Does culture adds up?

Empirical evidence from the world cross-border merger market

Abstract

We find strong evidence that three key dimension of national culture (trust, individualism and hierarchy) affect the number of mergers. When tested on a dataset with 21,024 country-pair year observations, we find the three dimension to negatively affect the cross-border mergers activity between countries. The effect of cultural differences on the announcement returns, observed over publicly traded mergers, are murky even though all three dimension of culture impact the combined announcement returns. Furthermore their exist differences between the way cultural distances impact the announcement returns within industries. The findings are robust to year and country-level fixed effects and different measures of cultural differences. The results suggest that cultural differences are a source of risk and they negatively impact the integration process within companies, thereby adding to the already complex process of merging firms.

Keywords: Cross-border mergers, national culture, abnormal performance, merger volume

Name: **Rik van Velthoven**

Student number: **382826**

Supervisor: **Dr. C. M. Lin**

City: **Rotterdam**

Date: **23/07/2018**

NON-PLAGIARISM STATEMENT

By submitting this thesis the author declares to have written this thesis completely by himself/herself, and not to have used sources or resources other than the ones mentioned. All sources used, quotes and citations that were literally taken from publications, or that were in close accordance with the meaning of those publications, are indicated as such.

Table of Contents

I. Introduction

Globalization is erasing the borders, which separates us. Markets around the world have become more and more integrated, yet still large differences are found between people sharing different beliefs and deeply-held values, separated by the borders that create the nation they live in. Differences in culture are likely to enrich companies in a social context, but does the same hold in a monetary context. And how scared are companies to cross-the border and interact, is there a synergy effect to be found in differences that separate the one group from another, or pose these differences double-layered integration costs, when firms merge together. In other words do differences in culture add up to the integration costs companies face when merging or do they add up to the synergy gains expected by the cross-border mergers?

Along with the growth in cross-border mergers and acquisitions, have come the rise in empirical research examining and studying cross-border mergers. Cross-border mergers carry their own unique sets of risk, which are less of a hurdle to be cleared in domestic mergers. For companies to realize the objective and synergy gains, which they aim for, complexities have to be overcome. First there are differences in corporate culture between companies, which can create frictions during the integration process. In addition to that companies involved in cross-border mergers face national cultural differences, along with political and social risk factors. Because of these factors cross-border mergers are more complex and harder to manage. Companies have to set up a good plan of potential risk factors and potential benefits to pull off merger that create additional wealth for the company. Even though cross-border mergers introduce companies to a new set of risk factors, unique opportunities can arise which are absent in domestic mergers. Cross-border mergers could provide an entry mode of companies to foreign markets and they could access scare resources not to be found in the home country. The question that arise at first hand, does these unique opportunities outweigh the additional set of risk factors, introduced when companies decide to step the border. Are they paid-off for taking the risk?

The answer to that is mixed in prior empirical studies. Some find the wealth creation effect for companies to be greater, when they are involved in domestic mergers compared to their cross-border counterparts, in the European, US and the UK market (Conn, Cosh, Guest, & Hughes, 2005) (Moeller, Schlingermann, & Stulz, 2004). However these findings are contradicted by other studies, which find the combined wealth effect for both firms to be higher in cross-border mergers (Ahern, Daminelli, &

Fracassi, 2010). The debate doesn't stop there. In addition to that there is discussing about, which are the potential drivers between differences in performances of cross-border and domestic mergers and which role cultural differences plays in that story. On one side we have the view of researchers, who believe that differences in culture could introduce mergers to a new set of unique operations and make them more flexible to adapt to changes in the macro-economic environment. From this standpoint it is believed that cultural differences between firms, are a set of unique opportunities which could serve as a cultural synergy effect, thereby adding to the already existing potential benefits firms are trying to capture by mergers and acquisitions (Barney, 1986) (Carrillo & Gromb, 2007). On the other hand, we have the opposed view that differences in culture will lead to problems in the integrations process, which are difficult and costly to overcome, thereby adding to the already complex process of integration and optimization between merging companies. Thereby the integration process get disturbed and the synergy effects never reach their full potential (Stahl & Voight, 2008) (Bruner R. F., 2002).

The different standpoints in prior studies let to the base of this paper. In this paper is investigated whether a cross-border effects exist and what could be the potential drivers of it. With the use of an event study, the total combined abnormal announcement returns for shareholders of cross-border merger firms is compared to those of domestic merging firms. No such effect as the cross-border effect is found to be present in the sample with the cross-border and the matched domestic sample, as well as over the total sample.

In addition to that the role of cultural distances is examined, first to determine the effect of cultural differences on the combined returns, which shareholders experience during the days surrounding the announcement period. With the motive in mind that differences in culture could work out both ways. It could enrich companies and introduce them to a unique set of operations and solution solving, which could make the company more efficient and more flexible to adapt to changing macro environments. The opposing view is that cultural differences add to the already complexity of the merging process of two firms and that cultural differences will add to the integration costs and reduce the synergy benefits. The results in this study are murky. The stock's market discriminates between different dimensions of culture. While differences in trust and individualism are valued negatively by the stock markets, the same can't be said about cultural disparity in hierarchism. A positive effect between difference in hierarchism and the combined announcement return are found.

To be sure we don't base the results of the study on the valuation that the stock market gives us about cultural differences, the total number of cross-border mergers between countries is investigated with a

gravity model. Hereby walking in the path plagued by prior researchers with as main differences that we try to explain the intensity off cross-border numbers between countries not by a geographical, but by a cultural dimension. Not only is the role of culture investigated, but also the role corruption and governance standards play in the cross-border intensity between countries. The findings from the gravity model are one-sided. Along all three dimension of culture a negative effect of cultural differences is found on the total number of mergers between countries. Thereby adding up to the view that cultural differences impose an extra risk factor and firms in general are therefore left with less NPV opportunities in cultural more distant countries.

The contribution to the literature is three-fold. First the objective is to shed new light on the performance of cross-border mergers in comparison to their domestic counterparts. In addition to that the impact of cultural differences on the performance and intensity of cross-border is investigated over the last two cross-border waves. Thereby adding an additional time period to these investigated by Ahern et al. (2010). Furthermore the cross-border sample is split up in different industries, hereby examining how cultural differences impact the performance of cross-border mergers within these industries. By our knowledge no prior research have attempted to investigate the impact of cultural differences on the cross-border mergers performance within industries and between industries.

The paper is built up as follow. In the second section the subject is bounded in a theoretical framework, where prior research and theories are introduced, leading to the hypothesis. In the third section, the constructing of the sample and its characteristic are discussed along with the methodology which is used to test the hypothesis. In the fourth section the results from the analyses are explained and discussed. Followed by the fifth section and sixth section, which will consist of robustness checks along with a conclusion and discussion of the results and some recommendations for future research.

II. Theoretical Framework

2.1 Cross-border mergers

2.1.1 Cross-border merger waves

Cross-border merger and acquisitions have become a popular instrument of investing in foreign countries. Since 1980 the volume, along with the total number of cross-border mergers have increased dramatically and nowadays cross-border mergers make up a major component of total foreign direct investment. As well as economic times of high and low conjuncture mergers and acquisitions come in waves. Even though cross-border, as well as domestic merger waves, are highly correlated to economic booms and turmoil's they are driven by different underlying factors. The waves act the same, but don't exactly mirror the same timelines (Erel, Liao, & Weisbach, 2012).

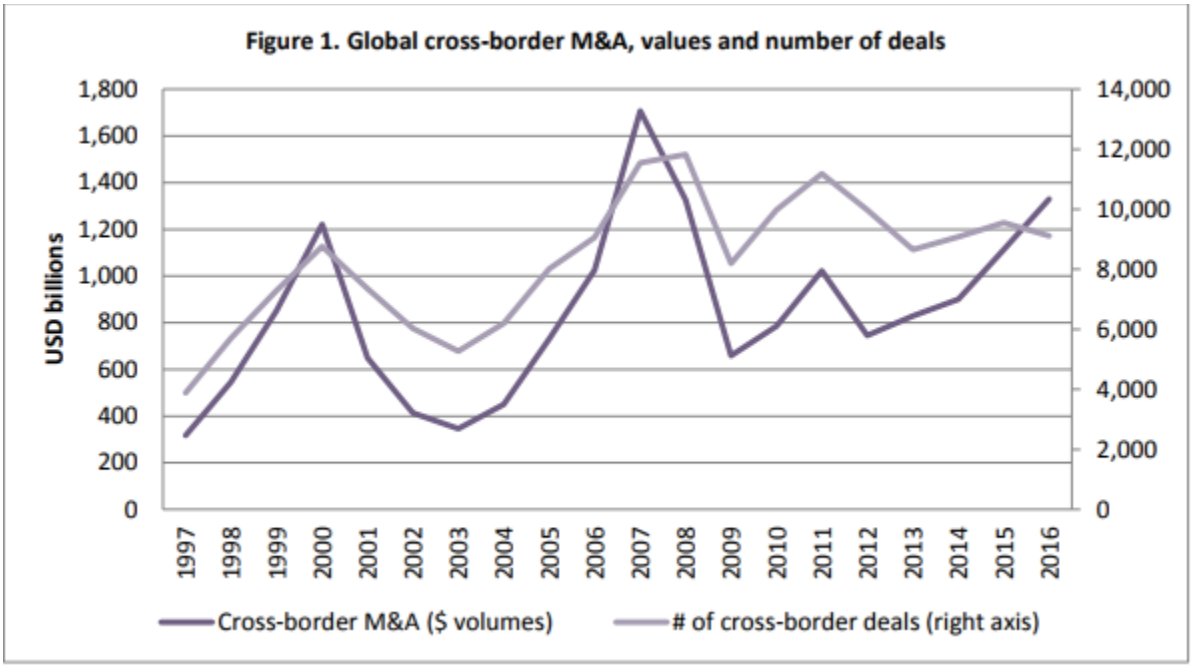
From the first figure one can observe the total number of cross-border mergers and their volume over the last two decades. The last two cross-border waves roughly span from 1999 to 2007 and 2008 to 2016. The cross-border waves fit the timeline of macro-economic booming times, as well as their turmoil. The 1999 to 2007 wave, roughly began after the Dotcom-bubble which ended a period of rapid innovation as well as excessive speculation and growth. The wave found his ending around 2007, which was the start of the financial crisis.

Drivers of merger waves can vary between cross-border and domestic merger waves, even though both tend to cluster by time and industry. While both are driven by periods off macro-economic growth, cross-border waves, also follow changes in host government policies (e.g. trade liberalization), which introduce companies to a new set of opportunities when crossing the border (Porter & R., 2005). With the world rapidly evolving and globalizing, supranational companies arise and the world gets smaller. Therefore it is expected that cross-border mergers and acquisitions while even become more popular as time goes on, thereby underlying the importance to study what drives cross-border mergers and which factors affect them.

Purposes of a mergers vary by company, but some widely recognized purposes off mergers are: increasing the overall competitive advantages, creating revenue growth, realizing synergy gains, entry mode to new markets and many more. On top of that some unique opportunities are introduced, when

firms decide to cross the border. A cross-border merger can be used as a strategy of internationalization and a mode of foreign entry. Also foreign market opportunities can be exploited along with the access to scare resources, which are not present in the home country (Anderson, 1997).

In addition to that cross-border mergers carry their own set of unique risks that are less present in domestic mergers. Firms involved in cross-border mergers face political, social and cultural risk, which have to be mapped before a cross-border merger is undergone.



2.1.2. Do M&A produce positive value?

Measure of performance

Mergers and acquisitions are a widely studied topic in empirical research. There exist a vast amount of studies which extensively researched this topic. However studies related to M&A produce different results. Firstly different outcomes by studies examining the performance of mergers are driven by different performance measures, which vary by research fields. The measurement of performance in prior research is subject to a range of different approaches. The approaches vary from subjective (degree of synergy realization, integration effectiveness and strategic gap reduction) to objective

measurement methods (accounting performance, market performance and other operational data). Also the time-horizon used to capture the performance of mergers vary from short-term (a couple of days around the announcement time) to long-term time horizons (up to several years) (Das & Kapil, 2012).

A broadly used measure is the organizational performance, which is typically defined as instruments of purpose, coordinated by strategies and goals. The most common variables to measure the organizational performance include; sales, profit market shares and many other indicators. Those variables are especially used in management, organization and strategy research and the performance of the merger is measured on long-term horizons (Zollo & Meier, 2008).

Another conducted method is the measurement of the performance through outcome and event studies. The use of event study is especially common in the finance literature, while the use of outcome studies is more common in industrial organization literature. In outcome studies the stock response to the announcement of the acquisition is used to determine the performance of the mergers and acquisitions. Furthermore the pre- and post-acquisition performance are compared with matching firms from the same industry, to investigate whether the acquisition was positively valued by the market or not, thereby controlling for industry specific outcomes. A drawback of this measure is that mergers have become an increasingly popular method to expand business, thereby reducing the sample of benchmark firms which haven't undergone a mergers (Andrade, Mitchell, & Stafford, 2001) .

In addition to that event studies are a popular method in the empirical research and they analyze the stocks market response to the announcement of the merger. With this approach it is assumed that the markets are efficient and all relevant information about the performance of the acquisition is captured in the event window used to analyze the performance of the mergers. Event studies are common in finance literature and are recognized for providing insight in determining whether mergers and acquisitions pay-off (Bruner & Perella, 2004).

Based on different measurement approaches, different outcomes relating to the performance of mergers and acquisitions are found. The goal of a mergers is to achieve economic benefits. Therefore Bruner (2004) argues that the only way to prove mergers add value is through economic measurement, therefore using an event window, which measures the returns of the target and acquirer firm, provides the best fit (Bruner & Perella, 2004).

Performance of domestic mergers and acquisitions

In empirical research it is widely accepted that mergers and acquisition do pay-off and there is a positive overall wealth effect for the shareholders. However there's debate in prior studies, whether positive wealth effects discriminates between the two firms, in which the positive wealth effect of the mergers is absorbed by shareholders of the target firm. Bruner (2002) conducted an investigation to a total of 44 empirical studies that investigated the impact of M&A through an event-study. He used empirical research published in the 1971-2000 period. In his research he found that there was an overall concessive, with respect to, positive wealth effects for the shareholder of the target firms. This was contrary to the outcome for the shareholder of the acquirer firm. Bruner found that in 13 out of the 44 cases acquisitions destroyed value for the acquirer firm, compared to 17 out of 44 cases where the acquisition created value for the shareholders of the acquirer firm. In the other studies, no significant effect on the return of the acquirer firm was found during the used event-window. When he investigated the net gains for shareholders from the buyer and seller perspective he found that in more than half of the studies investigated, a significantly positive effect was found on the total net gains of the shareholders (Bruner R. F., 2002). So do mergers and acquisition pay-off? The overall consensus in the literature is that M&A does provide wealth gains for the shareholders of both firms combined. However most of the combined wealth effect is attributed to the shareholders of the target company, where the announcement of a merger, produce in almost all cases in empirical research, a positive effect on the stock's price of the target company. When we look from the standpoint of the shareholders of the acquirer firm, empirical research doesn't seem to find common ground. Where some studies do find a significantly positive wealth effect for the shareholders of the acquirer firm, other studies challenge this findings with different results, resulting in zero or negative returns for the shareholders of acquirer firms.

2.1.3 Cross-border effect

From examining previous research, we have found that domestic mergers in general create positive combined wealth effects, even though most of the wealth effects are absorbed by the shareholders of the target firms. Interesting is how mergers perform when firm decide to cross the border, while that is within the scope of this study. Cross-border are recognized for their unique risk characteristics, which are of lesser importance in domestic mergers. Where in domestic mergers firms face integrations complexity, because of differences in corporate culture, the complexity of the integration process in

cross-border mergers is enlarged due to other risk factors (e.g. political risk). On the other hand unique benefits could be obtained within cross-border mergers, ranging from new entry foreign market opportunities to access of scare resources (Anderson, 1997). The question is whether the potential extra benefits outweigh the extra risk factors. In empirical research there exist a vast majority of papers which compare the returns for domestic merger to their cross-border counterparts.

Even though the differences of cross-border and domestic mergers are widely studied in prior empirical studies the results produce different outcomes. Conn et all.(2005) investigate the announcement and post-announcement returns of UK firms using a time period ranging from 1984 till 1998. They find significantly negative announcement return for public UK firms acquiring public domestic targets. While UK firms engaging in a cross-border acquisition, show zero announcement returns (Conn, Cosh, Guest, & Hughes, 2005). Furthermore Conn analyses 15 studies which examine the announcement returns of UK and US companies, acquiring cross-border publicly traded targets. He finds that in most cases the acquirers produce zero or negative CAR's (cumulative abnormal return) during the event window (Conn R. , 2003). This is in line with the results found by Moeller and Schlingemann (2005), they find domestic acquisition in the UK and in the US to generate more wealth for their shareholder in comparison to firms crossing the border. These results are also similar when comparing returns of domestic European mergers to European firms merging with other European firms. Campa and Hernando (2005) find that the combined announcement returns for European cross-border mergers to be significantly less than those of European domestic mergers (Campa & Hernando, 2005). They attribute this finding to the existence of cultural, legal and transaction barriers. Previous mentioned findings are contrary to the findings of Ahern et al. (2010). They compared the announcement returns of cross-border acquisitions to those of domestic acquisitions. In a univariate analyses they find that cross-border mergers produce a significantly higher return than their domestic counterpart (Ahern, Daminelli, & Fracassi, 2010).

