

Determinants of Takeover Success and the Role of Investor Protection in Cross-Border Tender Offers

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PURPOSE OF THE STUDY

In this thesis I examine tender offers and the determinants which significantly affect their outcome. The focus is on revealing the determinants which help acquirers anticipate the outcome of the offer already before the offer is announced. First, I attempt to find the deal specific determinants which most significantly affect the outcome of tender offers. The second objective of this paper is to measure the country-level differences in investor protection and the effects of these differences to the outcome of the offer. In addition, I try to alleviate the ambiguity relating to the effect of the tender offer premium offered to the shareholders by adding a variable whether the offer price exceeds the target 52-week high price. I also study the determinants in special situations such as hostile and competed offers.

DATA AND METHODOLOGY

A sample of 3783 tender offers from 38 countries was gathered from SDC Platinum. The sample included offers announced and completed during the time period spanning from 1986 to 2010. Supplementary stock price data was collected from Thomson ONE Banker. The investor protection measures, the anti-director rights index used as a proxy for shareholder protection and the creditor rights index are from the papers by Spamann (2010) and Djankov et al. (2007), respectively. The measures for law enforcement and the level of corruption are obtained from World Bank databases. Logistic regression method was used to analyze the data.

RESULTS

Shareholder protection is found to have no effect on the outcome of the offer which adds to the findings of Spamann (2010). High level of creditor rights in the target country decreases the probability of success. Hostile attitude and competition among bidders are found to be the most significant determinants of tender offer success. Both have a negative effect on the outcome. I find the one week offer premium to have a positive impact of the outcome of a tender offer. The effect fades when the variable for offer price exceeding the target 52-week high is added. This confirms that after exceeding a certain level the significance of the premium is low. Contrary to previous findings toeholds are found to have a significant impact only in hostile offers.

KEYWORDS

Acquisition, takeover, tender offer, reference point, corporate governance, investor protection.

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DETERMINANTS OF TAKEOVER SUCCESS AND THE ROLE OF INVESTOR PROTECTION IN CROSS-BORDER TENDER OFFERS

TUTKIELMAN TAVOITTEET

Tämän työn tarkoituksesta on tutkia yrityskauppojen, joiden tekotapa on julkinen ostotarjous, onnistumistodennäköisyyttä, ja selvittää onnistumistodennäköisyyteen vaikuttavia seikkoja. Tutkin ensin kaappakohtaisia seikkoja jotka voivat vaikuttaa tarjouksen onnistumiseen, ja yritän selvittää aiemmassa tutkimuksessa mielipiteitä jakaneen ostohinnan vaikutusta ostotarjouksen onnistumistodennäköisyyteen lisäämällä sijoittajapsykologiaan liittyvän muuttujan, joka vertaa ostohintaa kohteenviimeisimpien 52 viikon korkeimpaan osakekurssiin. Tutkin myös erikoistapauksia kuten vihamielisiä sekä kilpailtuja julkisia ostotarjouksia. Työn toinen tavoite on selvittää sijoittajasuojan tason vaihtelun vaikutusta julkisiin ostotarjouksiin joissa tarjoaja ja ostokohde sijaitsevat eri maissa.

LÄHDEAINEISTO JA MENETELMÄT

Tutkimuksessa käytetty otos käsittää 3783 julkista ostotarjousta 38 eri maasta. Tarjoukset ovat tehty, ja niiden lopputulos on ilmoitettu vuosien 1986 ja 2010 välisenä aikana. Ostotarjouksia käsitlevä aineisto on kerätty SDC Platinum ja Thomson ONE Banker -tietokannoista. Sijoittajien suojaava kuvaava indeksi on otettu Spammann:n (2010) tutkimuksesta, kun taas velkojen suojaava kuvaavan indeksin ovat julkaisseet Djankov et al. (2007). Muut sijoittajasuojaan liittyvät, lakien noudattamista sekä korruption tasoa mittavat indeksit ovat Maailmanpankin tietokannoista. Aineiston analysointi tapahtui logistisen regressionanalyysin avulla.

TULOKSET

Julkisen ostotarjouksen onnistumiseen vaikuttavat vahvimmin kohteen johdon vihamielinen suhtautuminen tarjoukseen sekä kilpailu tarjoajien kesken. Molempien vaikutus onnistumiseen on negatiivinen. Myös ostohinta vaikuttaa onnistumiseen positiivisesti, mutta sen vaikutus pienenee, kun lisään kohteenviimeisen 52 viikon korkeimman osakekurssin hinnan viitetasoksi. Vastoin edellisiä tutkimustuloksia havaitsen, että tarjoajan omistus kohteessa ennen tarjouksen tekemistä vaikuttaa positiivisesti vain vihamielisissä tarjouksissa. Yli rajojen ulottuvissa kaupoissa vain velkojen suoja vaikuttaa onnistumistodennäköisyyteen merkittävästi. Korkeampi velkojen suojan taso vaikuttaa kaupan onnistumiseen negatiivisesti.

