (0.1877)
Observations	1408	1408	1408	1408	1408
R ²	1.35%	2.24%	4.74%	0.61%	1.77%
F-Statistic	1.86*	2.09***	1.95***	1.21	1.29
P-value	0.0626	0.0070	0.0015	0.2913	0.1329

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

per capita, however, no interpretation is provided here due to unreliability of the regression model⁵.

On regards of the results in table 4, it can be concluded that information asymmetry and heterogeneity between acquirer and target country do explain acquirer's ability to generate shareholder value, this being limited to economic and institutional differences, especially in GDP per capita and corruption. On this note, I cannot reject hypothesis six, stating that: increased information asymmetry and heterogeneity between acquirer and target countries favourably effects acquirer's abnormal returns.

6. Discussion and Conclusion

This study uses acquirer's stock price performance as a measure to anticipate the value created to bidding firms shareholders through foreign M&As in emerging markets. M&As into emerging markets have become a considerable popular choice for developed market firms as a form of foreign direct investments (FDI) and entering these prosperous emerging markets in a successful manner. The paper investigates if developed market acquirers are able to generate shareholder value in these foreign transactions and what the key determinants are for being decisive about abnormal returns encountered by acquirers. Involved in this study of abnormal announcement returns are 1412 transactions of developed market acquirers from 22 different countries who acquired firms from one of 26 emerging markets within the time period of October 1995 to December 2018. In total, the dataset sample used in this study encompasses M&A deals spread over more than 23 years and comprises an accumulated M&A deal value of over \$571 billion.

Acquirers are able to generate an average (median) positive and highly significant abnormal return of 0.75% (0.23%), within a two day event window including the day of the announcement (t=0) itself and the following trading day (t=1). These CARs are in line with the announcement returns stated in past empirical research (Chari, Ouimet & Tesar, 2009; Chalencon & Mayrhofer, 2018) who find positive average CARs ranging from 0.61% to 1.16%, dependent on the length of the event window used. Moreover, I find that acquiring firms, however, destroy the initial shareholder value within a three months event window after the announcement of

⁵ See appendix A6 for further discussion of regression models and detailed evaluation of GDP per capita.

acquiring an emerging market target. This is shown by the reversal of positive two-day acquiring firms CARs of 0.75% to a significant -1.8% three months thereafter.

Factors determining acquirer's announcement returns stem from firm and bid characteristics, as well as country differences between the acquirer and target nation. The following has come forth from the analysis, giving rectification to the sub question stated in section 1 on how these determinants affect announcement returns.

The means of payment hypothesis, commonly proven to be accepted for developed market M&As (da Silva et al., 2004; Loughran & Vijh, 1997), failed to hold significant in this study. The deal type hypothesis is also rejected since tender offers failed to be explanatory for acquirer's abnormal returns, which is in agreement with the developed market M&A literature such as by Loughran and Vijh (1997) who neither find any significant differences between tender offers and mergers. Furthermore, the agency cost theory (Bhaumik and Selarka, 2012) is evaluated to be applicable for the emerging country context, since percentage of shares acquire proved to create additional total shareholder value for acquiring firms, however, intangible assets not being deterministic for this positive effect. Thus, the internalisation theory failed to hold true in this research, which is in contrary to the results of Francoeur (2006) who finds a positive effect of intangible assets on acquirer's abnormal returns. Lastly, it is confirmed that developed market acquirers can exploit the country divergences, especially the inferior development in institutional and economic dimensions of target nations, which supports the earlier studies by Chalencon and Mayrhofer (2018) and Jandik and Khali (2009).

In order to provide a clear cut answer to the main research question stated at the beginning of this paper, the following can be concluded. The inferences drawn from this study show that acquirer's stock performance, in M&As into emerging countries, depends particularly on bid and firm characteristics next to country divergences between the parties involved. These characteristics, especially the percentage of shares acquired, transaction value of the deal and acquirer size, withstand influential for the anomalous returns generated for shareholders to acquiring firms. This being significant, despite measures of robustness and controlling for target industry and regional effects. Additionally, it can be concluded that information asymmetry and heterogeneity between acquirer and target country do determine acquirer's stock performance, nonetheless, this being limited to economic and institutional differences.