Not only does the return between domestic and cross-border mergers vary, also returns vary between cross-border mergers. Chari et al. (2004) examined the combined announcement returns of acquisitions where the acquirer firm is located in a developed market and where the target was located in an emerging or developed market. They find that both acquirer and target firms enjoy the benefits of higher announcement return, when the target firm is located in an emerging. Their results hold over a 3 week time period (Chari, Ouimet, & Tesar, 2004)

Empirical studies have produced a wide variety of different outcomes to the combined returns of mergers in cross-border acquisition in comparison to their domestic counterparts. Some find that

domestic mergers outperform cross-border mergers, while others find contrary results. The findings are driven by a wide variety of factors, including time, country, market and firms specific factors. To shed new light on the performance of cross-border versus domestic mergers I will investigate the differences in performance between cross-border and domestic firms. The following hypothesis while be tested:

H1: There exist a cross-border effect

When cross-border mergers do outperform their domestic counterparts this provide new evidence that cross-border mergers, are able to provide merger firms with more wealth creation. It could therefore be valuable for firms to investigate the opportunity to merge with firms across the border.

2.2 National culture

2.2.1 Measures of national culture

One of the underlying factors that could potentially impact the performance of cross-border merges are cultural differences. To study the effect of differences in national culture it is important to first define the concept of national culture. National culture remains an ill-defined concept in the literature. Hofstede defines is it as "the collective programming of the mind distinguishing the members of one group or category of people from others" (Hofstede, 1980). Another definition describes culture as the "learned beliefs, values, rules, norms, symbols and traditions that are common to a group of people" (Northouse, 2007, p.302p). Cultural values are often seen as complex, intangible and subtle core values, which are not clearly visible and therefore they are hard to capture and observe. National culture could be seen as deeply-held values shared by a common group. These deeply-held values makes a group of people respond and react in predictable ways, where different behavioral and thought patterns could be drawn from, which separates one group from another (Kogut & Singh, 1988).

While culture is a difficult and hard to define phenomenon the same holds for the conceptualization of culture in a proxy or model. In empirical research several attempts have been made to capture the subjective nature of national culture, ranging from simple proxies, to complex multidimensional models. Because the subjective nature of culture all of these attempts are likely to be imperfect and prone to shortcomings. There exist a wide variety of measures used to capture the effect of culture. Some more simple proxies are language and religion which are used as proxies extensively in the literature to capture the effect of culture between two different countries and groups. However more complicated

multidimensional construction of national culture such as Trompenaars and Hampden-Turner's model based on 7 dimensions (Trompenaars & Hamden-Turner, 1998), Schwarz (Schwartz, 1999) classification of society in terms of embeddedness vs autonomy, hierarchy vs egalitarianism, and mastery vs harmony and the World Values Survey proposed by Ronald Inglehart (1997) are also commonly found in the literature along with the 18 factor GLOBE dimensions produced by House (1991).

World value survey method and the Hofstede Index

The two most used and validated measure of national culture in empirical research are those proposed by Inglehart (1997) and the cultural index of Hofstede (Hofstede, 1980). From the world values survey spearheaded by Inglehart, three dimensions of national culture can be obtained; trust, individualism and hierarchy. Where trust is the dependence or the faith that people have in another people to fulfill an obligation. Trust is widely observed as a main an important driver in economic trade, where agents trust on one another that both sides fulfill their part in a deal (Zak & Knack, 2001). In addition to that hierarchy is a measure of whether people are likely to follow instructions given by higher authorities and hierarchic cultures are those marked by a vertical structure, opposed to egalitarian cultures where the hierarchical structure is built up in a horizontal way and people question higher authorities. In egalitarian countries people like to think of themselves as being equal with their superiors, while this is the opposed case in egalitarian countries (Brett & Okumura, 1998). In an individualistic society people are driven by their own set of incentives and goals and feel less need to sacrifice their self-interest for the group compared to individuals in collectivistic countries. In individualistic countries self-interest is valued over group-interest (Brett & Okumura, 1998).

In addition to the three cultural dimension trust, hierarchy and individualism the Hofstede index is an alternatively widely used index, to measure cultural differences between countries. The Hofstede index is composed out of six cultural dimension which range from the; power distance index, individualism versus collectivism, masculinity versus femininity, uncertainty avoidance index, long-term versus short-term normative orientation and indulgence versus. These six dimensions together form the Hofstede index. The Hofstede index have some limitations relating to out-datedness, single company data and one point in time measurement of the values. Even though the limitations the Hofstede index is still widely used in the literature and the results are still valid and valuable, especially in the context of mergers and acquisition research (Taras, Kikrman, & Steel, 2010).

Standpoints on effect cultural differences

Where there are different conceptualization of national culture, the same goes for its impact on cross-border mergers, where two opposing views arise from the literature. One view is that cross-border mergers could benefit from culture differences, by providing access to the target and acquirer's unique set of routines that could create cultural synergy gains. The other view is that cultural differences between countries results in a double-layered problem, where cultural differences causes firms to be unable to realize synergy gains. The first view is supported by Carrillo and Gromb (2007), who shows that organizations with more diverse cultures perform better in fast changing environment. They define a coherent set of procedures, informal rules of behavior, etc. to be the offspring of culture embedded in a company. When the culture within a company is more homogeneous, it will be hard for those companies to adapt to changes in the working process. They argue therefore that homogeneous cultural companies working in rapid changing industry will produce lower revenue, because of the incapability to change to a new set of routines. From this prospect it could be argued that difference in culture between companies could lead to a faster and more efficient adaption to new situations that occur. It could therefore be argued that cultural more distant companies perform better (Carrillo & Gromb, 2007). This conclusion could also be drawn from the arguments made by Barney (1986). In his study he argues that a firm's culture could be a source of sustainable competitive advantages, if the culture is valuable, rare and imperfectly imitable. He argues that these kind of organizational culture could provide superior competitive advantages over other firms. Through mergers companies could get hold of these superior corporate cultural advantages, if these corporate cultures are valuable, rare and imperfectly imitable (Barney, 1986).

On the other hand Buono et al. (1985) point out that cultural distances between mergers results in cultural collisions during the post-announcement period leaving firms with the inability to realize synergy gains. Furthermore Stahl and Voigt (2008) add to this by stating that the literature suggest a negative impact of cultural differences in integration processes during mergers. Thereby increasing the integration costs and eroding the gains (Stahl & Voight, 2008).

2.2.2 Impact culture on cross-border performance

The conflicting views about whether cultural differences add up to the integration costs between mergers or to the synergy gains, find their imitation in empirical research. Morosini et al. (1994) find evidence for the first view that cultural differences add up to the synergy benefits of merging companies. They find a positive relationship between cultural differences and the performance of cross-

border mergers and acquisitions. They used a sample of 52 cross-border acquisitions that took place between 1987 and 1992 and used the post-sales grow as a proxy for the mergers performance. Even though an effect of cultural differences on the post-merger performance is found by Morosini et al. their results could be questionable, because of their small sample size and while they only investigate Italy as their host country (Morosini, Shane, & Singh, 1994).

Evidence for the opposing view that cultural difference add up to the integration costs and thereby forming an double-layered problem is provided by Ahern, Daminelli and Fracassi (2010). In their research they investigated the effect of the three most important underlying culture drivers on the combined announcement return for the shareholders. They find that differences in the levels of trust and individualism to negatively affect the combined announcement returns of shareholder (Ahern, Daminelli, & Fracassi, 2010).

From empirical research we can observe that the effects of cultural disparity between countries on the announcement return of mergers is mixed. One view stating that difference in culture create a double layer problem, while the other view states that it creates a 'double synergy benefit'. To measure the impact of national culture on merger performance, it is important to differentiate national culture from the corporate culture. In the study of Weber et al. (1996) the role of national and corporate culture on the effect of international and domestic mergers is examined. They present evidence that corporate culture can be defined as a set of operational practices, while national culture is defined by deeply-held values embedded in a cultural group. They find that national culture predicts a negative attitude towards mergers better than corporate culture does. Therefore they find that national culture is a bigger hurdle in realizing synergy gains opposed to corporate culture, while differences in operating practices are easier to overcome than differences in cultural values (Weber, Shenkar, & Raveh, 1996). So even though corporate and national culture could both influence the performance of cross-border mergers, we only examine the effect of national cultural differences on the performance of cross-border mergers for the sake of simplicity. Empirical research suggest that cultural differences add up to the complexity of integration between firms and that differences in national culture pose an extra risk factor. Therefore the second hypothesis reads:

H2: Differences in culture lead to lower combined announcement returns

This hypothesis is tested over all the publicly traded firms, which interacted in a cross-border mergers during the sample period, where the three main components of culture (trust, individualism and

hierarchy) are used as national culture measures along with the Hofstede Index to test for fidelity. The three key dimensions are the main used variable for cultural effects, because they are more frequently updated than the Hofstede index, thereby accounting for changes in culture over time.

2.2.3. Impact culture on cross-border performance between industries

Differences in culture could be a source of extra wealth creation or a source of value destruction. Where differences in performance of cross-border mergers between different industries are covered in the literature, it remains blank on the effect that cultural differences have on the performance of cross-border mergers, in different industries. Even though it could be the case that each industry has its own way of dealing with differences in national culture, when they merge. Industry differs by a subset of different factors some are more capital intensive, while others are more labor intensive. In addition to that some industries find themselves in rapidly changing technologic environments while other industries are in slowly changing environments. This could mean that fast changing industries could benefit, from cultural differences while according Carrillo and Gromb (2007) companies with a heterogeneous culture are more flexible to adapt to changes in working and macro environments. Furthermore some industries have a higher dependency on economic trends, while others follow their own trends. If we assume that different industries deal with cultural differences in distinct ways, it could be argued that the effect of cultural differences on the performance of cross-border mergers between industries should also differ. To test for this the third hypothesis is as follows:

H3: The effect of national culture on the performance of cross-border mergers differs by industry

When there exist differences between the effects that cultural differences have on the cross-border mergers performance between industries, we should see substantial differences in the coefficient of national cultural differences on the announcement returns of firms. When this is the case the hypothesis will be accepted.

2.2.4. Impact cultural differences on merger volume

Firms could have different incentives to merge with one another. The literature states that firms will merge when a NPV opportunity arises (Ahern, Daminelli, & Fracassi, 2010). As described in the previous section differences in national culture could add up to the integrations costs and thereby eroding the gains. Because of this firm are left with less positive NPV opportunities and therefore when cultural

differences between two countries introduce an extra border, we should observe less cross-border merger volume between countries when there are more culturally distant.

This view is supported by many empirical studies, along with the one of Erel, Liao and Wiesbach (2012). They analyzed the cross-border merger volume between 1990 and 2007. In their research they find evidence that geography and bilateral trade flows between countries increases the likelihood of a merger. Furthermore they find that differences in culture reduces the likelihood that firms from two countries merge (Erel, Liao, & Weisbach, 2012). These findings find support in those of Ahern et al. (2010), who also report a negative effect of cultural distance on the cross-border merger volume observed between different countries.

Above mentioned findings in the literature provide further evidence that differences in culture are an extra risk factor which increases the complexity of the integration process between firms thereby adding to the integration costs and leaving firms with less NPV opportunities to invest in. Therefore the fourth hypothesis reads:

H4: Differences in culture have a negative effect on the number of cross-border mergers

The effect is examined over the full sample spanning from 1999 to 2016. To confirm the hypothesis we should see a negative effect of cultural differences on the total number of cross-border mergers.

2.3 Impact factors on performance and cross-border merger volume

In the literature several effects have been identified to affect the performance of cross-border mergers and the total number of mergers between countries. These effects could be split up to firm-specific, deal-specific and country specific factors, that could influence the performance of cross-border mergers and the total number of mergers observed. Below are different firm- deal- and country- specific factors described, which could be the drivers behind the cross-border merger performance and the total number observed.

2.3.1. Firm-specific factors

Several studies in empirical research point out that the market-to-book ratio has an effect on the combined shareholders wealth effect for firms involved in mergers. Rau and Vermealen (1998) examine a sample of 987 takeovers by US firms, during the 1980 to 1991 period, and they find that acquirers with a high market to book ratio (referred to as glamour firms) underperform firms with a low market-to-

book ratio. They attribute this effect to the managers working at glamour firms being more prone to overestimating their own abilities to manage an acquisition. Furthermore they argue that the board of directors and large shareholders of 'glamour' firms are more likely to approve the acquisition plan of the managers, because in 'glamour' firms managers tend to have better track records compared to their counterparts working at 'value' firms. At the same time the stock market is more likely to overestimate the effect of the acquisition, made by 'glamour' firms, surrounding the announcement period. This is because the stock market tends to over extrapolate past performance of high market-to-book ratio in the announcement period returns (Rau & Vermaelen, 1998). High market-to-book ratio firms are therefore more likely to achieve higher abnormal return following the announcement period in comparison to their low market-to-book ratio counterparts. This idea is consistent with the results found by Lang et al. (1989) and Servaes (1991). They both report that short-term announcement return are positively correlated with the market-to-book ratio of a firm. Indicating that firms with a higher market-to-book ratio tend to outperform value firms during the announcement period.

Besides that prior studies implicate a negative effect of free cash flows to the announcement returns of firms. The explanation of this is proposed by Jensen (1986). He argues that higher excess cash flows within a company increases the agency costs between shareholders and managers. Payouts to shareholders could create major conflicts, while payouts reduces the resources of the managers. Managers are supposed to act in the best interest of the shareholders and maximize the value of the firm. There are however several conflict that could arise when managers have high levels of free cash flow at their disposal, while they could have different incentives than the shareholder of the firm. Managers seeking to increase their power, could let firms grow beyond the optimal size and are therefore more prone to be involved in negative NPV projects (Jensen, 1986). These arguments are supported by the results found by Harford (2002), in his research he finds that cash-rich firms are more likely to attempt acquisitions. In his study he finds that acquisitions made by cash-rich firms are value destroying and acquisitions by cash-rich bidders are followed in an abnormal decline of the operating performance (Harford, 2002). The results found by Harford are in support of the agency costs of excess cash theory proposed by Jensen. Therefore it is expected that firms with higher free cash flow at their disposal perform worse in comparison to firms with low levels of excess cash.

Not only the book-to-market ratio of firms and the free cash flows are firm specific variables that have an impact on the announcement return of firms involved in an acquisitions, but also the size of the acquirer firm has an impact on the performance of mergers. Moeller et al. (2004), examine in their

paper the performance of 12,023 firms from 1980 to 2001. Their results suggest that on average shareholders from acquiring firms lose up to 25 million during the announcement period. However they find these results to be influenced by large acquirers, which accounts for most of the losses. When they examine the equally weighted announcement bidder returns, they find contrary findings, indicating that on average shareholders earn a 1.1% returns from the announcement of a merger (Moeller, Schlingermann, & Stulz, 2004). Their results indicate that the size of the acquirer is negatively related to the announcement return, feeding evidence for a size effect.

Not only the size of the acquirer matters, but also the relative size of the target in comparison with the acquirer. Several studies indicated a positive effect of the relative size on the returns experienced by the shareholders of the firms during the announcement period. Along these researchers are Ahern et al. (2010), who find a positive relationship between the relative size of the target to the acquirer firm and their combined announcement returns. (Ahern, Daminelli, & Fracassi, 2010) This finding is supported by the results of Asquith et al. (1983). They also find a positive effect on the relative size of the target and bidder firm to the returns of the firms during the announcement period (Asquith, Bruner, & Mullins, 1983) over the 1963-1979 period.

2.3.2 Deal specific factors

There are several deal-specific variables, which are widely recognized in the literature to impact the announcement return for shareholders. First of all multiple studies find a positive effect of mergers paid by with cash and announcement returns. Loughran and Anand (2012) find a strongly significant relationship between the long-term performance of mergers and the method of payment. They used a sample of 947 acquisitions during the 1970-1989 period and they find that cash mergers produce a positive returns of 61.7%, while their stock paid counterparts produce a negative return of -25.0% (Loughran & Anand, 2012). These results are consistent with those found by Agrawal, Jaffe and Mandelker (1992). The rationality behind this is the adverse signaling effect, where managers of firms are more likely to offer stock payment, when they think the stock price of the company is overvalued. This market knows this and reacts accordingly, thereby producing negative returns during the announcement period. Another widely studied effect which could impact the combined wealth creation effect for shareholders during the announcement period is the use of a tender offer. In a tender offer a company tries to obtain the shares of the target company by directly making them an offer and hereby avoid dealing with the board of the target company. An advantage of a tender offer is that in most cases

it is time-saving, while the acquirer company don't have to deal with the board of the company. A disadvantage is that a tender offer, signals good market conditions to target shareholders. Because of this shareholders want a premium above their share price and thereby making tender offers more expensive for acquirer firms. In most studies a positive effect between tender offers and the announcement return is found. For example Dodd and Ruback (1977) find positive return for shareholders of the acquiring and the target firm (Ruback & Dodd, 1977). These results are consistent with those of Jensen and Ruback (1983), who find that tender offers produce larger average excess return for both the bidder and the target company.