AVAINSANAT

Yrityskauppa, yritysosto, julkinen ostotarjous, viitetaso, hyvä hallintotapa, sijoittajasuoja.

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1 INTRODUCTION

1.1 Background and Motivation

Acquisitions are an important instrument for companies to expand their product offering, geographic coverage and to obtain the necessary resources to remain competitive. Because of these reasons acquisitions have been a subject heavily studied by finance scholars. The causes of acquisitions and the following operational and stock market performance of the acquirer and the target are subjects which have been exhaustively documented in the past research. The motivation for corporate acquisitions has been found to range from the creation of operational synergies to managerial hubris and empire-building.

When we enter the domain of corporate acquisitions it can be crudely divided to mergers, which can be described as a combination of two friendly parties and tender offers, which are public offers, made directly to target shareholders to tender their shares to the bidder for a certain offer price. The beauty of a tender offer lies in the feature that target management can be bypassed with a public offer, so the bidder can acquire the target even in a situation where the target management opposes the bid. As no private negotiations take place the bidder cannot extract any knowledge from the target during the negotiations. Because of this the determinants affecting the outcome of a tender offer are an important but a challenging research subject as the outcome of the offer is affected by various different details of the offer.

Probably the most famous study conducted about tender offers is the one made by Bradley, Desai and Kim (1988) who study the effects of tender offer announcements to the stock prices of the target and the bidder. They confirm the hypothesis that corporate acquisitions create positive synergies which increase the value of the target and the bidder. They measure positive combined abnormal stock returns of 7.4% for the target and the bidder at the announcement of the tender offer. Consequently, failing in a tender offer has its effects on the bidder as well as for the target. Flanagan et al. (1998), report that 23% of all tender offers between 1977 and 1988 were unsuccessful. Bradley et al. (1983) confirm that on average the stockholders of unsuccessful bidding firms suffer a significant wealth loss, which is related to the loss in a control contest to a rival. The negative wealth effect is caused by the competitive disadvantage position at the

product market resulting from the failed acquisition. Ruback (1988) adds that a failed bid also reflects negatively in the future returns of the target as well.

As the potential positive and negative effects of tender offers are well-defined the next step is to determine how a bidder can maximize the probability of success when making a tender offer of a company. The factors or determinants affecting the outcome of a tender offer are a subject which has been less studied than, for example the announcement effects, or the reasons behind those effects. The reason probably is that the predicting tender offer outcomes is a complicated matter as the scale of potential of factors affecting the outcome is quite large.

The most influential empirical papers taking multiple determinants into consideration about tender offer success are the ones written by Walkling (1985) and Hoffmeister and Dyl (1981). Hirsleifer and Titman (1990) build a theoretical model on the subject. One of the latest papers is the one written by Flanagan et al. (1998).

Out of all the determinants affecting the outcome of a tender offer the attitude of the target management has been found to be the most influential one. All the previously mentioned studies have confirmed that negative, hostile target management reaction to the tender offer announcement has a significant negative impact on the outcome of the offer. Although the offer is made directly to the shareholders the opinion of the management is important as they can use all kinds of takeover defenses to deter the bid (Baron, 1983). The reason for hostility can be strategic, hostility is used as a negotiation tactic to drive the offer price upwards or it can occur because of managerial entrenchment (Schwert, 2000).

The role of the premium offered to target shareholders has been the most controversial question so far. Hoffmeister and Dyl (1981) and older studies have found the offer premium to be an insignificant determinant of the offer success. Conversely, Walkling (1985) presents empirical results that the size of the offer premium has a significant positive effect on the outcome of the offer. He reasons that the previous results are due to the misspecification of the premium due to rumors and information leakages affecting the target stock price already before making the SEC filing. The theoretical model of Hirsleifer and Titman (1990) clearly indicates that the probability of success increases linearly with the size of the premium offered. But to make the matter even

more ambiguous, Flanagan et al. (1998) find the size of the premium insignificant in their empirical paper.

One interesting theory which could help in explaining the role played by the tender offer premium is presented by Baker et al. (2009). They tie the tender offer price to the target 52-week high price during the year prior the offer and use the high price as a psychological reference point (Kahneman, 1992). They find that an offer exceeding this reference point is more likely to succeed than an offer where the premium offered is lower than the reference point price. This shows that anchoring the premium to a certain level might help succeeding in an offer more than the absolute level of the premium offered.