6.1 Limitations and suggestions for future research

In regards to the models and methods used in this research, certain limitations are identifiable. First, the choice of model utilised to compute abnormal returns may alter the magnitude of abnormal stock returns. A viable suggestion for further improving the accuracy of measuring the abnormal returns attributable to the M&A announcement is to use comparable firm portfolio method to estimate normal returns instead of market model estimation. Thereby one can improve the accuracy of the estimated normal returns by adjusting for different firm characteristics e.g. the computation of percentile size portfolios. Hence I suggest for future research to employ the portfolio based method as a means of comparing abnormal returns to similar firm size portfolios not involved in M&As during the event period. But since the event window of two days is relatively short, possible improvements in accuracy are mainly limited for computing longer term CARs.

In addition, this paper is limited in the descriptive power of attributing variation in abnormal returns to the measured country differences, as I considered mainly divergences in countries economic and socio-economic aspects. A second possible idea left for future research is to what extend differences in countries political and regulatory aspects, such as legislative and anti-trust laws, can influence the stock markets approval for M&A transactions of developed market acquirers for emerging market targets. This, especially, is a topic which shall receive increased attention since many emerging markets have changed or will change their regulations in foreign direct investments and regulatory laws.

7. References

- Agarwal, M., & Bhattacharjea, A. (2006). Mergers in India. A response to regulatory shocks. *Emerging Markets Finance and Trade*, 42(3), 46-65.
- Bhagat, S., Malhotra, S., & Zhu, P. (2011). Emerging country cross-border acquisitions: Characteristics, acquirer returns and cross-sectional determinants. *Emerging markets review*, 12(3), 250-271.
- Bhaumik, S. K., & Selarka, E. (2012). Does ownership concentration improve M&A outcomes in emerging markets?: Evidence from India. *Journal of Corporate Finance*, 18(4), 717-726.
- Brown, S. J., & Warner, J. B. (1980). Measuring security price performance. *Journal of financial economics*, 8(3), 205-258.
- Bruner, R. F., Conroy, R. M., Estrada, J., Kritzman, M., & Li, W. (2002). Introduction to 'valuation in emerging markets'. *Emerging Markets Review*, 3(4), 310-324.
- Buckley, P. J., & Casson, M. C. (2009). The internalisation theory of the multinational enterprise: A review of the progress of a research agenda after 30 years. *Journal of International Business Studies*, 40(9), 1563-1580.
- Cantwell, J., & Santangelo, G. D. (2002). M&As and the global strategies of TNCs. *The Developing Economies*, 40(4), 400-434.
- Chalencon, L., & Mayrhofer, U. (2018). Do cross-border mergers-acquisitions in mature and emerging markets create similar value?. *Journal of Organizational Change Management*, 31(4), 944-958.
- Chang, S. (1998). Takeovers of privately held targets, methods of payment, and bidder returns. *The Journal of Finance*, 53(2), 773-784.
- Chari, A., Ouimet, P., & Tesar, L. L. (2004, March). Cross border mergers and acquisitions in emerging markets: The stock market valuation of corporate control. In *EFA 2004 Maastricht Meetings Paper* (No. 3479).
- Chari, A., Ouimet, P. P., & Tesar, L. L. (2009). The value of control in emerging markets. *The Review of Financial Studies*, 23(4), 1741-1770.
- Chi, J., Sun, Q., & Young, M. (2011). Performance and characteristics of acquiring firms in the Chinese stock markets. *Emerging markets review*, 12(2), 152-170.
- Contractor, F. J., Lahiri, S., Elango, B., & Kundu, S. K. (2014). Institutional, cultural and industry related determinants of ownership choices in emerging market FDI acquisitions. *International Business Review*, 23(5), 931-941.
- da Silva Rosa, R., Limmack, R., Supriadi, & Woodliff, D. (2004). The equity wealth effects of method of payment in takeover bids for privately held firms. *Australian Journal of Management*, 29(1_suppl), 93-110.