The method of payment and the attendance of the target company seems to matter, when analyzing the announcement return. The same goes for other characteristics of takeover, existing literature provides overwhelming evidence for the attitude of the deal (friendly versus hostile) and the effects on announcement return, where friendly deals produce higher return than hostile deals. Furthermore mixed results are found with respect to firms acquiring firms form the same industry versus firms acquiring firms from another industry (Graham, Lemmon, & Wolf, 2002).

2.3.3. Country-specific factors

There are several country aspects that could influence the announcement returns as well as the mergers volume between different countries. The gross domestic product of a country and the GDP per capita are individual country specific effects that are likely to influence the volume observed between 2 countries. Furthermore the differences in tax rate could be a driver for border volume where firms try to seek lower corporate tax countries to reduce their costs (Giovanni, 2005). Lower tax rate countries should be associated with more cross border volume as well as higher announcement return.

Other country specific factors that could potentially influence the performance and the volume of cross-border mergers are corruption, differences in levels of shareholder protection and the political stability in a country. Although not widely researched corruption could potentially impact the performance and volume of cross-border mergers. Corruption could erode the gains obtained through foreign investments, therefore making projects less attractive and resulting in a decrease of positive of NPV opportunities in corrupt countries (Mauro, 1995). Berns and Weitzel (2006) find that corruption is negatively related to the announcement return of mergers, while they do not find evidence for local corruption constituting significant barriers to foreign investors (Weitzel & Berns, 2006). Furthermore the

political stability in a host country is widely recognized as a critical determent for investing in foreign countries. Habib and Zurawicki (2001) along with Wei (2000) find a positive relationship between foreign direct investments and the political stability in a host country (Habib & Zurawicki, 2001). In addition to this several researchers point out the positive relationship between the quality of legal institutions and the direction of M&A flows (Hyun & Kim, 2010). As suggested by La Porta et al. (2004) the combined returns of the firms, could be affected by the level of shareholder protection in the target country. When an acquirer takes over a target it is likely that the target company adept to the governance structure of the acquirer country. Companies can be undervalued when the level of shareholder protection is associated with agency costs (Moeller, Schlingermann, & Stulz, 2004). In addition to that Rossi & Volpin (2004) find that M&A volume is higher in countries with better shareholder protection. Djankov et al. (2008) developed a proxy to measure the level of shareholder protection within a country. They constructed the anti-self-dealing index which is a proxy of good governance within a country (Djankov, La Porta, & Shleifer, 2008). We should expect to see higher combined return between when the shareholders protection in the target country is low.

III. Data & Methodology

In this section the sample is described and the way it is constructed. In addition to that the sample characteristics are discussed. Following up on the sample, the methodology which will be used to test the different hypothesis is explained.

3.1 Sample construction

3.1.1. Sample

The sample consist of all mergers during the 1999-2016 period, thereby accounting for the last two cross-border merger waves (1999 to 2007 and 2008 to 2016). The data is extracted from the Thompson One database. All deals are included where the acquirer, after the acquisition, at least holds 50% of the shares acquired. Furthermore all deals where the transaction volume exceeds 1 million are included in the sample. Only deals between public, private and subsidiary firms are extracted from Thompson one. In addition to that several deal-variables are extracted from Thompson One including, the form of payment, attitude of the deal, whether a tender offer was made and other deal-specific information. After these restrictions the sample consist of a total of 155,089 merger observations. Due to later unavailability of other data (e.g. cultural data etc.) the sample is reduced to 123,120 merger observations of which 27,830 are cross-border mergers. The total sample consist of 47 different countries in which there are 47 unique acquirer nations and 45 unique target nations. Of the 123,120 merger observations, 48,769 included observations where the target or the acquirer firm is located in the United States, roughly making up for 40% of the total sample.

The total of 123,120 merger observation are aggregated into 20,592 cross-border country-pair-years. This sample is merged with domestic country-pair years which are used as a benchmark where no cultural differences exist. The sample with the cross-border and matched domestic border country-pair years contain 21,402 country-pair year observations. This sample is used to test the relationship between the total number of mergers and cultural distances between countries.

In the total sample there are 7,572 firms of which public price data is available for the target and the acquirer firm. Data on the prices and the country indexes is extracted from DataStream. Due to non-

availability and stale prices[1], the total sample of mergers where public data is available contains 6,372 mergers of which 1,430 are cross-border mergers. The 1,430 cross-border mergers are matched with domestic mergers based on country, industry, year and relative deal value. The cross-border mergers contain up to two matched domestic pairs, one for the target nation and one for the acquirer nation[2]. In total the public cross-border dataset with the matched domestic mergers, contains 4,131 observations. This dataset is used to test, whether there exist a cross-border effect and whether cultural differences impact the performance of cross-border mergers. Furthermore this sample is used to test different effects that cultural differences have on the performance of cross-border mergers, between industries.

Control variables

The control variables which are used to control for several deal-, firm- and country specific effects along with their source and construction are presented in the appendix.

3.1.2. Cultural variables

In this section is described how the cultural variables are obtained using the WVS and the Hofstede index.

WVS-Method

For the WVS method three key variables are used to capture national culture. The three variables are; Trust versus distrust (whether a person can be trusted or not), hierarchy versus egalitarianism (whether people think they should follow the rules dictated by higher authorities), individualism versus collectivism (whether people should sacrifice personal gains for the greater good of all). These three key dimension, as appointed by literature, can be extracted from the World Values Survey, which is a cross-country survey conducted in more than 100 countries thereby capturing more than 90 percent of the world's population (World Value Survey, 2018). In this survey a common questionnaire is used in the pursuit of capturing human beliefs and values over different waves. Where the fourth (1999-2004), fifth

[1] Due to concern with price availability firms are dropped where the stock price of the firm didn't move over the 200-day test period

[2] First domestic mergers are linked on country, the two first digit SIC-codes of the acquirer and target firm and the same year of the cross-border mergers. When no firms are found to be matched, a link is performed on the first digit SIC-code of the industry of the acquirer and target firm. When no match is found the year and industry criteria are relaxed, while the country criteria is maintained.

(2005-2009) and sixth (2010-2014) wave, are of interest for this study. The 3 above mentioned dimensions are derived from questions from the survey, from the following questions;

1. *Trust versus distrust*: To measure trust, the following question from the questionnaire of the WVS is used:

Generally speaking, would you say that most people can be trusted or that you need to be careful in dealing with other people?

The answers are aggregated into one score for each wave where 0 indicate that people trust other people completely and a score of 1 indicates that people don't trust other people

2. Individualism: To measure individualism, the following question from the WVS is used:

How would you place your views on this scale? 1 means you completely agree with the statement on the left; 10 means you agree completely with the statement on the right; and if your views fall somewhere in between, you can choose any number in between.

Incomes should be made more equal (score 1)

We need larger incomes differences as incentives for individual effort (score 10)

The answers are aggregated into one score where 0 indicates that people are prefer collectivism and a score of 1 indicates that people prefer individualism

3. *Hierarchy versus egalitarianism:* To measure hierarchy the following question from the WVS is used:

People have different ideas about following instructions at work. Some say that one should follow one's superior's instructions even when one does not fully agree with them. Others say that one should follow ones superior's instructions only when one is convinced that they are right. With which of these two opinions do you agree?

1. *Should follow instructions.*

2. *Must be convinced first.*

The answers are aggregated into one score where 0 indicates that a more hierarchical society and a score of 1 indicates a more egalitarianism society.

All of the answers on the questions are aggregated into a score, as mentioned above, for each country in the correspondending year. Even though the questionaries' are completed within waves the exact year is given. In the sample the scores of trust, individualism and hierarchy are linked to the closest year in the sample.

Hofstede Method

In the Hofstede cultural index six different dimensions are used to create an index which measures the relative cultural distance between two countries. The dimensions are constructed with the use of a worldwide survey of employee values by IBM. The data for the six dimension have been taken from the Cultures and Organizations (2010). The index is constructed as suggested by Kogut & Singh (1998), in which the deviations of the separate dimensions are corrected for differences in variances. The index is constructed as follows.

$$\mathrm{CDI}_{ab} = \sum_{i=1}^{6} \frac{(\mathrm{S}_{ib} - \mathrm{S}_{ia})/\mathrm{V}_i}{6} \qquad (1)$$

In where,

CDI_{ab} = Cultural distance between acquirer country *a* and target country *b*

S_{ib}, S_{ia} = The scores of acquirer country *b* and target country *a* on dimension *i* of the index

V_i = The variance of dimension *i* of the index

The individual dimension *i* are as follows:

PDI= Power distance index

IDV= Individualism versus collectivism

MAS= Masculinity versus femininity

UAI= Uncertainty avoidance index

LOT= Long-term versus short-term normative orientation

IND= Indulgence versus restraint

3.1.3 Sample characteristics.

In table 1 the summary statistics of the total sample are presented. In panel A we can observe that that the average score of trust in the sample is 0.658 and the average score on individualism and hierarchy are 0.537 and 0.515 respectively. All scores got standard deviations ranging from 0.09 to 0.16. German civil and French civil law are the most observed origins of law. Next to that we can observe in panel B of table 1 that in half of all the deals, cash is used as payment method and that it is more commonly used in cross-border mergers. Furthermore the average size of the acquirer- and target company are merely the same in cross-border and domestic mergers. With the acquirer company being worth approximately 8 billion dollar and the target company being worth approximately 1.5 billion dollar. In addition to that the deal value of the transaction, is higher than the value of the target company (measured as the market value 30 days prior to the announcement date), indicating that on average acquirer firms pay an premium above the market value of the target to obtain the firm. In 28.9% of the cross-border mergers the same language is spoken and in almost 50% of the cases the target and acquirer country signed a regional trade agreement. Furthermore the average score on the corruption index is 60 out of 100, with a standard deviation of 0.229.

In table 2 the total number mergers can be observed from the perspective of the acquirer nations over the 1999-2016 period. Not surprisingly the US is the most common acquirer country followed by the U.K., Canada, China and Australia. It is interesting however that especially China, Japan, South-Korea and the US don't undergo a lot of cross-border mergers relative to the total amount of domestic mergers. The percentage of cross-border mergers, relative to domestic mergers is especially high in European countries, where in the Netherlands the number of cross-border mergers is even higher than the total number of domestic mergers. The high number of total mergers relative to domestic mergers is likely to be attributed by the high level of integration of the European market as results of the forming of the European Union, thereby creating a good environment for investment in other (European) countries.

In figure 1 the total number of cross-border mergers are presented in a graph. The top 6 cross-border acquirer nations over the 1999-2016 period are the United States, U.K., Canada, Australia, France and Germany. From the figure it can be observed that these countries together make up for a big part of all cross-border mergers. Also the cross-border waves in the different countries seems to correspondent with the overall cross-border merger wave, which gives an indication that the overall cross-border wave is not driven by a small subset of countries. Furthermore it is assumable that cross-border waves are

driven by macro-economic world factors impacting the market as a whole rather than countries independently.

If we observe the last wave from the world value survey (2010-2014) and we take a look at the top 5 and bottom 5 countries scores on the three dimension we observe the following. First of all the top 5 countries, which scores the best on trust are Nordic European countries and countries which score low on trust are undeveloped countries with also high levels of corruption as indicated by the corruption index. Furthermore we find that the U.S. scores the highest in terms of egalitarianism and China is among the top 5 countries with a high level of hierarchism. The scores are presented in the appendix.

In addition to that when a correlation matrix is deployed between the three dimensions of culture and the cultural index of Hofstede we observe a low correlation between the three dimensions (<0.10) and a high correlation (0.40) between trust and the cultural index of Hofstede. The low correlation between the three different dimensions of culture indicate that each of the three dimensions explains a part of the national culture on his own. The correlation matrix is presented in the appendix.

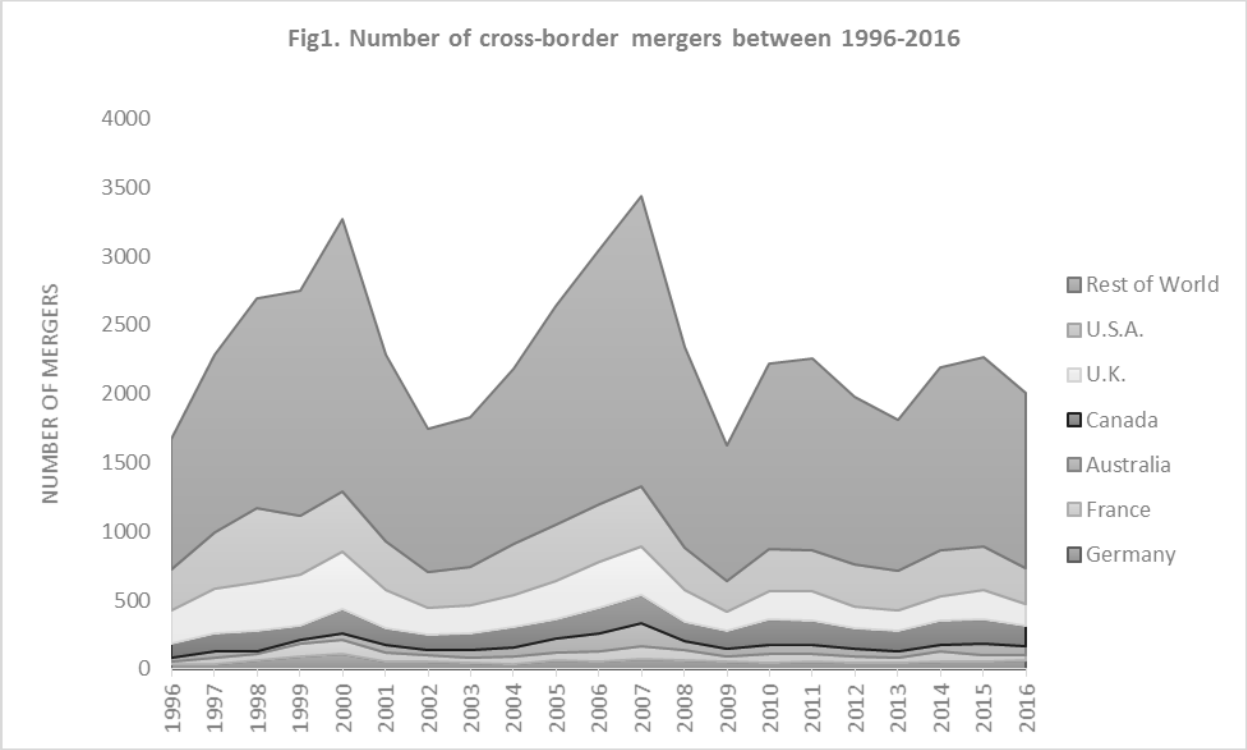


Table 1

Summary statistic of variables,

In this table the summary statictics of the mean, median and standard deviation are presented. In panel A the observations are in country-year level, in panel B the observations are in country-pair-year level and in panel C the observations are in deal-level. The data period of the observation ranges from 1996 till 2016. In the left column the variable names are presented, while in the second column the summary statistics of the cross-border smaple are given and in the most right column the summary statistics of the matched cross-border and domestic observations are presented. The sample is built up as follow, in panel B there are a total of 20,592 cross-border country-pair-year observation while there are 21,402 matched cross-border and domestic country-pair-year observations. In panel C there are a total of 1,430 cross-border public observations while there are 4,131 cross-border and matched domestic merger observations.