Another determinant which has been documented to have a positive effect on the outcome of the offer is the toehold held by the bidder (Walkling, 1985; Hirsleifer and Titman, 1990; Flanagan et al., 1998). Toehold represents the percentage of target shares held by the bidder before the announcement of the tender offer. The empirical results of the effect of the toehold are very clear, but still using a toehold is rare in non-hostile acquisitions (Betton et al., 2009).

In addition to the above mentioned determinants there are other less frequently studied determinants, such as competition among bidders and the method of payment used, to mention a few, which have been found to have an effect on the outcome of the offer, but the effects have not been as clear as with the previously mentioned ones. That combined with the uncertainty related to the effects of certain determinants such as the offer premium proves that there is still ground to cover in the research related to the success of tender offers.

1.2 Objective and Contribution

In this thesis I examine tender offers taking place between 1986 and 2010, and the determinants which significantly affect their outcome. The focus is on revealing the determinants which help acquirers anticipate the outcome of the offer already before the offer is announced.

First, I try to find the significant determinants affecting the outcome of the tender offer with a global sample of 3873 tender offers from 38 countries consisting both domestic and cross-border offers. The second objective of this paper is to measure the country-level differences in investor

protection and the effects of these differences to the outcome of the offer. This is done with a smaller sample consisting of only cross-border tender offers.

The research questions of this thesis are the following:

- 1. What are the determinants affecting the outcome of a tender offer?*
- 2. How does the level of investor protection affect the outcome of cross-border tender offers?*

The first research question relates to the theoretical paper by Hirschleifer and Titman (1990) and to the empirical research conducted by Walkling (1985) and Flanagan et al. (1998). I try to find the significant determinants affecting the outcome of the offer which have been proven to have an impact on the outcome of the offer. My goal is to find the most significant factors explaining the outcome from the determinants used in the previous literature. To evaluate the significance of the offer premium in a more versatile manner I include the comparison of the offer price to the 52-week target high price to the analysis as Baker et al. (2009) did.

In order to reveal more information about the effects of hostility and competition to the outcome of the offer I divide the sample according the attitude of the target management and the number of bidders and study the effects in these smaller samples. I anticipate that this approach should yield better explanations for the current results observed. As my sample consists of targets from 38 different countries I analyze the differences in the results for different countries and country groups in addition to studying the effects in the large sample. The previous research has heavily concentrated on targets based in the United States.

The second research question deals with country-level differences in corporate governance and in the resulting level of investor protection and how these affect the outcome of a cross-border tender offer. The target management holds large influence over the outcome of a tender offer even though it is an offer made directly to the shareholders. In cross-border offers it is possible to observe whether better governance and investor protection changes this. The level of corporate governance also affects the influence of other stakeholders such as creditors over the company matters. In countries where the level of creditor protection is high, creditors should have more power in corporate decisions affecting the level of cash flow risk the company faces.

I measure the level of shareholder and creditor protection with the indices constructed by Spämann (2010) and Djankov et al. (2007). Also the level of law enforcement and corruption is taken into account in the analysis. The differences in investor protection are a fairly new subject in M&A research. There are few studies which have looked at the effects of cross-border acquisitions causing a corporate governance transfer (Bris and Cabolis, 2008a; 2008b; Martynova and Renneboog, 2008). A corporate governance transfer denotes the effect occurring when the level of investor protection differs in the bidder and target countries. Bris and Cabolis (2008a, 2008b) and Martynova and Renneboog (2008) measured the effect of the corporate governance transfer to the announcement returns of the bidder and the target and found significant positive abnormal returns in conjunction with cross-border acquisitions where the bidder comes from a better investor protection environment than the target. The abnormal returns are linked to the potential value improvements in the target which are achieved through better monitoring of the management leading into lesser agency problems. I apply their approach to see whether corporate governance transfer and investor protection overall plays any role in defining the outcome of a tender offer.

Contribution to the existing literature

The contribution of this thesis to the existing line of literature dealing with the success of tender offers is manifold. I test the previous determinants with a larger and more heterogeneous sample. This should add credibility and validate some of the previous results. In addition, I use new behavioral finance and corporate governance theories to find new evidence about the success of tender offers. The areas of contribution are the following:

1. The main contribution of this thesis comes from the examination of cross-border tender offers and the effects of country-level investor protection to the outcome of a tender offer. Martynova and Renneboog (2008) and Bris and Cabolis (2008a; 2008b) have found positive abnormal returns associated with investor protection improving acquisitions, but no study yet, to my knowledge, has examined the effects of the level of investor protection to the outcome of a tender offer.
2. Contrary to previous academic studies focusing to targets in a single, developed market area, primarily to the US (Walkling, 1985; Flanagan et al., 1998), I provide evidence about tender offer activity from a more general, global perspective. As my

sample consists of targets from 38 countries I am able to do some country level analysis and comparison for single countries which have sufficient amount of observations. My sample size, 3783 observations is distinctly larger than the samples used in previous studies which rather used samples with hundreds than thousands of observations. This should add some statistical credibility to the results. The large sample size also guarantees large enough number of hostile and competed bids which provides me an excellent opportunity to analyze these special cases of tender offers.