- Goldman, E., & Gorton, G. (2000). *The visible hand, the invisible hand and efficiency* (No. w7587). National Bureau of Economic Research.
- Fama, E. F. (1960). Efficient market hypothesis (Doctoral dissertation, PhD Thesis, Ph. D. dissertation, University of Chicago Graduate School of Business).
- Feito-Ruiz, I., & Menéndez-Requejo, S. (2011). Cross-border mergers and acquisitions in different legal environments. *International review of law and economics*, 31(3), 169-187.
- Francoeur, C. (2006). The long-run performance of cross-border mergers and acquisitions: Evidence to support the internalization theory. *Corporate Ownership & Control*, 4(2), 312-323.
- Gubbi, S. R., Aulakh, P. S., Ray, S., Sarkar, M. B., & Chittoor, R. (2010). Do international acquisitions by emerging-economy firms create shareholder value? The case of Indian firms. *Journal of International Business Studies*, 41(3), 397-418.
- Hayes, A. F., & Cai, L. (2007). Using heteroskedasticity-consistent standard error estimators in OLS regression: An introduction and software implementation. *Behavior research methods*, 39(4), 709-722.
- Heron, R., & Lie, E. (2002). Operating performance and the method of payment in takeovers. *Journal of Financial and quantitative analysis*, 37(1), 137-155.
- Ioana-Cristina, S., & Gheorghe, C. (2014). Characteristics of the Emerging Market Economies-BRICS, from the perspective of Stock Exchange Markets. *THE ANNALS OF THE UNIVERSITY OF ORADEA*, 39.
- Jandik, T., & Kali, R. (2009). Legal systems, information asymmetry, and firm boundaries: Cross-border choices to diversify through mergers, joint ventures, or strategic alliances. *Journal of International Business Studies*, 40(4), 578-599.
- Jiang, F., Stone, G. R., Sun, J., & Zhang, M. (2011). Managerial hubris, firm expansion and firm performance: Evidence from China. *The Social Science Journal*, 48(3), 489-499.
- Kim, E. H., & Lu, Y. (2013). Corporate governance reforms around the world and cross-border acquisitions. *Journal of Corporate Finance*, 22, 236-253.
- Kim, E. H., & Singal, V. (1993). Mergers and market power: Evidence from the airline industry. *The American Economic Review*, 549-569.
- Lanine, G., & Vander Vennet, R. (2007). Microeconomic determinants of acquisitions of Eastern European banks by Western European banks 1. *Economics of Transition*, 15(2), 285-308.
- Lebedev, S., Peng, M. W., Xie, E., & Stevens, C. E. (2015). Mergers and acquisitions in and out of emerging economies. *Journal of World Business*, 50(4), 651-662.
- Loughran, T., & Vijh, A. M. (1997). Do long-term shareholders benefit from corporate acquisitions?. *The Journal of Finance*, 52(5), 1765-1790.