	Cross-border			**Cross-border and matched domestic**		
Panel A: Country-level variables	Mean	Median	Standard deviation	Mean	Median	Standard deviation
Trust	0.658	0.697	0.167	0.658	0.697	0.167
Individualism	0.537	0.537	0.096	0.537	0.537	0.096
Hierarchy	0.515	0.509	0.121	0.515	0.509	0.121
English Common Law	0.178	0.000	0.383	0.178	0.000	0.383
French Civil Law	0.356	0.000	0.479	0.356	0.000	0.479
German Civil Law	0.356	0.000	0.479	0.356	0.000	0.479
Scandinavian Civil Law	0.111	0.000	0.314	0.111	0.000	0.314
Political Stability	0.513	0.742	0.801	0.513	0.742	0.801
Corruption	0.602	0.600	0.229	0.602	0.600	0.229
Anti-Self-Dealing Index	0.440	0.379	0.209	0.440	0.379	0.209
Corporate Tax Rate	0.265	0.280	0.076	0.265	0.280	0.076
ln(Openness)	0.042	0.042	0.007	0.042	0.042	0.007
ln(GDP)	26.45	26.49	1.65	26.45	26.49	1.65
ln(GDP per capita)	0.096	0.099	0.012	0.096	0.099	0.012
Panel B: Country-pair variables						
ln(1+|Total Dollar Volume$_{ijt}$ |)	1.530	0.000	2.582	1.742	0.000	2.821
ln(1+|Number of M&A$_{ijt}$ |)	0.372	0.000	0.681	0.474	0.000	0.910
Ln(1+|Trust|)	0.166	0.143	0.116	0.159	0.136	0.118
Ln(1+|Individu|)	0.092	0.081	0.065	0.089	0.078	0.066
Ln(1+|Hierarchy|)	0.125	0.104	0.095	0.121	0.098	0.096
ln(1+|CDI|)	6.548	6.654	0.780	6.302	6.627	1.462
ln(1+|Anti self index)|	0.202	0.176	0.141	0.194	0.170	0.143
Same religion	0.229	0.110	0.270	0.238	0.116	0.278
Same language	0.092	0.000	0.289	0.126	0.000	0.332
Distance	8.083	8.382	1.172	8.003	8.302	1.152
Member of WTO	0.906	1.000	0.292	0.909	1.000	0.287
Regional Trade Agreement	0.474	0.000	0.499	0.460	0.000	0.498
Same legal system	0.290	0.000	0.454	0.317	0.000	0.465
Common Curency	0.094	0.000	0.292	0.129	0.000	0.335
Panel C: Deal level Variables						
CAR3 (-1, +1)	0.028	0.019	0.081	0.028	0.020	0.082
CAR5 (-2, +2)	0.031	0.022	0.081	0.031	0.022	0.082
CAR10 (-5, +5)	0.037	0.027	0.097	0.034	0.026	0.112
Ln(1+|Trust|)	0.107	0.076	0.095	0.037	0.000	0.075
Ln(1+|Individu|)	0.058	0.049	0.049	0.020	0.000	0.040
Ln(1+|Hierarchy|)	0.134	0.118	0.079	0.046	0.000	0.079
ValueofTransaction	0.002	0.000	0.005	0.002	0.000	0.006
Relative Size	0.308	0.164	0.429	0.304	0.147	0.458
Acquiror Market Value	0.007	0.001	0.021	0.008	0.001	0.023
Target Market Value	0.001	0.000	0.004	0.001	0.000	0.005
Cash	0.584	1.000	0.493	0.446	0.000	0.497
Tender	0.394	0.000	0.489	0.398	0.000	0.489
Friendly	0.941	1.000	0.236	0.949	1.000	0.221
Same_Industry	0.646	1.000	0.478	0.664	1.000	0.472
Acquiror book-to-market	0.612	0.436	0.570	0.578	0.399	0.533
Acquirer FCF to Bookvalue	0.231	0.216	0.341	0.236	0.225	0.355
Ln(Acquirer Country Openness)	0.040	0.040	0.571	0.039	0.040	0.561
Ln(Target Country Openness)	0.039	0.039	0.561	0.039	0.039	0.556
Ln(Acquirer country GDP)	28.14	28.07	1.492	28.28	28.11	1.456
Ln(Target country GDP)	28.35	28.21	1.564	28.35	28.21	1.478
Ln(Acquirer country GDP/capita)	0.104	0.105	0.644	0.104	0.105	0.621
Ln(Target country GDP/capita)	0.104	0.106	0.650	0.104	0.105	0.623
Ln(1+|Corporate tax rate|)	0.077	0.065	0.060	0.027	0.000	0.051
Same religion	0.229	0.240	0.175	0.287	0.280	0.223
Same language	0.513	1.000	0.500	0.517	1.000	0.470
ln(Distance)	7.984	8.656	1.253	7.384	8.039	1.212
same legal system	0.546	1.000	0.498	0.844	1.000	0.363

Table 2

Number of mergers from acquirer countries to target countries between 1999-2016. Acquiring nations are listed in the row variables and target nations are listed in the column header. Below is the total percentage of foreign mergers indicated for each mergers

	Target Nation																				
	US	UK	CA	CH	AU	JP	HK	FR	SK	IT	SP	GE	SW	MA	SI	BR	IN	NL	SA	NO	Total
United States	41832	1601	1854	116	368	260	78	252	72	64	84	251	142	10	69	26	155	166	33	51	17200
United Kingdom	1546	13216	199	25	178	73	54	153	10	60	50	170	101	20	52	4	57	128	67	45	8776
Canada	1248	164	6236	35	78	14	27	32	10	9	6	15	20	4	6	6	12	19	8	10	8074
China	187	51	35	7487	29	30	770	22	45	10	5	12	7	20	148	1	4	13	1	0	6653
Australia	429	278	132	57	5743	46	59	18	10	8	6	31	16	30	104	3	17	22	47	10	6099
Japan	118	22	3	23	10	5432	24	7	15	2	2	9	0	3	38	1	2	9	0	1	2919
Hong Kong	92	40	22	176	35	17	1728	10	10	0	3	3	2	23	93	0	1	4	3	1	2678
France	390	356	48	17	12	16	8	1761	6	71	48	105	47	0	7	3	18	79	3	16	2388
South Korea	86	22	8	10	10	36	24	16	2175	1	3	8	8	3	24	0	3	12	3	3	1983
Italy	152	164	10	19	10	15	4	76	2	1600	43	37	13	2	1	2	8	29	2	3	1960
Spain	179	186	24	8	16	9	3	85	2	46	1593	56	21	3	4	3	8	48	0	15	1958
Germany	502	399	57	26	34	29	14	98	9	46	26	1084	71	5	14	1	19	78	4	22	1894
Sweden	150	153	24	5	7	6	5	21	0	5	5	45	1275	1	6	0	3	38	1	111	1625
Malaysia	23	13	2	8	16	20	24	0	3	0	1	4	3	1415	78	0	5	7	1	0	1611
Singapore	62	31	3	27	32	35	60	10	5	3	2	9	4	64	912	0	22	9	2	5	1280
Brazil	159	45	57	5	17	18	10	38	1	18	57	16	5	3	3	1225	8	11	4	10	1219
India	111	38	6	2	10	20	10	21	8	6	6	22	4	7	31	0	862	9	3	3	1204
Netherlands	205	246	25	12	13	16	6	41	2	21	11	55	29	3	11	2	6	505	6	6	1171
South Africa	29	86	22	9	32	7	7	5	2	8	4	6	7	6	3	0	7	3	982	2	945
Norway	79	88	10	6	6	1	3	10	2	3	4	21	118	3	4	3	2	14	0	633	1085
Foreign Acq%	12.1%	23.2%	28.9%	7.3%	13.7%	10.9%	40.8%	34.2%	8.9%	19.3%	18.7%	44.6%	32.7%	12.9%	43.4%	4.4%	29.3%	58.0%	16.1%	33.0%	

3.2 Methodology

3.2.1. Event study

For estimating the wealth attributed to the shareholders of the acquirer and target firm during the announcement period an event study is conducted. To compute the abnormal returns, first have to be decided what the normal returns of the acquirer and target firm are. In this study the market model approach is used to compute the combined abnormal returns for the shareholders of the merging companies. In which the benchmark is the locally equally weighted country index for each individual country.

The most commonly used event window in empirical research is the [-1, +1] event window. Although wider event-windows are also used in empirical research. Event windows are used under the assumption that it captures all the relevant information surrounding the event. This goes under the assumption of market efficiency. In this research three different event windows are used which are the following; the [-1, +1], [-2, +2] and the [-5, +5] event window. Sometimes in empirical research even longer event windows are used ranging up to 60 days, I intentionally refrain from using longer event-windows, while these intervals are more prone to capturing noise (e.g. EPS of companies). Furthermore I discard from using the Fama and French three factor model, whilst my sample includes countries from all over the world and this would add to the complexity of estimating the abnormal return. In addition to that, including the Fama and French factors, would statically improve the model, but due to the short event-window used, not likely have a great impact on the results (Fama, 1998). The equation to compute the abnormal return of the companies during the event window is as follows:

$$R_{jt} = \alpha_j + \beta_j R_{market} + \varepsilon_{jt} \qquad (2)$$

In where,

B_j = Covariance of firm *j* with the market index

R_{jt} = observed return of firm *j* over time period *t*

R_{market} = Return of the local equally weighted country index

Next the abnormal returns of both companies are computed as follows:

$$AR_{tjt} = R_{jt} - (\alpha_j + \beta_j R_{market}) \qquad (3)$$

The alpha and the beta are estimates of the market model. They are estimated using a 200-day estimation window starting at -210 days before the event and ending -10 before the event. Abnormal returns represent the return for the shareholders of the companies. After computing the abnormal returns the cumulative abnormal return are computed as follows.

$$\mathrm{CAR}_{ijt} = \sum_{t_2}^{t_1} \mathrm{AR}_{it} * \frac{MV_i}{MV_{ij}} + \sum_{t_2}^{t_1} \mathrm{AR}_{it} * \frac{MV_j}{MV_{ij}} \qquad (4)$$

In which the cumulative abnormal return (CAR) is the combined abnormal returns of the acquirer company *i* and the target company *j*, over time period t_1 and t_2, weighted by their market value (MV) 30 days prior to the event.

3.2.2. Univariate analyses

To test whether cross-border mergers produce different combined announcement returns for the shareholders of cross-border merging firms, a univariate test analyses is applied. In which the differences in the combined announcement returns between cross-border mergers and domestic mergers are tested. This is done through t-tests which assume unequal variances, when tests on equal variances are rejected. These test are performed on the difference of the combined announcement returns, as well as the difference in the return for the acquirer shareholders and target shareholders from cross-border versus domestic mergers. In total 9 t-test are executed, 3 test for each of the different event windows, where the combined announcement returns are also separated in returns for the target and the acquirer firm. The announcement returns are tested on the [-1, +1], [-2, +2] and [-5, +5] interval. These test are executed for the cross-border and matched domestic-border sample, as well as for the cross-border sample and all domestic mergers observed during the used time period. The test statistics will indicate whether cross-border mergers perform better, equal or worse than domestic mergers.

3.2.3. Cross-sectional analyses

1. Cross-border effect

To test whether a cross-border effect exist during the sample period, after controlling for a subset of factors known to influence the announcement returns, a cross-sectional OLS regression is deployed. The combined announcement returns over the 3-day event window are used as dependent variable while it is expected that the 3-day event will produce the strongest effect. The cross-sectional regression model is denoted as follows:

$$CAR_{(-1,+1)} = \alpha + \beta_1(CrossBorder) + \beta_2 Firm\ specific\ variables + \beta_3 Deal - specific\ variables + \beta_4 Target\ \&\ Acquirer\ country\ variables + Acquirer\ country\ dummies + Target\ country\ dummies + Time\ dummies + \epsilon_{ijt} \quad (5)$$

In which the combined cumulative abnormal return over the 3-day event window is the dependent variable and *Cross-Border* is a dummy variable which equals 1 for cross-border mergers and zero otherwise. In addition to that several firm-, deal, country- and country-pair specific variables are added to investigate what influenced a possible cross-border effect.

2. Effect cultural differences on combined announcement returns.

To examine the effect of cultural differences on the cross-border combined announcement returns a cross-sectional OLS regression is conducted. In the regression the dependent variables is the $CAR_{(-1,+1)}$ and the cultural distance is the independent variable.

$$CAR_{(-1,+1)} = \alpha + \beta_1(Cultural\ variables) + \beta_2 Firm\ specific\ variables + \beta_3 Deal - specific\ variables + \beta_4 Target\ \&\ Acquirer\ country\ variables + \beta_5 Country - pair - variables + Acquirer\ country\ dummies + Target\ country\ dummies + Time\ dummies + \epsilon_{ijt} \quad (6)$$

In the regression model the combined cumulative abnormal return is the dependent variable and the three dimensions of culture are the independent variables along with country specific variables (corruption, quality of law, political stability and good governance). The interest not only lays in the effect of culture on the combined announcement returns, but also how proxies which capture the countries institutional, law and governance quality affect the performance of cross-border mergers.

3. Effect cultural differences on cross-border mergers performance between industries

To examine the effect of cultural differences on the performance of cross-border mergers between industries, a cross-sectional regression model is deployed following equation (6). The different industries are subdivided based on the first two digit of their SIC-codes. Companies are matched together when the target and acquirer firm have the same first two digit SIC-codes. In total there are 10 different industries.

First a regression is run on each of the different industries, for which we use a minimum threshold of 50 observation per industry over the entire sample. When this threshold is not met, no regression is run for

these industries. This is done while small sample sizes could produce false outcomes (Hurvuch & Tsai, 1989).

The coefficient outcomes of the national culture variables are compared between the different industries using a chi squared test, to test for significant differences between the coefficient of cultural differences on the announcement returns.

4. Effect cultural differences on number of mergers

To investigate the effect of cultural disparity on the cross-border merger volume a Tobit regression gravity model is used as suggested by many researchers (Porter & R., 2005) (Ahern, Daminelli, & Fracassi, 2010). A gravity model predicts the intensity of cross-country relations, based on geographical distance. Although geographical distance is included in the model, the distance is measured in cultural space. In the model the total aggregated number of mergers from country *i* to country *j* in year *t* is the dependent variable and the cultural distance between two countries is the independent variable. A Tobit regression model is run to account for the truncation of observed mergers activity at zero, in accordance with Ahern et al. (2010). Several country and country-pair variables are added to the model to isolate the effect of cultural disparity on the number of cross-border mergers. Furthermore the standard errors are clustered at the target nation and the acquirer nation, to account for within country time-series correlation. The time-series data is used and the model looks as follows;

$$Ln(M\&A\ Number_{ijt}) = \alpha + \beta_1 Ln(Cultural\ Distance_{ij}) + \beta_2 Ln(Geographic\ distance_{ijt}) + \beta_3 Other - country - pair\ variabels + \beta_4 Time - varying\ country - level\ variables + Acquirer\ country\ dummies + Target\ country\ dummies + Time\ dummies + \epsilon_{ijt} \quad (7)$$

The dependent variable is the natural log of the total number of mergers from country *i* to county *j* in year *t*. The cultural distance, is the cultural distance between country *i* to country *j* on the three dimensions of culture (trust, individualism and hierarchy). The geographic distance is the absolute distance of the main economic center from country *i* to country *j*. Furthermore other country specific variables like the quality of the law, political stability and the corruption within a country are added to control for any country specific effects. Also country time varying variables such as GDP, GDP per capita are added to control for the economic situation of the country over the time period. In addition to that country-pair variables are added to control for country-pair specific effects like differences in language, legal system, currencies and religion.

Fixed Effects

Within the regression model time fixed effects are added to capture the influence of aggregate (time-series) trends, such as economics recessions, currency crisis or other macro-economic shocks. To account for time fixed effects, year dummy variables are added in each of the regression models. In addition to that target country and acquirer country fixed effects are added in the model, unless it is stated otherwise. Country fixed effects capture country-level effects that don't change over time. Because of interest in country-level effects such as; level of corruption, political stability, the quality of the law and good governance, the country fixed effects are not included in all regression while country specific indicators such as the level of corruption are slowly changing over time and country fixed effects would likely absorb the effect of these indicators. It is indicated when fixed effects are used in the regressions.

Adjustment

In the regression, several control variables of interest are added, therefore it is first necessary to check whether any of the variables of interest suffer from collinearity. A first simple check to do this is to run a correlation matrix over all the variables. When variables have a correlation exceeding 0.8 this could introduce serious problems to the model, while multicollinearity could increase the variance of the coefficient estimates and make the estimates very sensitive to small changes in the model (Naes & Mevik, 2001). This results in unstable coefficient estimates, which are difficult to interpret. In the appendix a correlation matrix is presented. We observe that there is a high correlation between corruption, political stability, quality of the law and the proxy for good governance. When run in a regression the variables have VIF scores higher than>6. This could pose serious problems w.r.t the interpretation of their coefficient and p-values. Therefore it is chosen to exclude the quality of law and political stability in the regressions. When the regression are run after this exclusion the VIF scores of all the variables of interest is under 5. In addition to collinearity problems the model could suffer from heteroscedasticity of the standard errors, while OLS regressions assume the standard errors to be homogenous. To test for heteroscedasticity of the standard errors a Breusch-Pagan test is used (Breusch & Pagan, 1979). When heteroscedasticity of the standard errors is observed this is controlled for in the OLS regression. In the cross-sectional analyses on the effects of cultural disparity on the total number of mergers the standard errors of the target and acquirer nation are double-clustered to account for within-country time-series correlation.

IV. Results

In this section the findings from the analyses are presented and discussed.

4.1 Cross-border effect

Univariate analyses:

From table 4 we can observe that the combined announcement returns for cross-border mergers are slightly higher than those of domestic mergers on the [-1, +1], [-2, +2] and [-5, +5] interval. Even though we observe a small difference in the combined returns during the event windows, none of these differences is statistically significant, indicating that there is no significant differences between the combined returns of cross-border and domestic mergers. In the second and third column of table 4 the returns for the target and the acquirer are tested separately. On all the event windows the returns of the target of cross-border firms are lower than those of their domestic counterparts, although none of these differences are statically significant. For the acquirer firms the returns on all the event windows are higher for cross-border mergers. On the 3- and 5 day event window the difference is not statically significant, while this is the case for the 10-day event window. The return on the 10-day event window are 0.65% higher for cross-border acquirer firms and those are significant at the 10% level. Even though the return are significant, they have to be interpreted with caution while the return could be influenced by other factors such as the announcement of positive earnings. In untabulated test we find that over the entire sample on the 3 day and 5 day event window, no cross-border effect is present in the dataset. However on the 10-day event-window we find the combined return for cross-border mergers to be 0.56% higher and significant at the 10% level.

Cross-sectional analyses

There are several differences between cross-border and domestic mergers, which could influence the return of mergers. Therefore in a cross-sectional OLS regression is tested whether firm- deal- and country specific factors could effect a cross-border effect. In table 5 the results are displayed for the cross-border and matched domestic sample. We find no evidence for a cross-border effect even when accounting for several firm- deal- and country specific factors. The same holds for the total sample consisting of all public cross-border mergers and all-domestic mergers. After controlling for several factors no cross-border effect is present in the sample. We do find the usual suspect to influence the combined announcement returns for the shareholders of the merging companies, which include a positive effect of cash payments, relative size and friendly mergers on the combined announcement

returns, all holding at the 5% significance level or higher. In addition to that we observe the acquirer's market value to negatively influence the combined return indicating that larger acquirer firms perform worse than their smaller counterparts. Interestingly enough a negative effect of the use of tender offers is found, where the use of a tender offer on average destroys 0.5% of the shareholders combined returns during the announcement period.

The results found in the univariate analyses and the cross-sectional regressions aren't in favor for the hypothesis. The results don't indicate that a cross-border effect is present in the data sample even though cross-border mergers perform slightly better than their domestic counterparts. Therefore the first hypothesis is rejected.

Table 4
Univeriate test of return between cross-border and domestic mergers,
In this table the results of the univeriate analyses of the return between the cross-border and domestic mergers are presented. Where in panel A the combined returns, the target returns and the acquirer returns over the 3-day event window are presented and in panel B and C the returns over the 5 and 10 day event window. The t-statistic are given in parenthesis and 10%, 5% and 1% significance is indicated by ***,** and *.

	Combined	Target	Acquirer
Panel A:	CAR(-1,+1)		
Domestic	0.0278	0.201	0.0018
	n=2,707	*n=2,707*	*n=2,707*
Cross-border	0.0279	0.197	0.0055
	n=1424	*n=1424*	*n=1424*
Difference	0.0001	-0.004	0.0038
t-statistic	(-0.40)	(0.43)	(-1.44)
Panel B:	CAR(-2,+2)		
Domestic	0.0310	0.216	0.0036
	n=2,707	*n=2,707*	*n=2,707*
Cross-border	0.0311	0.21	0.01
	n=1424	*n=1424*	*n=1424*
Difference	0.0001	-0.0046	0.0037
t-statistic	(-0.02)	(0.46)	(-1.33)
Panel C	CAR(-5, +5)		
Domestic	0.0333	0.235	0.00470
	n=2,707	*n=2,707*	*n=2,707*
Cross-Border	0.037	0.231	0.0112
	n=1424	*n=1424*	*n=1424*
Difference	0.004	-0.0048	0.0065
t-statistic	(-1.06)	(0.45)	(-1.77)*

Table 5

Cross-border effect

Dependent variable is the cumulative abnormal return from the acquirer and target company over the [-1,+1] event window, weighted by market values, over 1999-2016. OLS estimates are presented, where the sample respresent all public cross-border mergers matched with up to two domestic public mergers based on country, industry, year and relative value. A constant is included in the model, but not represented in the table. At the end of the table is indicated which fixed effects are included. Significance is at the 10%, 5% and 1% level indicated by *,** and *** with the p-values represented in parenthesis.

	Combined CAR(-1, +1)			
	(1)	(2)	(3)	(4)
CrossBorder	-0.001	-0.002	-0.002	-0.020
	(0.761)	(0.444)	(0.400)	(0.169)
Acquiror book-to-market		-0.001	-0.001*	-0.001*
		(0.138)	(0.082)	(0.086)
Free cash flows		0.006	0.006	0.006
		(0.192)	(0.179)	(0.194)
Acquiror market value		-0.360***	-0.356***	-0.350***
		(0.000)	(0.000)	(0.000)
Relative size		0.026***	0.026***	0.026***
		(0.000)	(0.000)	(0.000)
Deal value		0.842*	0.931*	0.923*
		(0.098)	(0.094)	(0.094)
Cash		0.014***	0.014***	0.014***
		(0.000)	(0.000)	(0.000)
Tender		-0.005**	-0.005*	-0.005*
		(0.040)	(0.060)	(0.061)
Friendly		0.008*	0.010**	0.010**
		(0.067)	(0.016)	(0.020)
Same Industry		-0.004*	-0.004	-0.004
		(0.093)	(0.120)	(0.117)
ln(Acquirer country openness)			-0.024	-0.024
			(0.334)	(0.336)
ln(Target country openness)			-0.052*	-0.052*
			(0.062)	(0.062)
ln(Acquirer country GDP)			0.001	0.006
			(0.990)	(0.939)
ln(Target country GDP)			-0.077	-0.084
			(0.308)	(0.271)
ln(Acquirer country GDP/capita)			-0.001	-0.005
			(0.991)	(0.950)
ln(Target country GDP/capita)			0.048	0.054
			(0.531)	(0.484)
Language				0.009*
				(0.057)
Same currency				-0.012
				(0.121)
Distance				0.000
				(0.977)
Year Fixed Effects	YES	YES	YES	YES
Target Nation Fixed Effects	YES	YES	YES	YES
Acquirer Nation Fixed Effects	YES	YES	YES	YES
Observations	4,131	4,131	4,112	4,112

4.2 Cultural effect on combined announcement returns

In table 6 the effect of cultural distance on the combined announcement returns are presented. In all the regression models time fixed effects are included, in the first 5 regression models no acquirer and target country fixed effects are included, while they would capture the effects of the target and acquirer measure of corruption and good governance on the announcement returns. In the last two regression models target and acquirer country fixed effects are included.

From the table we can observe that differences in trust and individualism have a negative effect on the combined announcement returns in the cross-border sample. The effect of differences in individualism are insignificant when controlled by with target and acquirer nations fixed effect for the cross-border sample. An opposed effect is found for hierarchy, larger national cultural differences in hierarchy are indicated with higher significant combined announcement returns over the cross-border sample. When the cross-border sample is matched with the domestic sample (column 7), we observe that cultural differences in trust and individualism have a significantly negatively effect on the combined announcement returns, with both being significant at the 5% level. For hierarchy the opposite effect is also present in the matched cross-border and domestic sample, indicating that differences in hierarchy between two firms are positively valued by the stock market. It could be the case that the stock market values difference along the hierarchical dimension of culture as positive, while vertical or horizontal structure could be implemented in either firm, thereby making them more efficient.

The outcomes of the regression further indicate that cash payment are valued positively by the market with cash payment resulting in about 14.0% to up to 16.0% higher combined return in comparison with other methods of payments. Also the market value of the acquirer has a negative effect on the combined return. Interestingly enough deal value has a positive effect on the combined return although its results have to be interpreted with caution, while the variable deal value is conversely J-shaped due to the data collection process.

The proxies for governance and corruption are both insignificant over all regressions, thereby making it invaluable to say something about their effect on the combined announcement returns.

It is furthermore of interesting note that the results relating the effect of individual cultural difference and the combined announcement return don't hold when the sample is split up in two periods. Even though we find differences in trust to have a negative effect on the combined return, it's only slightly significant in the cross-border and matched domestic border sample in both time periods, the same

Table 6

Effect cultural distance on announcement return,

The dependent variable is the combined announcement return of the acquirer and the target weighted by their market values, over the 3 day event window (-1, +1). The sample period spans form 1999 to 2016. OLS estimates are presented, where columns 1-6 only include cross-border mergers and column 7 include cross-border mergers matched with up to two domestic mergers based on country, industry, year and relative deal value. || indicates the absolute difference between the acquirer and target natoin variables. A constant is included in each regression model, but not reported in the table. At the end of the table is indicated which fixed effects are used. Significance at the 10%, 5% and 1% is indicated by ***,** and * with p-values represented in the parentheses and with adjusted standard errors for heteroskedasticity when needed.

	Combined CAR(-1, +1)						
	Cross-border						Cross-border and matched domestic
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
ln(1+|Trust|)	-0.036*	-0.042**	-0.046**	-0.037*	-0.024	-0.069*	-0.066**
	(0.080)	(0.050)	(0.030)	(0.095)	(0.324)	(0.052)	(0.011)
ln(1+ |Individu|)	-0.058	-0.074*	-0.066*	-0.066*	-0.053	-0.054	-0.081**
	(0.135)	(0.069)	(0.094)	(0.090)	(0.203)	(0.270)	(0.042)
ln(1+ |Hierarchy|)	0.074***	0.076***	0.084***	0.082***	0.104***	0.071**	0.058**
	(0.001)	(0.001)	(0.000)	(0.001)	(0.000)	(0.024)	(0.040)
Acquiror Governance		-0.022**	-0.022**	-0.015	-0.003	0.197	0.366
		(0.017)	(0.012)	(0.109)	(0.834)	(0.902)	(0.762)
Acquirer country corruption		0.000	0.000	-0.000	-0.000	0.001	-0.000
		(0.237)	(0.185)	(0.413)	(0.553)	(0.447)	(0.708)
Target Governance		0.003	0.001	0.001	0.017	0.548	0.767
		(0.735)	(0.898)	(0.887)	(0.182)	(0.457)	(0.142)
Target country corruption		0.011	0.001	-0.009	-0.011	0.055	0.026
		(0.387)	(0.919)	(0.748)	(0.713)	(0.495)	(0.663)
Acquirer book to market			-0.000	-0.001	-0.001	-0.001	-0.001*
			(0.718)	(0.486)	(0.506)	(0.427)	(0.097)
Free cash flows			0.012	0.012	0.012	0.013*	0.006
			(0.116)	(0.101)	(0.106)	(0.092)	(0.185)
Acquirer market value			-0.447***	-0.445***	-0.439***	-0.430***	-0.348***
			(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Relative size			0.015***	0.016***	0.016***	0.017***	0.026***
			(0.004)	(0.006)	(0.006)	(0.006)	(0.000)
Deal value			0.654*	0.665*	0.638*	0.596*	0.885*
			(0.062)	(0.062)	(0.069)	(0.096)	-0.094
Cash			0.016***	0.016***	0.016***	0.016***	0.014***
			(0.001)	(0.001)	(0.001)	(0.001)	(0.000)
Tender			-0.001	0.000	0.001	0.001	-0.005*
			(0.906)	(0.989)	(0.883)	(0.854)	(0.078)
Friendly			0.006	0.009	0.009	0.006	0.009**
			(0.405)	(0.129)	(0.164)	(0.388)	(0.026)
Same industry			-0.003	-0.002	-0.002	-0.001	-0.004
			(0.507)	(0.621)	(0.611)	(0.842)	(0.119)
ln(Acquirer country openness)				-0.006	-0.010	-0.018	-0.025
				(0.320)	(0.125)	(0.607)	(0.313)
ln(Target country openness)				-0.005	-0.008	-0.062	-0.048*
				(0.394)	(0.221)	(0.154)	(0.077)
ln(Acquirer country GDP)				-0.003	-0.004	0.017	-0.002
				(0.209)	(0.162)	(0.868)	(0.978)
ln(Target country GDP)				-0.001	-0.001	-0.086	-0.079
				(0.691)	(0.603)	(0.438)	(0.309)
ln(Acquirer country GDP /capita				0.010**	0.009*	0.008	0.002
				(0.035)	(0.097)	(0.939)	(0.978)
ln(Target country GDP/capita)				0.004	0.003	0.061	0.054
				(0.538)	(0.622)	(0.600)	(0.506)
Religion					0.019	0.005	-0.014
					(0.186)	(0.853)	(0.537)
Language					0.004	0.008	0.008
					(0.610)	(0.395)	(0.266)
ln(Distance)					-0.004**	-0.002	-0.001
					(0.046)	(0.401)	(0.344)
Same legal system					-0.007	-0.012	-0.006
					(0.357)	(0.169)	(0.402)
Same currency					0.007	0.014	-0.003
					(0.534)	(0.306)	(0.733)
Year fixed effects	YES	YES	YES	YES	YES	YES	YES
Acquiror nation fixed effects	NO	NO	NO	NO	NO	YES	YES
Target nation fixed effects	NO	NO	NO	NO	NO	YES	YES
Observations	1,430	1,430	1,430	1,430	1,430	1,430	4,104
R-squared	0.031	0.036	0.085	0.091	0.095	0.143	0.105

holds for the effect of differences in hierarchism on the combined announcement returns. Differences in hierarchy are related with higher combined announcement returns even though the effect is only significant on at the 10% level. The regression results of the effect of cultural difference on the announcement return during the 1999-2007 and 2008-2016 period are presented in the appendix.

The results obtained from the regressions are mixed. We do observe a negative effect of differences in trust and individualism on the combined announcement return, but this flag doesn't rise for the effect of disparity in hierarchy on the combined announcement returns. Furthermore when the sample is split up in two different time periods the results don't hold, even though this could be due to having a small sample. Because of the mixed results we are unable to accept the hypothesis that cultural differences have a negative effect on the combined announcement returns.

4.3 Cultural effect within industries

In the appendix the effect of cultural differences along the three key dimension of culture on the announcement returns within different industries are displayed. From the regression we see that differences in trust are in the mining, manufacturing and transportation industry associated with a negative effect on the performance of the cross-border mergers, with trust having a significant effect in the mining and manufacturing industry. In addition to that a positive effect of differences in hierarchy on the performance of cross-border mergers is found in the manufacturing industry. It is further of interesting node that tender offers in the financial, insurance and real estate industry reduce the return experienced by the shareholders with 4.1%, while in the service industry tender offer produce a positive value of 2.9% percent compared to when no tender offer was made.

When the return of cross-border mergers are compared, we observe that the shareholders in the service industry experience the highest three-day return of 3.5% and firms in the financial industry experience the lowest three-day announcement returns of 1.1%. Apparently the stock market values cross-border mergers in the service industry higher than those in the financial industry. Indicating that there are higher synergy benefits to gain or there are lower integration cost. Furthermore firms involved in a cross-border merger in the manufacturing industry have 2.0% significantly higher returns than those in the financial industry. In addition to this shareholders of cross-border mergers in the service industry experience 2.4% significant higher combined announcement return in comparison to shareholders in the financial industry. The results are displayed in the appendix.

In table 7 presented below, we can observe the different coefficient on the 3 dimension of culture on the announcement returns within industries. Only in the manufacturing and the mining industry a significant effect of trust on the combined announcement returns was found. When these coefficient are compared with a chi squared test no significant distance is found between the two coefficients. Furthermore all the coefficients are tested where the difference between the cultural effects on the announcement return between the industries is the largest. We can observe from table 8 that the coefficient of trust on the announcement return significantly differs from the manufacturing to the service industry. Indicating that differences in the levels of trust in the manufacturing industries impact the performance significantly different than differences in the levels of trust in the service industry.

From the tests we observe that differences in national culture affect the performance of mergers between industries in unique ways. Thereby indicating that it's likely the case that different industries have their own sets of dealing with differences in national culture. We could therefore accept the third hypothesis that the effect of national culture on the performance of cross-border mergers differs by industry.

Table 7
Differences of cultural impact between industries,

In the table the coefficient from the regression of cultural differences on the combined announcement return of different industries are presented. Above the different industries the cultural dimension is given. The results of the Chi^2 are presented in parentheses. Significance on the 10%, 5% and 1% level is indicated by *, ** and ***.

Trust			Trust		
Mining	Manufacturing	Chi^2	Manufacturing	Services	Chi^2
-0.479 (0.080)**	-0.141 (0.032)*	-0.338 (-0.1454)	-0.141 (0.032)**	0.140 (0.411)	-0.281 (0.0189)*
Hierarchy			Individualism		
Mining	Manufacturing	Chi^2	Manufacturing	Transportation, communication et al.	Chi^2
0.147 (0.554)	-0.091 (0.324)	0.2380 (0.2809)	0.1160 (0.025)**	-0.755 (0.801)	0.8710 (0.4455)

4.4 Cultural effect on cross border merger volume

In table 8 the effect of cultural distances on the number of cross-border mergers is displayed. In all the regression models time fixed effects and acquirer country fixed effects are included. In the first four regressions target nation fixed effect aren't included, while this would capture the effect of host country corruption and governance standards would have on the number of cross-border mergers.

From the table we can observe that all three dimensions of culture have a negative effects on the cross-border merger volume, with all three variables being statically significant over all regressions. When the difference in trust increases with 1%, on average 0.8% less cross-border mergers are observed. Furthermore when differences in individualism and hierarchy rise by 1 percent the number of cross-border mergers declines by 0.4%. These results indicate that differences in culture come with costs, therefore when larger cultural differences between two countries exist, there are less positive NPV project left to invest in for companies, followed by a lower number of total mergers observed.

Furthermore we find the usual suspects to affect the number of cross-border mergers. When the distance between countries increases, less number of mergers are observed. Interestingly enough having the same currency also results in a lower number of mergers between two countries. It could be the case that countries with the same currencies choose for other ways of foreign direct investments, rather than mergers. Furthermore countries speaking the same language and countries with the same religion observe 36.8% and 29.4% higher numbers of mergers.