- M&A, Farlex Financial Dictionary. (2009). Retrieved May 12 2019 from <https://financial-dictionary.thefreedictionary.com/M%26A>
- M&A Statistics by Countries (2019), Institute for Mergers, Acquisitions and Alliances (IMAA), imaa-institute.org/m-and-a-statistics-countries/.
- M&A, West's Encyclopedia of American Law, edition 2. (2008). Retrieved May 12 2019 from <https://legal-dictionary.thefreedictionary.com/M%26A>
- Martin, K. J., & McConnell, J. J. (1991). Corporate performance, corporate takeovers, and management turnover. *The Journal of Finance*, 46(2), 671-687.
- Mergers & Acquisitions Quarterly Reviews (2019), Refinitiv Emerging Market Financial Advisor Quarterly Report 2019, www.refinitiv.com/dealsintelligence/.
- Meyer, K. E., Estrin, S., Bhaumik, S. K., & Peng, M. W. (2009). Institutions, resources, and entry strategies in emerging economies. *Strategic management journal*, 30(1), 61-80.
- Meyer, K. E., & Estrin, S. (2001). Brownfield entry in emerging markets. *Journal of international business studies*, 32(3), 575-584.
- Mody, M. A. (2004). *What is an emerging market?* (No. 4-177). International Monetary Fund.
- Moeller, S. B., Schlingemann, F. P., & Stulz, R. M. (2004). Firm size and the gains from acquisitions. *Journal of financial economics*, 73(2), 201-228.
- Morck, R., & Yeung, B. (1992). Internalization: an event study test. *Journal of international economics*, 33(1-2), 41-56.
- MSCI. (2019). MSCI global market accessibility review
- Nicholson, R. R., & Salaber, J. (2013). The motives and performance of cross-border acquirers from emerging economies: Comparison between Chinese and Indian firms. *International Business Review*, 22(6), 963-980.
- Rau, P. R., & Vermaelen, T. (1998). Glamour, value and the post-acquisition performance of acquiring firms. *Journal of financial economics*, 49(2), 223-253.
- Roll, R. (1986). The hubris hypothesis of corporate takeovers. *Journal of business*, 197-216.
- Rugman, A. M. (1986). New Theories Of The Multinational Enterprise: An Assessment Of Internalization Theory. *Bulletin of economic research*, 38(2), 101-118.
- Seth, A., Song, K. P., & Pettit, R. R. (2002). Value creation and destruction in cross-border acquisitions: an empirical analysis of foreign acquisitions of US firms. *Strategic management journal*, 23(10), 921-940.
- Stigler, G. J. (1958). The economies of scale. *The Journal of Law and Economics*, 1, 54-71.
- Stock, J. H., & Watson, M. W. (2003). *Introduction to econometrics* (Vol. 104). Boston: Addison Wesley.

Teece, D. J. (1980). Economies of scope and the scope of the enterprise. *Journal of economic behavior & organization*, 1(3), 223-247.

Tremblay, V. J., & Tremblay, C. H. (2012). Horizontal, vertical, and conglomerate mergers. In *New perspectives on industrial organization* (pp. 521-566). Springer, New York, NY.

Platt, E. and Weinland, D. (2018). Global M&A activity hits new high. [online] Ft.com. Available at: <https://www.ft.com/content/b7e67ba4-c28f-11e8-95b1-d36dfef1b89a#comments-anchor> [Accessed 11 Apr. 2019].

Bruner, R. F., Conroy, R. M., Estrada, J., Kritzman, M., & Li, W. (2002). Introduction to 'valuation in emerging markets'. *Emerging Markets Review*, 3(4), 310-324.

8. Appendix

A1. MSCI Market Classification Framework

Notes: The table provides the criteria matrix which classifies economic markets into either developed or emerging countries. The resulting outcome is the sample selection of acquirers (developed) and targets (emerging). MSCI describes its classification further: “The size and liquidity requirements are based on the minimum investability requirements for the MSCI Global Standard Indexes. Market accessibility aims to reflect international institutional investors’ experience of investing in a given market and as a result, this criterion includes several sub-criteria. These criteria are generally based on qualitative measures that are reviewed for all markets at least once a year during the MSCI Global Market Accessibility Review.” (MSCI, 2019). According to the classification, the set of M&As is restricted, and acquiring and target countries have to satisfy these to be included in the data sample.