From the results of the regression it stems that more mergers are observed to target countries with a high level of governance standards. Also as expected, corruption in the host country negatively influence the number of mergers between two countries. A ten point increase in the country corruption index is associated with a 12.74% increase in the number of mergers as we can observe in column 5 of table 8.

When the sample is split in two time periods we merely obtain the same results, with differences in trust and hierarchy negatively related to the number of mergers in the 1999-2007 period and differences in trust and individualism having a significantly negative effect on the total number of mergers in the 2008-2016 period. Furthermore when a regression is run with the total dollar deal value of mergers between two countries as dependent variable, we find that higher cultural differences along all three dimensions results in lower cross-border volume. These results can be found in the appendix.

The results indicate that higher levels of corruption are followed by a lower total number of mergers and better governance standard in the host country are associated with a higher number of total mergers. Furthermore an increase in cultural differences, along all of the three cultural variables, have a negative impact on the total number of mergers as well as on the total dollar volume of mergers. We thereby can accept our fourth hypothesis that there's a lower number of mergers when countries are more cultural disparate.

4.5 Robustness checks

To check for robustness of the result several robustness checks are performed. First off all the Hofstede index is used as an alternative measure of cultural differences between countries. In addition to that a European subsample is used to test for the effect of cultural differences on the total number of mergers. The European subsample only contains countries which use the euro, this is done to control for the effect exchange rates appreciations and depreciations could have on the total number of mergers. In addition to that European countries are relatively small, because of this the cultural measure are more likely to be precise in comparison to bigger countries like Russia or the United States.

Hofstede Index

When the Hofstede index is used as alternative culture measure, no effect of cultural differences on the combined announcement returns is found. This suggest that the effect of cultural differences on the announcement returns could be biased to the measure of culture used. When we take the Hofstede index as alternative cultural measure to test the effect of cultural differences on the total number of mergers observed, we do find that the results to hold. Resulting in a lower number of total mergers between countries, when there are more cultural distant. The results are presented in the appendix.

European subsample

When regression are run to test the effect of cultural differences on the total number of mergers observed in the intra-European market, we find that differences in trust significantly negatively affect the total number of mergers between two countries. This suggest that the results earlier found hold, when accounting for exchange rate effects when countries have the same currency. The results of the regression can be observed in table 10.

Table 8

Cultural distance and number of mergers

The dependent variable is the natural log of the total number of mergers from acquirer country *i* to target country *j* in a panel from 1999 to 2016. The measures of culture (trust, individualism and hierarchy) are measured as the natural log of the absolute cultural distance between the acquirer and target country. Tobit regression of a gravity model are run in columns 1-5. || indicates the absolute difference between the acquirer and target country variables. A constant is included in the model but not displayed in the table. Inclusion of fixed effects is indicated at the end. Significance is at 10%, 5% and 1% indicated by *, **, ***. The p-values are double clustered at the acquirer and target country and are displayed in the parentheses.

	ln(1+Number of mergers)				
	(1)	(2)	(3)	(4)	(5)
ln(1+|Trust|)	-4.720***	-4.501***	-3.746***	-0.468***	-0.801***
	(0.000)	(0.000)	(0.000)	(0.006)	(0.000)
ln(1+ |Individual|)	-7.897***	-7.196***	-4.865***	-0.769***	-0.402*
	(0.000)	(0.000)	(0.000)	(0.002)	(0.091)
ln(1+ |Hierarchy|)	-1.965***	-2.178***	-3.373***	-0.373	-0.398*
	(0.003)	(0.001)	(0.000)	(0.134)	(0.099)
Target country corruption		-0.013***	-0.019***	-0.012***	-0.002
		(0.000)	(0.000)	(0.000)	(0.408)
Target country governance		0.744***	-0.123	0.560***	-2.437
		(0.000)	(0.480)	(0.000)	(0.344)
ln(Acquirer country openness)			0.740***	0.664***	0.621***
			(0.000)	(0.000)	(0.000)
ln(Target country openness)			-0.159	-0.408***	0.305***
			(0.111)	(0.000)	(0.008)
ln(Acquirer country GDP)			1.312***	1.368***	1.130***
			(0.008)	(0.002)	(0.005)
ln(Target country GDP)			0.508***	0.326***	1.076***
			(0.000)	(0.000)	(0.005)
ln(Acquirer country GDP /capita)			-0.045	-0.358	-0.109
			(0.928)	(0.421)	(0.795)
ln(Target country GDP/capita)			-0.126**	-0.111***	-0.824**
			(0.027)	(0.001)	(0.032)
Ln(Imports from target nation)			-0.168***	0.057***	0.044**
			(0.000)	(0.005)	(0.017)
Ln(Distance)				-0.424***	-0.448***
				(0.000)	(0.000)
Ln(1+Corporatetax rate ||)				0.358	0.026
				(0.197)	(0.925)
Same legal system				0.232***	0.236***
				(0.000)	(0.000)
Same currency				-0.243***	-0.101*
				(0.000)	(0.073)
Language				0.368***	0.340***
				(0.000)	(0.000)
Religion				0.499***	0.294***
				(0.000)	(0.000)
WTO				0.051	0.045
				(0.527)	(0.666)
RTA				0.100*	0.106*
				(0.081)	(0.056)
Year fixed effects	YES	YES	YES	YES	YES
Acquirer country fixed effects	YES	YES	YES	YES	YES
Target country fixed effects	NO	NO	NO	NO	YES
Observations	21,402	21,402	21,402	21,402	21,402
Log Likelihood	-20334	-19871	-18648	-15641	-15042

Table 10

Cultural distance and number of mergers

The dependent variable is the total number of mergers from acquirer country *i* to target country *j* in a panel from 1999 to 2016. In this table only countries from Europe which have the same currency are included. The measures of culture (trust, individualism and hierarchy) are measured as the natural log of the absolute cultural distance between the acquirer and target country. Tobit regression of a gravity model are run in columns 1-5. || indicates the absolute difference between the acquirer and target country variables. A constant is included in the model but not displayes in the table. Inclussion of fixed effects is indicated at the end. Significance is at 10%,5% and 1% indicated by *,**,***. The p-values are double

	ln(1+Number of mergers)				
	(1)	(2)	(3)	(4)	(5)
ln(1+|Trust|)	-1.637**	-2.258***	-0.487	-0.773**	-0.901***
	(0.015)	(0.000)	(0.154)	(0.018)	(0.008)
ln(1+ |Individu|)	-2.497**	-3.599***	-0.863	0.298	0.341
	(0.038)	(0.002)	(0.125)	(0.611)	(0.565)
ln(1+ |Hierarchy|)	-1.309	-1.613	-0.859	0.203	0.418
	(0.350)	(0.218)	(0.193)	(0.770)	(0.525)
Target country corruption		-0.008	-0.010***	-0.015***	-0.013**
		(0.143)	(0.002)	(0.000)	(0.040)
Target country governance		-1.492***	-0.005	0.314	-25.406**
		(0.000)	(0.984)	(0.185)	(0.016)
ln(Acquirer country openness)			0.355	0.446	0.489
			(0.266)	(0.165)	(0.123)
ln(Target country openness)			-0.239*	-0.272*	0.750*
			(0.091)	(0.065)	(0.058)
ln(Acquirer country GDP)			1.969**	2.269**	2.314**
			(0.032)	(0.011)	(0.011)
ln(Target country GDP)			0.107	0.352***	3.238***
			(0.173)	(0.000)	(0.001)
ln(Acquirer country GDP /capita)			0.139	-0.221	-0.264
			(0.906)	(0.845)	(0.820)
ln(Target country GDP/capita)			0.139	-0.101	-3.889***
			(0.332)	(0.522)	(0.002)
Ln(Imports from target nation)			0.383***	0.112*	0.163**
			(0.000)	(0.091)	(0.021)
Ln(Distance)				-0.367***	-0.368***
				(0.000)	(0.001)
Ln(1+Corporatetax rate ||)				-0.655	-0.853
				(0.278)	(0.169)
Same legal system				0.381***	0.267***
				(0.000)	(0.004)
Language				-0.121	0.029
				(0.261)	(0.787)
Religion				0.071	0.050
				(0.596)	(0.778)
Year fixed effects	YES	YES	YES	YES	YES
Acquirer country fixed effects	YES	YES	YES	YES	YES
Target country fixed effects	NO	NO	NO	NO	YES
Observations	2,258	2,258	2,258	2,258	2,258
Log Likelihood	-2139	-2017	-1703	-1675	-1641

V. Conclusion

5.1 Conclusion

The goal of this study was to investigate how differences in national culture would affect the performance and the total number cross-border mergers. Furthermore the research was conducted to shed new light on the cross-border effect and evaluate which country specific factors influence the performance and the number of mergers in a country. With respect to the cross-border effect, the results are clear. After investigation of the publicly traded cross-border and matched domestic sample it appears that no cross-border effect exist, even when controlling for a different subset of factors that could potentially influence the performance of mergers. The effect of culture on the performance of cross-border mergers are murky. In the results it appears that differences in trust and individualism negatively affect the performance of cross-border mergers. This is contrary to the third dimension of culture (hierarchy), where differences in hierarchy positively affect the performance of cross-border mergers. The results also don't hold when the Hofstede index is used as alternative cultural measure. Even though the signs are contrary, it is clear that cultural differences have their impact on the performance of cross-border mergers. In addition to that, we find that industry plays a roll. Not only do the combined announcement returns of cross-border mergers differ between industries, the same goes for the effect of cultural differences on the performance. Evidence is found that cultural dimensions impact the performance between industries in different ways. Thereby suggesting that industries have their own characteristics and the way they handle cultural differences seems to be different. Furthermore we find that cultural differences along all three dimensions, as well as the alternative Hofstede index, negatively impact the cross-border intensity between two countries.

Overall the results suggest that cultural differences are associated in the market as a unique risk factor that companies have to overcome when they step the border. These cultural differences likely add to the already complex process of merging firms together, thereby increasing the integration costs. Differences in culture could cause firms to never reach the full benefits of synergy effects. This suggest differences in national culture add a second border to be crossed. Firms should be aware of cultural differences and the way they can influence the performance of companies. So does culture add up? It does add up to the complexity of the integration process and could restrain firms from reaching their optimal form.

5.2 Discussion & recommendation for future research

- In this study the effect of cultural differences on the combined announcement returns of the target and acquirer firms is examined. Because we include the returns of both firms it means that both firms must be publicly traded. This reduces the sample. Future research could investigate the effect of cultural differences on the returns of the acquirer companies, thereby being left with a larger sample.

- Even though there exist a wide variety of different cultural measures, the subjective nature of culture is hard to capture within a proxy or a model. Even when more advanced measure will be developed, the measure of culture will always be prone to shortcomings. The ability to say something about the effect of cultural differences is therefore highly related to the proxy used to capture national culture. Therefore the results always have to be interpreted with cautions, even though the underlying mechanism could be sound.

- In this paper the assumption is made that all relevant information about differences in national culture are captured in the event windows used to measure the performance of cross-border mergers. It could be argued that measuring the performance of the companies with short-term event windows create a bias, while the integrations costs reflected in the cultural differences only find their full blossom in the long-term integration process. However the results of the effects of cultural differences on the total number of mergers observed would tackle this, because a lesser amount of mergers is observed when differences in culture become greater.

- For future research it could be investigated whether cultural differences impact the performance and the total volume of cross-border mergers to a bigger or lesser extent between different geographical regions. In addition to that future research could be developed where the focus lies on different industries within countries. It could be the case that different industries deal with cultural differences in its own unique way, thereby industries could learn from one another.

VI. Appendix

Control variables;

Trust: The average level of trust in a country scaled on an index from 0 to 1. Levels of trust are obtained from the World Survey Value

Anti-self-dealing index:

Book-to-market: Book value of the company relative to its market value 30 days before announcement. Source: *DataStream*.

Free cash flow: The amount of free cash flow of a company, measured by the EBITDA dived by the book value of the company 30-days before announcement. Source: *DataStream*

CAR3: The combined cumulative abnormal return of the target and acquirer company over the (-1, +1) window surrounding the announcement, weighted by the total market value 30-days before announcement period. Price info is obtained through DataStream.

CAR5: The combined cumulative abnormal return of the target and acquirer company over the (-2, +2) window surrounding the announcement, weighted by the total market value 30-days before announcement period. Price info is obtained through DataStream.

CAR10: The combined cumulative abnormal return of the target and acquirer company over the (-5, +5) window surrounding the announcement, weighted by the total market value 30-days before announcement period. Price info is obtained through DataStream.

Cash: Dummy which equals one if the merger is paid by with more than 50% of cash.

Common currency: Dummy variable which equals one if the target and acquirer nation share the same currency. Source: *CEPII*

Corporate tax rate: Corporate tax rate of the country. Source: *World Bank*

Corruption: the score of the country on the CPI index created by *Transparency International*. Variable is divided by -1. Source: *Transparency International.*

Distance: Distance between the acquirer and target nation measured in km's where the distance is measured between the most important economic place in the target and acquirer nation. Source: *CEPII*

Law: Origin of law of country. *Source: La Porte et al. (1998)*

Hierarchy: Measure of how likely people are to follow instructions from higher authorities. Measured by the average number of the response in the World Value Survey compounded in an index from 0 to 1.

Individualism: Measure of level of individualism in a country scaled on an index from 0 to 1. Levels of individualism are obtained through the World Value Survey.

GDP: Measure of the gross domestic product in a country in a given year. Source: *CEPII*

GDP/capita: Gross domestic product in a country in a given year scaled by the total number of people in a country. Source*: CEPII*

Openness: Total levels of imports and exports in a country in a given year dived by their gross domestic product. Source: *CEPII*

Number of M&A: Total number of mergers between acquirer and target country. Source: *Thompson one*

Total dollar volume: Total dollar deal value of mergers between acquirer and target country. Source: *Thompson one*

Market value: Market value of the company measured 30 days prior to the announcement date. Source: *DataStream*

RTA: Dummy which equals one when the acquirer and target country signed a regional trade agreement.

Same legal system: Dummy variable which equals one when the acquirer and target country have the same legal origin. Source: *La Porte (1998)*

Same religion: Dummy variable which equals one when the acquirer and target country share the same religion. Source: *CEPII*

Sam industry: Dummy variable which equals one when the target and acquirer company are from the same industry based on the first two-digits of their SIC-coded. Source: *Thompson One*

Tender: Dummy variable equals one when a tender offer was made. Source: *Thompson One*

Trust: The average level of trust in a country scaled on an index from 0 to 1. Levels of trust are obtained from the World Survey Value

Value of transaction: The value of the deal in millions. Source: *Thompson one*

WTO: Dummy variable which equals one when acquirer and target country are member of the World Trade Organization. Source: *Thompson One*

Effect cultural distance on announcement return,

The dependent variable is the combined announcement return of the acquirer and the target weighted by their market values, over the 3 day event window (-1, +1). The sample period spans form 2008 to 2016. OLS estimates are presented, where columns 1-6 only include cross-border mergers and column 7 include cross-border mergers matched with up to two domestic mergers based on country, industry, year and relative deal value. || indicates the absolute difference between the acquirer and target natoin variables. A constant is included in each regression model, but not reported in the table. At the end of the table is indicated which fixed effects are used. Significance at the 10%, 5% and 1% is indicated by ***,** and * with p-values represented in the parentheses and with adjusted standard errors for heteroskedasticity when needed.