<u>Criteria</u>	<u>Developed Countries</u>	<u>Emerging Countries</u>
<i>Panel A: Economic Development</i>		
A.1 Sustainability of Economic Development	<i>Country GNI per capita 25% above the World Bank high income threshold* for 3 consecutive years</i>	No requirement
<i>Panel B: Size and Liquidity requirements</i>		
B.1 Number of companies meeting the following standard Index criteria	5	3
- Company size (full market cap)**	USD 3,102 mm	USD 1,551 mm
- Security size (float market cap)**	USD 1,551 mm	USD 776 mm
- Security liquidity ⁶	20% ATVR	15% ATVR
<i>Panel C: Market Accessibility Criteria</i>		
C.1 Openness to foreign ownership	<i>Significant</i>	Very high
C.2 Ease of capital inflows/outflows	<i>Significant</i>	Very high
C.3 Efficiency of operational framework	<i>Good and tested</i>	Very high
C.4 Availability of Investment Instrument	<i>High</i>	Unrestricted
C.5 Stability of institutional framework	<i>Modest</i>	Very high

* High income threshold for 2018: GNI per capita of USD 12,056 (World Bank, Atlas method).

** Minimum in use for the May 2018 Semi-Annual Index Review, updated on a semi-annual basis.

⁶ Security liquidity is measured by the annualized traded value ratio (ATVR) composed of the annualized traded value of a security relative to its free float-adjusted market capitalization.

A2. Summary statistics for M&A data and additional explanatory variables.

Notes: Transaction value, Intangible Assets and Acquirer Size are continuous variables measured in million USD. % shares acquired measures the percentage amount of shares acquired in the M&A transaction. % cash is a continuous variable measuring the total amount of the consideration paid in cash and expressed as a percentage of the total consideration paid. Tender offer, Public Target, Cash only, Same Industry, Majority control, Religion and Language are dummy variables that take the value one if the the transaction is a tender offer, target is publicly listed, payment is 100% cash, acquirer and target are in the same industry, %shares acquired >50%, acquirer and target have same religion and acquirer and target country have same language, respectively, and otherwise zero. # previous M&As measure the acquirers amount of previous M&As conducted in the sample period from 1995 to 2018. Diff GDP/Capita, CPI, Trade, Enrollment, Corruption, Political/Liberty are the additional explanatory variables explained in section 3.2 and measured as absolute difference of the average value over the sample period between the acquirer and target country.

Variable	(1) Mean	(2) SD	(3) Max	(4) Min
% shares Acquired	66.1790	34.5355	100.0	5.0
Transaction value (\$M)	404.8681	1523.4927	42247.5	10.0
Intangible Assets (\$M)	6528.2526	17981.0727	172770.0	0.0
% Cash	40.2303	47.1436	101.6	0.0
Tender Offer	0.0581	0.2340	1.0	0.0
Acquirer Size (\$M)	24495.2464	56469.5283	981094.7	1.6
Public Target	0.2259	0.4183	1.0	0.0
Cash only	0.3407	0.4741	1.0	0.0
Same Industry	0.7210	0.4487	1.0	0.0
Majority Control	0.6140	0.4870	1.0	0.0
Diff GDP/Capita	31696.7603	8540.5117	60626.6	52.2
Diff CPI	5.6309	6.8843	30.3	0.0
Diff Trade	61.3951	88.2056	326.1	0.1
Diff Enrollment (Primary)	4.1835	2.8796	29.2	0.0
Diff Corruption	33.7710	12.5830	59.9	1.3
Diff Political/Liberty	2.2191	1.6983	5.9	0.0
Religion	0.5021	0.5002	1.0	0.0
Language	0.0205	0.1419	1.0	0.0
# previous M&As	2.7748	2.3803	12.0	1.0
Total Obs:	1412			

A3. Acquiring countries stock market indices

Notes: This table provides each developed countries stock market index, which is used to compute abnormal returns by measuring the portion of the event as the observed return at the event date in deviation from the expected outcome in normal circumstances. The according stock indices are matched with each M&A announcement acquirer, by identifying their respective country and matching index of this country from the table below. The indices are then used in formula (3 and 4) to estimate acquiring firms market model parameters and estimating expected normal returns for the event period, where $R_{Mi,t}$ is the return of the respective market index below and varies with (i) for each acquiring country. The returns for each index are obtained from DataStream and their respective DataStream symbols are given in parentheses.