	Combined CAR(-1, +1)						
	Cross-border						Cross-border and matched domestic
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
ln(1+|Trust|)	-0.056**	-0.048*	-0.056*	-0.028	-0.010	-0.026	-0.060*
	(0.046)	(0.099)	(0.061)	(0.361)	(0.754)	(0.568)	(0.096)
ln(1+ |Individu|)	-0.066	-0.072	-0.097	-0.093	-0.060	-0.100	-0.094
	(0.339)	(0.290)	(0.119)	(0.122)	(0.337)	(0.292)	(0.247)
ln(1+ |Hierarchy|)	0.108***	0.115***	0.119***	0.091***	0.105***	0.073	0.074*
	(0.001)	(0.000)	(0.000)	(0.009)	(0.005)	(0.112)	(0.086)
Acquiror Governance		0.009	0.003	0.013	0.025	-0.056	-2.342
		(0.484)	(0.849)	(0.364)	(0.135)	(0.953)	(0.489)
Acquirer country corruption		0.000**	0.000***	-0.000	-0.000	0.001	-0.001
		(0.018)	(0.008)	(0.827)	(0.971)	(0.405)	(0.627)
Target Governance		0.000	-0.004	0.004	0.020	4.307	2.948*
		(0.988)	(0.742)	(0.784)	(0.248)	(0.120)	(0.094)
Target country corruption		-0.035*	-0.040**	-0.115***	-0.127***	-0.088	0.124
		(0.057)	(0.037)	(0.006)	(0.004)	(0.643)	(0.314)
Acquirer book to market			0.002	0.001	0.001	0.001	0.000
			(0.235)	(0.336)	(0.409)	(0.680)	(0.854)
Free cash flows			0.018*	0.017	0.017	0.019	0.021***
			(0.082)	(0.101)	(0.112)	(0.113)	(0.002)
Acquirer market value			-0.409***	-0.407***	-0.402***	-0.431***	-0.359***
			(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Relative size			0.014**	0.014**	0.014**	0.015***	0.019***
			(0.015)	(0.012)	(0.013)	(0.008)	(0.001)
Deal value			0.854**	0.834**	0.858**	0.874**	1.632**
			(0.013)	(0.021)	(0.015)	(0.038)	(0.013)
Cash			0.011*	0.010*	0.011*	0.011	0.008*
			(0.091)	(0.099)	(0.081)	(0.149)	(0.074)
Tender			0.001	0.002	0.004	0.003	-0.003
			(0.843)	(0.766)	(0.554)	(0.679)	(0.452)
Friendly			-0.013	-0.005	-0.008	-0.004	0.007
			(0.351)	(0.622)	(0.499)	(0.740)	(0.320)
Same industry			-0.003	-0.003	-0.004	-0.003	0.002
			(0.548)	(0.638)	(0.507)	(0.673)	(0.657)
ln(Acquirer country openness)				-0.004	-0.008	0.012	0.166**
				(0.676)	(0.427)	(0.915)	(0.047)
ln(Target country openness)				0.005	0.007	-0.249**	-0.135*
				(0.492)	(0.359)	(0.025)	(0.089)
ln(Acquirer country GDP)				-0.001	-0.001	-0.023	0.234
				(0.890)	(0.811)	(0.936)	(0.302)
ln(Target country GDP)				0.002	0.003	-0.595	-0.372
				(0.555)	(0.368)	(0.156)	(0.159)
ln(Acquirer country GDP /capita				0.013*	0.009	0.092	-0.121
				(0.076)	(0.219)	(0.749)	(0.607)
ln(Target country GDP/capita)				0.017*	0.017*	0.508	0.312
				(0.060)	(0.069)	(0.254)	(0.264)
Religion					0.036*	0.015	-0.044
					(0.068)	(0.705)	(0.161)
Language					-0.000	-0.005	-0.012
					(0.988)	(0.716)	(0.238)
ln(Distance)					-0.004	-0.001	0.000
					(0.182)	(0.709)	(0.932)
Same legal system					0.000	0.008	0.020*
					(0.965)	(0.527)	(0.083)
Same currency					-0.012	-0.016	-0.008
					(0.421)	(0.495)	(0.618)
Year fixed effects	YES	YES	YES	YES	YES	YES	YES
Acquiror nation fixed effects	NO	NO	NO	NO	NO	YES	YES
Target nation fixed effects	NO	NO	NO	NO	NO	YES	YES
Observations	621	621	621	616	616	616	1,776
R-squared	0.054	0.065	0.108	0.120	0.129	0.196	0.111

Effect cultural distance on announcement return,

The dependent variable is the combined announcement return of the acquirer and the target weighted by their market values, over the 3 day event window (-1, +1). The sample period spans form 1999 to 2007. OLS estimates are presented, where columns 1-6 only include cross-border mergers and column 7 include cross-border mergers matched with up to two domestic mergers based on country, industry, year and relative deal value. || indicates the absolute difference between the acquirer and target natoin variables. A constant is included in each regression model, but not reported in the table. At the end of the table is indicated which fixed effects are used. Significance at the 10%, 5% and 1% is indicated by ***,** and * with p-values represented in the parentheses and with adjusted standard errors for heteroskedasticity when needed.

	Combined CAR(-1, +1)						
	Cross-border						Cross-border and matched domestic
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
ln(1+|Trust|)	-0.020	-0.033	-0.039	-0.033	-0.031	-0.054	-0.065*
	(0.528)	(0.305)	(0.215)	(0.333)	(0.405)	(0.290)	(0.068)
ln(1+ |Individu|)	-0.040	-0.071	-0.047	-0.030	-0.027	0.043	-0.073
	(0.404)	(0.193)	(0.373)	(0.589)	(0.636)	(0.592)	(0.167)
ln(1+ |Hierarchy|)	0.045	0.048	0.056*	0.055	0.081**	0.022	0.042
	(0.175)	(0.133)	(0.085)	(0.137)	(0.040)	(0.709)	(0.303)
Acquiror Governance		-0.037***	-0.037***	-0.034***	-0.022	-0.625	-0.057
		(0.003)	(0.001)	(0.009)	(0.193)	(0.670)	(0.960)
Acquirer country corruption		0.000	0.000	-0.000	-0.000	0.003**	-0.002**
		(0.932)	(0.831)	(0.553)	(0.756)	(0.032)	(0.030)
Target Governance		0.003	0.006	0.000	0.012	0.563	2.594**
		(0.803)	(0.656)	(0.982)	(0.479)	(0.763)	(0.030)
Target country corruption		0.039**	0.029	0.041	0.046	0.027	0.110
		(0.019)	(0.115)	(0.279)	(0.231)	(0.863)	(0.296)
Acquirer book to market			-0.001	-0.001	-0.001	-0.001	-0.001
			(0.368)	(0.308)	(0.320)	(0.500)	(0.348)
Free cash flows			0.009	0.009	0.009	0.010	-0.006
			(0.355)	(0.378)	(0.388)	(0.375)	(0.384)
Acquirer market value			-0.447***	-0.458***	-0.451***	-0.447***	-0.329***
			(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Relative size			0.016**	0.017*	0.017*	0.019*	0.033***
			(0.041)	(0.063)	(0.066)	(0.060)	(0.000)
Deal value			-0.124	-0.021	-0.102	-0.344	0.152
			(0.874)	(0.979)	(0.904)	(0.690)	(0.741)
Cash			0.018***	0.018***	0.018***	0.021***	0.018***
			(0.005)	(0.004)	(0.005)	(0.002)	(0.000)
Tender			-0.002	-0.002	-0.002	-0.004	-0.005
			(0.678)	(0.711)	(0.714)	(0.525)	(0.199)
Friendly			0.013*	0.015*	0.016**	0.011	0.005
			(0.079)	(0.053)	(0.047)	(0.273)	(0.338)
Same industry			-0.002	-0.001	-0.001	0.002	-0.009**
			(0.698)	(0.794)	(0.835)	(0.778)	(0.013)
ln(Acquirer country openness)				-0.006	-0.011	-0.034	-0.021
				(0.424)	(0.194)	(0.631)	(0.673)
ln(Target country openness)				-0.015	-0.022**	-0.108	-0.087*
				(0.117)	(0.048)	(0.223)	(0.095)
ln(Acquirer country GDP)				-0.002	-0.004	-0.040	-0.052
				(0.438)	(0.316)	(0.856)	(0.760)
ln(Target country GDP)				-0.003	-0.005	-0.121	-0.345*
				(0.400)	(0.230)	(0.658)	(0.051)
ln(Acquirer country GDP /capita				0.008	0.006	0.103	0.046
				(0.275)	(0.408)	(0.650)	(0.787)
ln(Target country GDP/capita)				-0.000	-0.001	0.134	0.304*
				(0.975)	(0.881)	(0.616)	(0.078)
Religion					0.009	0.009	-0.004
					(0.659)	(0.848)	(0.893)
Language					0.009	0.017	0.020*
					(0.407)	(0.256)	(0.059)
ln(Distance)					-0.004	-0.002	-0.002
					(0.238)	(0.660)	(0.243)
Same legal system					-0.014	-0.021	-0.015
					(0.173)	(0.128)	(0.111)
Same currency					0.016	0.026	-0.001
					(0.263)	(0.129)	(0.927)
Year fixed effects	YES	YES	YES	YES	YES	YES	YES
Acquiror nation fixed effects	NO	NO	NO	NO	NO	YES	YES
Target nation fixed effects	NO	NO	NO	NO	NO	YES	YES
Observations	809	809	809	801	801	801	2,328
R-squared	0.019	0.035	0.094	0.100	0.104	0.181	0.152

Effect cultural differences on combined announcement returns,

In the table the regression results are presented where the combined abnormal returns over the 3-day event window is the dependent variable. In the columns the different industries are indicated. The OLS estimates are presented in the table and at the end of the table is indicate whether fixed effects are included. Controls indicate whether the control variables are added. A constant is estimated in the regression, but not displayed in the table. Significance at the 10%, 5% and 1% level is indicated by *,** and ***.

	Mining	Manufacturing	Transportation, communication et al.	Finance insurance and real estate	Services
ln(1+|Trust|)	-0.479*	-0.141**	-0.310	0.024	0.140
	(0.080)	(0.032)	(0.672)	(0.894)	(0.411)
ln(1+ |Individualism|)	0.147	-0.091	-0.060	0.030	0.108
	(0.554)	(0.324)	(0.978)	(0.874)	(0.723)
ln(1+ |Hierarchy|)	-0.318	0.116**	-0.755	-0.175	0.211
	(0.606)	(0.025)	(0.801)	(0.408)	(0.234)
Acquirer market value	0.003	-0.358***	-0.814	-0.174	-0.734
	(0.995)	(0.000)	(0.599)	(0.529)	(0.729)
Relative size	0.010	0.022**	0.026	0.047**	0.158**
	(0.186)	(0.022)	(0.657)	(0.011)	(0.010)
Cash	0.023	0.024**	-0.028	0.004	0.010
	(0.166)	(0.014)	(0.785)	(0.829)	(0.565)
Tender	0.006	0.001	-0.025	-0.041*	0.029*
Controls	YES	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES	YES
Acquirer nation fixed effects	YES	YES	YES	YES	YES
Target nation fixed effects	YES	YES	YES	YES	YES
Observations	218	509	79	134	195
Adjusted R-squared	0.037	0.015	0.030	0.134	0.167

Cross-border returns by industry,

In the table the return of the different industries are presented for cross-border merger that took place in the 1999-2016 time period

	Mean	Standard deviation	Number
Mining	0.018	0.077	218
Manufacturing	0.031	0.075	509
Transportation, communication etc.	0.028	0.079	79
Finance, insurance and real estate	0.011	0.047	134
Services	0.035	0.096	195

Differences in cross-border return by industry,

In the table differences of cross-border returns between industries in the 1999-2016 period are presented. The p-values are given in the parentheses and 10%, 5% and 1% significance is indicated by *,** and ***

	Mining	Manufacturing	Transportation, communication etc.	Finance, insurance and real estate
Manufacturing	0.013 (0.376)			
Transportation, communication etc.	0.011 (1)	-0.002 (1)		
Finance, insurance and real estate	-0.006 (1)	-0.020 (0.094)*	-0.017 (1)	
Services	0.018 (0.216)	0.004 (1)	0.007 (1)	0.024 (0.057)*

In this table the top 5 and the bottom 5 countries with the highest scores on the three key dimensions of culture are presented.

Trust		Distrust	
Denmark	0.24	Iran	0.89
Norway	0.25	Peru	0.92
Sweden	0.35	Romania	0.93
Finland	0.35	Brazil	0.93
Netherlands	0.36	Philippines	0.97
Individualism		**Collectivism**	
Slovenia	0.35	Malta	0.67
Austria	0.35	Denmark	0.69
Chile	0.35	Indonesia	0.74
Estonia	0.38	Bulgaria	0.75
Germany	0.38	Bangladesh	0.76
Egalitarianism		**Hierarchy**	
United States	0.24	Finland	0.73
Japan	0.25	Lithuania	0.78
Uruguay	0.26	Taiwan	0.78
Norway	0.31	China	0.79
Canada	0.35	Brazil	0.81

Effect cultural distance on announcement return,

The dependent variable is the combined announcement return of the acquirer and the target weighted by their market values, over the 3 day event window (-1, +1). The sample period spans form 1999 to 2007. OLS estimates are presented, where columns 1-6 only include cross-border mergers and column 7 include cross-border mergers matched with up to two domestic mergers based on country, industry, year and relative deal value. || indicates the absolute difference between the acquirer and target natoin variables. A constant is included in each regression model, but not reported in the table. At the end of the table is indicated which fixed effects are used. Significance at the 10%, 5% and 1% is indicated by ***,** and * with p-values represented in the parentheses and with adjusted standard errors for heteroskedasticity when needed.

	Combined CAR(-1, +1)						
	Cross-border						Cross-border and matched domestic
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
ln(1+|CDI|)	-0.003	-0.004	-0.006	-0.002	0.006	0.001	-0.004
	-0.418	-0.353	-0.154	-0.585	-0.396	-0.943	-0.589
Acquiror Governance		-0.018*	-0.019**	-0.011	0.003	-0.026	0.187
		-0.053	-0.034	-0.232	-0.806	-0.987	-0.879
Acquirer country corruption		0	0	0	0	0	0
		-0.459	-0.462	-0.167	-0.281	-0.612	-0.749
Target Governance		0.012	0.009	0.008	0.023*	0.626	0.839
		-0.21	-0.379	-0.469	-0.074	-0.409	-0.114
Target country corruption		0.007	-0.002	-0.023	-0.029	0.049	0.022
		-0.575	-0.882	-0.432	-0.338	-0.544	-0.712
Acquirer book to market			0	-0.001	-0.001	-0.001	-0.001*
			-0.728	-0.441	-0.442	-0.373	-0.086
Free cash flows			0.011	0.013*	0.013*	0.014*	0.006
			-0.13	-0.093	-0.089	-0.075	-0.192
Acquirer market value			-0.437***	-0.445***	-0.442***	-0.429***	-0.350***
			0	0	0	0	0
Relative size			0.015***	0.016***	0.016***	0.017***	0.026***
			-0.006	-0.006	-0.006	-0.006	0
Deal value			0.686**	0.648*	0.624*	0.583	0.916**
			-0.043	-0.07	-0.083	-0.1	-0.011
Cash			0.018***	0.016***	0.016***	0.016***	0.015***
			0	-0.001	-0.001	-0.001	0
Tender			-0.003	-0.001	-0.001	0	-0.005*
			-0.553	-0.846	-0.879	-0.977	-0.053
Friendly			0.008	0.01	0.01	0.007	0.010**
			-0.261	-0.106	-0.136	-0.349	-0.019
Same industry			-0.003	-0.003	-0.002	-0.001	-0.004
			-0.461	-0.542	-0.606	-0.795	-0.114
ln(Acquirer country openness)				-0.007	-0.01	-0.02	-0.026
				-0.29	-0.137	-0.577	-0.303
ln(Target country openness)				-0.004	-0.005	-0.061	-0.049*
				-0.533	-0.464	-0.168	-0.075
ln(Acquirer country GDP)				-0.002	-0.003	0.029	0.011
				-0.382	-0.369	-0.777	-0.881
ln(Target country GDP)				0.001	0.001	-0.089	-0.088
				-0.725	-0.698	-0.436	-0.268
ln(Acquirer country GDP /capita)				0.013**	0.012**	-0.008	-0.012
				-0.011	-0.035	-0.941	-0.879
ln(Target country GDP/capita)				0.007	0.007	0.064	0.061
				-0.315	-0.326	-0.596	-0.458
Religion					0.035**	0.013	-0.008
					-0.029	-0.636	-0.711
Language					0.008	0.009	0.009
					-0.304	-0.352	-0.226
ln(Distance)					-0.003	-0.002	-0.002
					-0.191	-0.525	-0.154
Same legal system					-0.008	-0.009	-0.004
					-0.32	-0.296	-0.549
Same currency					0	0.006	-0.007
					-0.98	-0.648	-0.438
Year fixed effects	YES	YES	YES	YES	YES	YES	YES
Acquiror nation fixed effects	NO	NO	NO	NO	NO	YES	YES
Target nation fixed effects	NO	NO	NO	NO	NO	YES	YES
Observations	1,409	1,409	1,409	1,409	1,409	1,409	4,083
R-squared	0.019	0.035	0.094	0.100	0.104	0.181	0.152

Cultural distance and merger volume.

The dependent variable is the natural log of the total volume of mergers from acquirer country *i* to target country *j* in a panel from 1999 to 2016. The measures of culture (trust, individualism and hierarchy) are measured as the natural log of the absolute cultural distance between the acquirer and target country. Tobit regression of a gravity model are run in columns 1-5. || indicates the absolute difference between the acquirer and target country variables. A constant is included in the model but not displayes in the table. Inclussion of fixed effects is indicated at the end. Significance is at 10%,5% and 1% indicated by *,**,***. The p-values are double clustered at the acquirer and target country and are displayed in the parentheses.

	ln(1+Number of mergers)				
	(1)	(2)	(3)	(4)	(5)
ln(1+|Trust|)	-13.428***	-12.873***	-11.500***	-1.542**	-2.643***
	(0.000)	(0.000)	(0.000)	(0.017)	(0.000)
ln(1+ |Individu|)	-22.738***	-20.467***	-15.456***	-3.665***	-3.452***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
ln(1+ |Hierarchy|)	-2.772	-3.326*	-8.380***	0.014	0.804
	(0.117)	(0.059)	(0.000)	(0.988)	(0.442)
Target country corruption		-0.047***	-0.060***	-0.041***	-0.005
		(0.000)	(0.000)	(0.000)	(0.682)
Target country governance		1.753***	-0.843	1.187***	-13.517
		(0.003)	(0.125)	(0.001)	(0.193)
ln(Acquirer country openness)			2.636***	2.527***	2.436***
			(0.000)	(0.000)	(0.000)
ln(Target country openness)			-0.530*	-1.236***	0.539
			(0.086)	(0.000)	(0.254)
ln(Acquirer country GDP)			4.844***	5.378***	4.429***
			(0.006)	(0.001)	(0.006)
ln(Target country GDP)			1.381***	0.786***	4.048***
			(0.000)	(0.000)	(0.008)
ln(Acquirer country GDP /capita)			-0.721	-1.891	-0.894
			(0.687)	(0.263)	(0.589)
ln(Target country GDP/capita)			-0.304*	-0.279**	-3.522**
			(0.086)	(0.016)	(0.022)
Ln(Imports from target nation)			-0.205***	0.618***	0.598***
			(0.009)	(0.000)	(0.000)
Ln(Distance)				-1.196***	-1.247***
				(0.000)	(0.000)
Ln(1+Corporatetax rate ||)				3.171***	2.525**
				(0.001)	(0.013)
Same legal system				0.367**	0.383***
				(0.037)	(0.009)
Same currency				-0.676***	-0.188
				(0.003)	(0.411)
Language				1.286***	1.191***
				(0.000)	(0.000)
Religion				2.245***	1.760***
				(0.000)	(0.000)
WTO				0.203	0.237
				(0.504)	(0.556)
RTA				-0.165	-0.321
				(0.434)	(0.148)
Year fixed effects	YES	YES	YES	YES	YES
Acquirer country fixed effects	YES	YES	YES	YES	YES
Target country fixed effects	NO	NO	NO	NO	YES
Observations	21,402	21,402	21,402	21,402	21,402
Log Likelihood	-29494	-28864	-28233	-26446	-26057

Cultural distance and number of mergers

The dependent variable is the total number of mergers from acquirer country *i* to target country *j* in a panel from 1999 to 2007. The measures of culture (trust, individualism and hierarchy) are measured as the natural log of the absolute cultural distance between the acquirer and target country. Tobit regression of a gravity model are run in columns 1-5. || indicates the absolute difference between the acquirer and target country variables. A constant is included in the model but not displayes in the table. Inclussion of fixed effects is indicated at the end. Significance is at

	ln(1+Number of mergers)				
	(1)	(2)	(3)	(4)	(5)
ln(1+|Trust|)	-4.976***	-4.861***	-4.174***	-0.479**	-0.759***
	(0.000)	(0.000)	(0.000)	(0.023)	(0.000)
ln(1+ |Individu|)	-8.448***	-7.615***	-5.666***	-0.951***	-0.229
	(0.000)	(0.000)	(0.000)	(0.006)	(0.481)
ln(1+ |Hierarchy|)	-2.503***	-2.569***	-3.834***	-0.798***	-0.783***
	(0.000)	(0.000)	(0.000)	(0.005)	(0.003)
Target country corruption		-0.014***	-0.021***	-0.014***	-0.002
		(0.000)	(0.000)	(0.000)	(0.650)
Target country governance		0.599***	-0.236	0.554***	5.025
		(0.006)	(0.225)	(0.000)	(0.423)
ln(Acquirer country openness)			0.625***	0.581***	0.528***
			(0.001)	(0.000)	(0.000)
ln(Target country openness)			-0.176	-0.467***	0.005
			(0.139)	(0.000)	(0.978)
ln(Acquirer country GDP)			5.432***	5.410***	5.236***
			(0.000)	(0.000)	(0.000)
ln(Target country GDP)			0.472***	0.285***	-0.390
			(0.000)	(0.000)	(0.670)
ln(Acquirer country GDP /capita)			-4.548***	-4.535***	-4.383***
			(0.000)	(0.000)	(0.000)
ln(Target country GDP/capita)			-0.192***	-0.172***	0.832
			(0.002)	(0.000)	(0.344)
Ln(Imports from target nation)			-0.133***	0.100***	0.088***
			(0.000)	(0.000)	(0.000)
Ln(Distance)				-0.517***	-0.522***
				(0.000)	(0.000)
Ln(1+Corporatetax rate ||)				-0.102	-0.274
				(0.749)	(0.385)
Same legal system				0.203***	0.222***
				(0.000)	(0.000)
Same currency				-0.280***	-0.094
				(0.000)	(0.175)
Language				0.357***	0.329***
				(0.000)	(0.000)
Religion				0.496***	0.250**
				(0.000)	(0.012)
WTO				0.213**	0.289**
				(0.044)	(0.023)
RTA				-0.128	-0.078
				(0.103)	(0.318)
Year fixed effects	YES	YES	YES	YES	YES
Acquirer country fixed effects	YES	YES	YES	YES	YES
Target country fixed effects	NO	NO	NO	NO	YES
Observations	10,701	10,701	10,701	10,701	10,701
Log Likelihood	-9899	-9620	-9148	-7527	-7158

Cultural distance and number of mergers

The dependent variable is the total number of mergers from acquirer country *i* to target country *j* in a panel from 2008 to 2016. The measures of culture (trust, individualism and hierarchy) are measured as the natural log of the absolute cultural distance between the acquirer and target country. Tobit regression of a gravity model are run in columns 1-5. || indicates the absolute difference between the acquirer and target country variables. A constant is included in the model but not displayes in the table. Inclussion of fixed effects is indicated at the end. Significance is at

	ln(1+Number of mergers)				
	(1)	(2)	(3)	(4)	(5)
ln(1+|Trust|)	-4.631***	-4.335***	-3.426***	-0.457**	-0.909***
	(0.000)	(0.000)	(0.000)	(0.018)	(0.000)
ln(1+ |Individu|)	-7.744***	-7.184***	-4.367***	-0.674**	-0.652**
	(0.000)	(0.000)	(0.000)	(0.038)	(0.049)
ln(1+ |Hierarchy|)	-1.404**	-1.712**	-2.917***	-0.033	0.004
	(0.036)	(0.011)	(0.000)	(0.902)	(0.988)
Target country corruption		-0.010***	-0.016***	-0.010***	0.001
		(0.000)	(0.000)	(0.000)	(0.841)
Target country governance		0.877***	-0.051	0.545***	12.332**
		(0.000)	(0.771)	(0.000)	(0.034)
ln(Acquirer country openness)			1.038***	0.814***	0.702***
			(0.000)	(0.000)	(0.000)
ln(Target country openness)			-0.122	-0.346***	1.005***
			(0.203)	(0.000)	(0.000)
ln(Acquirer country GDP)			1.242	1.353	1.519*
			(0.218)	(0.128)	(0.068)
ln(Target country GDP)			0.553***	0.366***	-1.112
			(0.000)	(0.000)	(0.206)
ln(Acquirer country GDP /capita)			0.198	-0.241	-0.399
			(0.849)	(0.794)	(0.644)
ln(Target country GDP/capita)			-0.062	-0.042	1.474
			(0.329)	(0.282)	(0.103)
Ln(Imports from target nation)			-0.199***	0.021	0.007
			(0.000)	(0.327)	(0.742)
Ln(Distance)				-0.359***	-0.400***
				(0.000)	(0.000)
Ln(1+Corporatetax rate ||)				0.653**	0.152
				(0.038)	(0.648)
Same legal system				0.246***	0.234***
				(0.000)	(0.000)
Same currency				-0.177***	-0.055
				(0.005)	(0.402)
Language				0.368***	0.331***
				(0.000)	(0.000)
Religion				0.482***	0.292***
				(0.000)	(0.003)
WTO				-0.118	-0.319*
				(0.329)	(0.082)
RTA				0.225***	0.185***
				(0.000)	(0.003)
Year fixed effects	YES	YES	YES	YES	YES
Acquirer country fixed effects	YES	YES	YES	YES	YES
Target country fixed effects	NO	NO	NO	NO	YES
Observations	10,701	10,701	10,701	10,701	10,701
Log Likelihood	-10261	-10061	-9346	-7891	-7578

Cultural distance and number of mergers

The dependent variable is the total number of mergers from acquirer country *i* to target country *j* in a panel from 1999 to 2016. The measures of cultural distance is the CDI (Cultural Distance Index) is measured as the natural log of the absolute cultural distance between the acquirer and target country. Tobit regression of a gravity model are run in columns 1-5. || indicates the absolute difference between the acquirer and target country variables. A constant is included in the model but not displayes in the table. Inclussion of fixed effects is indicated at the end. Significance is at 10%,5% and 1% indicated by *,**,***. The p-values are double clustered at the acquirer and target country and are displayed in the parentheses.

	ln(1+Number of mergers)				
	(1)	(2)	(3)	(4)	(5)
ln(1+CDI)	-2.083***	-1.996***	-1.746***	-0.387***	-0.355***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Target country corruption		-0.009***	-0.009***	-0.010***	-0.002
		(0.000)	(0.000)	(0.000)	(0.355)
Target country governance		0.897***	0.285*	0.670***	-2.623
		(0.000)	(0.090)	(0.000)	(0.325)
ln(Acquirer country openness)			0.866***	0.731***	0.688***
			(0.000)	(0.000)	(0.000)
ln(Target country openness)			0.162*	-0.378***	0.323***
			(0.052)	(0.000)	(0.005)
ln(Acquirer country GDP)			1.649***	1.423***	1.257***
			(0.001)	(0.001)	(0.002)
ln(Target country GDP)			0.581***	0.320***	1.191***
			(0.000)	(0.000)	(0.002)
ln(Acquirer country GDP /capita)			-0.437	-0.445	-0.267
			(0.379)	(0.304)	(0.529)
ln(Target country GDP/capita)			-0.033	-0.065**	-1.013**
			(0.519)	(0.034)	(0.011)
Ln(Imports from target nation)			-0.175***	0.065***	0.047**
			(0.000)	(0.001)	(0.014)
Ln(Distance)				-0.394***	-0.416***
				(0.000)	(0.000)
Ln(1+Corporatetax rate ||)				0.681**	0.280
				(0.012)	(0.328)
Same legal system				0.188***	0.198***
				(0.000)	(0.000)
Same currency				-0.212***	-0.075
				(0.000)	(0.174)
Language				0.231***	0.236***
				(0.001)	(0.000)
Religion				0.502***	0.381***
				(0.000)	(0.000)
WTO				0.046	0.048
				(0.593)	(0.652)
RTA				0.105*	0.137**
				(0.056)	(0.014)
Year fixed effects	YES	YES	YES	YES	YES
Acquirer country fixed effects	YES	YES	YES	YES	YES
Target country fixed effects	NO	NO	NO	NO	YES
Observations	19,638	19,638	19,638	19,638	19,638
Log Likelihood	-18867	-18503	-17151	-14672	-14176

Bibliography

(2018, July 1). Retrieved from World Value Survey: http://www.worldvaluessurvey.org/wvs.jsp

Ahern, K. R., Daminelli, D., & Fracassi, C. (2010). *Lost intranslation?The effect of cultural values on mergers.* Texas.

Anderson, O. (1997). Internationalization and Market Entry Mode: A Review of Theories and Conceptual Frameworks. *Management International Review*, 27-42.

Andrade, G., Mitchell, M., & Stafford, E. (2001). New Evidence and Perspectives on Acquisitions. *Journal of Economic Perspectives*, 13-20.

Asquith, P., Bruner, R. F., & Mullins, D. W. (1983). THE GAINS TO BIDDING FIRMS FROM MERGER. *Journal of Financial Economics*, 121-139.

Aw, M., & Chatterjee, R. (2007). The performance of UK firms acquiring large cross-border and domestic takeover targets. *Applied Financial Economics*, 337-349.

Barney, J. B. (1986). Organizational Culture: Can It Be a Source of Sustained Competitive Advantage? *The Academy of Management Review*, 656-665.

Brett, J., & Okumura, T. (1998). Inter-and intra cultural negotiations : U.S. *Academy of Management Journal* , 495-510.

Breusch, T., & Pagan, A. (1979). A Simple Test for Heteroscedasticity and Random Coefficient Variation. *Econometrica*, 1287-1294.

Bruner, R. F. (2002). Does M&A Pay? A Survey of Evidence for the market. *Journal of Applied Finance*, 48-68.

Bruner, R. F., & Perella, J. R. (2004). *Applied Mergers and Acquisitions.*

Campa, J. M., & Hernando, I. (2005). *M&A Performance in the European Financial Industry.* Madrid.

Carrillo, J. D., & Gromb, D. (2007). Cultural Inertia and Uniformity in Organizations. *The Journal of Law, Economics and Organisation*, 743-771.

Chari, A., Ouimet, P., & Tesar, L. L. (2004). *Cross Border Mergers and Acquisitions in Emerging Markets: The Stock Market Valuation of Corporate Control.* Maastricht.

Conn, R. (2003). International Acquisitions: Review of Literature and Clinical Projects. *Journal of Financial Education*, 1-27.

Conn, R. L., Cosh, A., Guest, P. M., & Hughes, A. (2005). The Impact on UK Acquirers of Domestic, Cross-border, Public and Private Acquisitions. *Journal of Business Finance & Accounting*.

Das, A., & Kapil, S. (2012). Explaining M&A performance: a review of empirical research. *Journal of Strategy and Management* , 284-330.

Djankov, S., La Porta, R. L.-d.-S., & Shleifer, A. (2008). The law and economics of self-dealing. *Journal of Financial Economics*, 430-465.

Erel, I., Liao, R., & Weisbach, M. (2012). Determinants of Cross-Border Mergers and Acquisitions. *The journal of Finance*, 15.

Fama, E. (1998). Market efficiency, long-term returns, and behavioral finance. *Journal of financial economics*, 283-306.

Giovanni, J. (2005). What drives capital flows? The case of cross-border M&A activity and financial deepening. *Journal of INternational Economics*, 127-149.

Graham, J., Lemmon, M., & Wolf, J. G. (2002). Does Corporate Diversification Destroy Value? *The Journal of Finance*.

Habib, M., & Zurawicki, L. (2001). Country-level investments and the effect of corruption: some empirical evidenc. *International Business Review*, 687-700.

Harford, J. (2002). Corporate Cash Reserves and Acquisitions. *The Journal of Finance*.

Hofstede, G. (1980). *Culture's Consequences: International Differences in Work-Related.* Beverly Hills: Sage.

Hurvuch, C. M., & Tsai, C.-l. (1989). Regression and time series model selection in small samples. 297-307.

Hyun, H.-J., & Kim, H. (2010). The Determinants of Cross-border M&As: The Role of Institutions and Financial Development in the Gravity Model. *The World Economy*, 22.

Inglehart, R. (1997). *Modernization and postmodernization: Cultural, economic and political change in 43 societies.* Princeton: Princeton University Press.

Jensen, M. C. (1986). Agency Costs of Free Cash Flow, Corporate Finance,. *American Economic Association*, 323-329.

Kogut, B., & Singh, H. (1988). The effect of national culture on the choice of entry mode. *Journal of international Business Studies*, 411-432.

Loughran, T., & Anand, V. (2012). Do Long-Term Shareholders Benefit From Corporate Acquisitions? *The Journal of Finance*.

Mauro, P. (1995). Corruption and growth. *Journal of Economics*, 681-712.

Moeller, S. B., Schlingermann, F. P., & Stulz, R. M. (2004). Firm size and the gains from acquisitions. *Journal of Financial Economics*, 201-228.

Morosini, P., Shane, S., & Singh, H. (1994). *National Cultural Distance and Cross-Border Acquisition Performance.*

Naes, T., & Mevik, B.-H. (2001). Understanding the collinearity problem in regression and discriminant analysis. *Journal of chemometrics*.

Porter, & R., R. (2005). The determinants of cross-border equity flows. *Journal of Financial Economics*, 269-296.

Rau, P. R., & Vermaelen, T. (1998). Glamour, value and the post-acquisition performance of acquiring firms. *Journal of Financial Economics*, 223-253.

Ruback, R., & Dodd, P. (1977). Tender offers and stockholder returns: An empirical analysis. *Journal of Financial Economics*, 351-373.

Schwartz, S. H. (1999). A theory of cultural values and some implications for work. *Applied Psychology: An International Review*, 23-47.

Servaes, H. (1991). Tobin's Q and the gains from takeovers. *Journal of Finance*, 409-419.

Stahl, G., & Voight, A. (2008). Do cultural differences matter in mergers and acquisitions? A tentative model and meta-analytic examination. *Organizatoin Science*, 160-176.

Taras, V., Kikrman, B. L., & Steel, P. (2010). Examining the Impact of Culture's Consequences: A Three-Decade,. *Journal of Applied Psychology* , 405-439.

Trompenaars, F., & Hamden-Turner, C. (1998). *Riding The Waves of Culture: Understanding Diversity in Global Business.* London: Nicholas Breadley Publishing Limited.

Weber, Y., Shenkar, O., & Raveh, A. (1996). National and Corporate Cultural Fit in Mergers/Acquisitions: An Exploratory Study. *Management Science*, 1215-1227.

Weitzel, U., & Berns, S. (2006). Cross-border takeovers, corruption, and related aspects of governance. *Journal of International Business Studies*, 786-806.

Zak, P., & Knack, S. (2001). Trust and growth. *Economic Journal* , 295-321.

Zollo, M., & Meier, D. (2008). *What is M&A performance.*