<u>Country</u>	<u>Stock Market Indices</u>
Canada	Toronto stock exchange composite Index (TTOCOMP)
United States	Standad and Poor's 500 Composite Index (S&PCOMP)
Austria	Austrian Traded Index (ATXINDEX)
Belgium	Belgium 20 (BGBEL20)
Denmark	OMX Copenhagen (DKKFXIN)
Finland	OMX Helsinki (HEXINDEX)
France	France CAC 40 (FRCAC40)
Germany	DAX 30 Performance (DAXINDEX)
Ireland-Rep	ISEQ All Share Index (ISEQUIT)
Israel	Israel TA 125 (ISTA100)
Italy	MSCI ITALY (MSITALL)
Netherlands	AEX INDEX (AMSTEOE)
Norway	OSLO EXCHANGE ALL SHARE (OSLOASH)
Portugal	PORTUGAL PSI-20 (POPSI20)
Spain	IBEX 35 (IBEX35I)
Swede	OMX STOCKHOLM (SWEDOMX)
Switzerland	SWISS MARKET INDEX (SWISSMI)
United Kingdom	FTSE 100 (FTSE100)
Australia	S&P/ASX 200 (ASX200I)
Hong Kong	Hang Seng Index (HNGKNGI)
Japan	NIKKEI 225 STOCK AVERAGE (JAPDOWA)
New Zealand	FTSE NEW ZEALAND (WINZEAL)
Singapore	STRAITS TIMES INDEX L (SNGPORI)

A4. Selection of event windows for cumulative abnormal returns

The selection of the appropriate event window for measuring the cumulative abnormal return is based on the statistical significance of the t-test and Wilcoxon sign test. The resulting two sided p-values are presented in table A and indicate a suggested event window of $\{0,1\}$ and $\{-4,8\}$ based on the t-test and sign test, respectively. The students t-test indicate a significance of days AR_0 ($p=0.0000$) and AR_1 ($p=0.0022$) at the less than one percent statistical significance level. For the Wilcoxon's sign test, also days AR_0 and AR_1 are determined to be significant at the 5% and 10% level, thus representing the only consecutive days which are significant in both tests. For this reason I selected a CAR window of $\{0,1\}$. However, AR_5 is also considered as significantly different from zero under both test while the sign test shows significance for all days from zero until five. Hence I select a second CAR window from the announcement of the M&A until five days afterwards, e.g. $\{0,5\}$ to capture possible delays in the stock market's reaction to the announcement. This is reasonable to assume since emerging markets often possess insufficient accounting and information environments, inducing difficulties in their valuation (Bruner et al, 2002). This in turn can lead to delays in the stock price reaction of the firm as agents require more time to gather necessary information about emerging target firms. In addition to these short term CAR windows, I also utilise a three month long term event window, measuring abnormal returns from the event date up until three months after the announcement of the M&A. As this window will allow me to examine the development of the short term CARs and thereby provides additional value to the analysis of this thesis.

The different short term event windows, however, only slightly differ in their characteristics. The longer five day CAR window might be able to capture a longer delay of the stock market's reaction to the announcement of the M&A, nevertheless, the assumption that it can capture a larger proportion of the effect is yet still to be seen.

Panel A in table B gives the summary statistics of the three different CAR windows and panel B tests if these windows are significantly different from each other on the basis of their average by means of a standard t-test. Two day accumulated abnormal returns amount to 0.75% significant at less than one percent level. However, when comparing these to the longer five day CAR window, not many significant differences can be seen. The five day CARs are slightly lower with 0.60%, significant at the less than one percent level. However, the longer five day period induces increased variation in abnormal returns with a standard deviation of 6.54%. Despite the theoretical favourability of using the longer five day event window, their means do

Table A

Significance tests of acquirers abnormal return for days $t = \{-10,10\}$

The table shows acquirers abnormal returns which are computed based on the market model method. Their significance has been evaluated on basis of the student's t-distribution and the Wilcoxon's sign test. The P-value stated are for two sided tests for each statistical test. The students T-distribution tests the null hypothesis that the mean of each AR_i is equal to zero. The Wilcoxon sign test evaluates the null hypothesis that the median of each AR_i is equal to zero. The Wilcoxon sign test evaluates the null hypothesis that the median of each AR_i is equal to zero. AR_i are denoted relative to the event date given by AR_0 .

Variable	Student's T-test	Wilcoxon Sign Test
(1)	(2)	(3)
Abnormal Returns	Two sided P-values	Two sided P-values
AR -10	0.4651	0.2414
AR -9	0.3002	0.0056***
AR -8	0.3089	0.2013
AR -7	0.3598	0.1225
AR -6	0.5200	0.0936*
AR -5	0.9201	0.3654
AR -4	0.2215	0.0066***
AR -3	0.3977	0.0378**
AR -2	0.5026	0.0253**
AR -1	0.5631	0.0253**
AR 0	0.0000***	0.0106**
AR 1	0.0022**	0.0624*
AR 2	0.3685	0.0430**
AR 3	0.4098	0.0165**
AR 4	0.5328	0.0040***
AR 5	0.0583*	0.0004***
AR 6	0.3093	0.0013***
AR 7	0.2870	0.0003***
AR 8	0.4818	0.0106**
AR 9	0.6703	0.1360
AR 10	0.2236	0.0220

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

not significantly differ from each other since the difference in means is 0.16% and highly insignificant. In other words, I exclude the five day event window for measuring CAR from the analysis, to be more conservative. When comparing the two day average CARs with the three month CAR window, it is shown that their means significantly differ. Shown in panel A column 4, the three month event window indicates that acquiring firms destroy, on average, 1.8% ($p < 0.05$) of shareholder value within three months after the announcement of M&As.

Table B

Comparison of CAR windows with significance tests for difference in means.

Notes: Panel A compares certain summary statistics for one day, three day and three months CAR windows given in column 2, 3 and 4 respectively. CAR windows are computed based on summarizing the respective abnormal return days within the specified window length, relative to the event date t=0. Abnormal returns are calculated on the market model estimation method via a classical event study methodology. The difference in means test evaluates the null hypothesis that the average between two CAR windows is the same. All p-values stated are for two sided tests.

(1)	(2)	(3)	(4)
<i>Panel A: Summary statistics CAR windows:</i>			
		<u>CAR Windows</u>	
<u>Statistic</u>	<u>CAR [0,1]</u>	<u>CAR[0,5]</u>	<u>CAR[0,3M]</u>
Mean	0.0075***	0.0060***	-0.0177**
Max	0.5369	0.6200	4.7497
Min	-0.4246	-0.6028	-6.3958
SD	0.0547	0.0654	0.2957
N	1412	1412	1412
<i>Panel B: Difference in means test between CAR windows:</i>			
<u>Difference</u>	<u>Mean</u>	<u>T-statistic</u>	
(2) – (3)	0.0016	0.8912	
(2) – (4)	0.0252***	3.3200	

*p<0.1, **p<0.05, ***p<0.01

A5. Frequency and percentage distribution of M&A transactions by target nation.

Notes: Target Nations are selected based on the MSCI classification framework (Appendix A1) and illustrate the set of target countries included in the sample period of October 1995 to December 2018 for which a developed market acquirer announced a M&A transaction for a target company within these emerging countries.

(1) Target Nation	(2) Frequency	(3) Percentage
Argentina	34	2.41
Brazil	157	11.12
Chile	39	2.76
China	318	22.52
Colombia	25	1.77
Czech Republic	30	2.12
Egypt	22	1.56
Greece	17	1.20
Hungary	11	0.78
India	154	10.91
Indonesia	36	2.55
Malaysia	36	2.55
Mexico	72	5.10
Pakistan	2	0.14
Peru	21	1.49
Philippines	21	1.49
Poland	49	3.47
Qatar	1	0.07
Russian Fed	85	6.02
Saudi Arabia	8	0.57
South Africa	49	3.47
South Korea	83	5.88
Taiwan	52	3.68
Thailand	26	1.84
Turkey	47	3.33
UAE	17	1.20
Total	1412	100.00

A6. Discussion of Regression models employed for the cross sectional analysis of acquirers abnormal returns (Tables 2 – 4)

Models of table 2

The variation in acquirer's announcement returns between categories and subgroups for acquisitions of emerging target firms, outlined and discussed in section 5.1, are analysed via the benchmark regression model, given in section 4.2. The dependent variable is the two day and three month CAR window, which is regressed on the explanatory variables of firm and bid specific characteristics in addition to control variables. The regression models in the unrestricted version of column 3 uses adjustments for industry and target nation effects and is estimated without constant to prevent perfect multicollinearity between independent variables of industry and region groups.

The regression models employed in table 2 induce a relatively low explanatory power, where R^2 ranges from 0.1% to 3.69%. The low R^2 for the longer three months event window can be explained through the increased random noise effecting abnormal returns and diluting the part of the variation that can be described by the independent variables. Despite the low R^2 all regressions for the two day event window are significant at least at the 10% statistical level, given by their F-statistic testing for joint significance of all coefficients. For the regression with three months CAR as the dependent variable, only the unrestricted model of column 6 shows significance at the 10% level ($p = 0.0569$). However, this does not render other regressions with three month CAR as the dependent variable as futile, since they can be informative of the development of two day abnormal returns on whether acquirers are able to maintain these abnormal returns or if they are quickly vanishing after the announcement.

Models of table 3

Table 3 exhibits only transactions in which acquirers gain majority control over its target firm and follows the same benchmark methodology as in previous models. For the cases in which acquirers achieve acquisition of majority, again, I regress the different CAR windows on the variables of interest and controls, for all transactions in which the percent stake in the target firm acquired is at least 50%. In addition, I have adjusted the regression specifications, once again, for industry and regional target firm effects.

The model uses the same control and adjustments as in table 2 column 3, where intangible assets showed a negative coefficient, with the distinction that only observations where majority control is acquired are considered in this model. This reduces the observations included in the

model to 867, however, the regression is still highly significant at the less than one percent level ($p = 0.0000$) indicating a F-statistic of 2.9. The R^2 of the regression lies at 6.49%, which gives the highest R^2 obtained so far from all regression models considered. Since the models in table 3 are restricted to include only transactions for which percent of shares acquired is larger or equal to 50%, I ultimately restricted the variable ‘% shares acquired’ and thus excluded the variable from the regression. This is due to multicollinearity issues, as the effect of ‘% shares acquired’ would be heavily biased since transactions are restricted within this variable.

Models of table 4

The models employed in table 4 regress the two day and three month CAR windows on the explanatory variables measuring country differences between the acquirer and target country. The measurement and logarithmic transformation of these variables and the dimensions they are approximating is described in section 3.2.

Percentage of shares acquired is added as a control variable, since it showed significance in earlier models of table 2 and 3. Despite insignificance of percent of cash financed, tender offer and intangible assets, they are still used as control variables, in the specifications in table 4, for conservative reasons. Lastly, all models include the previously same control variables and adjust for industry and regional effects.

All regressions in table 4 with two day CARs as the dependent variable are significant at the 10% level, with models of column 2 and 3 being significant at the less than 1% statistical level. The unrestricted model including controls and adjusting for industry and region effects (column 3) shows an R^2 of 4.74% and induces a joint significance of all independent variables at the 0.15% statistical significance level (P-value). Thus it is reasonable to assume reliable estimates for the effects of country differences on bidder’s abnormal returns.

For the regressions of CARs over the three month event window, I find insignificant regressions with low R^2 , thus no inferences will be drawn from there, nonetheless, they are still informative on the likely development of the effects over a longer time period. The difference in GDP per capita between acquirer and target country seems to significantly cause negative abnormal returns over the longer period, however, this not being representative, since the independent variables are jointly insignificant and the regression overall has a negative R^2 of 0.37%. Due to this reason the coefficient estimate on GDP per capita is not considered to be representative and hence no inferences are drawn from this estimate in the results of section 5.3.