3. I use behavioral finance theory, specifically the theory about reference points (Kahneman, 1992) to further explain the role of the offer premium in tender offers. The significance of the offer premium has been a contradictory subject as some researchers have found it to be significant while others have not. The use of reference point theory in acquisitions has been documented only recently by Baker et al. (2009) and the focus of their paper is more on validating the position of the target 52-week high price as a meaningful psychological reference point when evaluating acquisition offers. But they also show that anchoring the offer price to a reference point improves the possibility of success in mergers and acquisitions.

A few master's theses have previously studied the success of tender offers. Kallio (2004) examines the traditional determinants of success with a European dataset. Aatola (2004) focuses on hostile takeovers, takeover defenses and their effect on the outcome of the tender offer. Niinivaara (2010) follows closely the paper of Baker et al. (2009) and touches the subject of tender offer outcome prediction while trying to find the relevance of the target 52-week high as an investor reference point.

1.3 Main Findings

Tender offers are found to be a takeover mechanism typical especially for countries which have adopted English common law as their legal system. 80 % of all offers are conducted in these countries. These countries include the United States and the United Kingdom which are considered to have the most sophisticated capital markets in the world. I suspect that private

negotiations are strongly favored in countries other than the UK or the UK as a transfer mechanism of corporate control.

The novel findings of this thesis relate to cross-border offers. I evaluate the effect of investor protection differences in target and bidder countries to the outcome of tender offers.

When I test the investor protection variables for the target and the bidder individually I find a bit unexpected but logical results. Shareholder protection is found to be insignificant as a determinant of tender offer outcome. However, as shareholders vote with their wallets in tender offers the result makes sense. All that is required is that the ownership of the individual shareholders is recognized. This adds to the line of results published by Spamann (2010) who revises the anti-director rights index constructed originally by La Porta et al. (1998). Spamann discards many previous results with the corrected index and I can add that shareholder protection does not explain the outcome of tender offers either.

But I find consistent evidence that the level of target creditor protection has a significant, negative effect on the outcome of a tender offer. The reason for this lies in the risk-averse nature of creditors. Companies based in countries with a high level investor protection follow less risky operating and investment strategies (Acharya et al. 2009). Creditors are also more influential in these countries. In countries with higher creditor protection the relative size of the private credit sector, measured by the proportion of private credit to GDP, is larger, and thus, it is more influential (Djankov et al, 2007). An outside acquirers plan could be to add value by increasing the operating risk of the target company. This would make cash flows of the target company more volatile. That poses a threat to target creditors, so they react negatively. This setting can be seen as an asset substitution problem (Jensen and Meckling, 1976) in which the creditors resist the increase of risk of the target assets by resisting the change of control. The negative effect on the outcome is due to creditors using their influence over the target management to resist the bid.

The attitude of the target management and competition among bidders are found to be the most significant, deal specific determinants of tender offer success. Both are negative and highly significant in every model studied in this thesis. I find the offer premium being significant and positive in hostile offers which implicates that hostility is used as a negotiation tactic. The negative effect of hostility to the outcome of an offer ranges from 37% to 60% while competition

among bidders decreases the probability of a single offer succeeding at least by 18%. The impact on the success probability of most other independent variables is very small in comparison.

I find the one week offer premium to be a significant predictor of the outcome of a tender offer. This confirms the theoretical reasoning of Hirsleifer and Titman (1990) and the empirical results of Walkling (1985). The effect is positive, so a higher premium improves the probability of success. To better understand the ambiguity around the significance of the tender offer premium I included a variable whether the offer price exceeds the past 52-week high price of the target as a psychological reference point found to be meaningful by past studies (Baker et al., 2009). When this variable was included the significance of the one week premium faded while the new variable was found to be highly significant and have a positive effect on the outcome of the offer. This confirms that after exceeding a certain level the significance of the premium is low. I also found the offer price exceeding the 52-week high to have a positive effect on the outcome in single-bidder situations when the target shareholders cannot compare competing bids but have to evaluate the relative level of the offer against some other benchmark.

Cash is definitely the favored method of payment in tender offers. The higher the level of cash used also increases the probability of success significantly. A cash offer is easy to evaluate even by a layperson and there is no fear of receiving overvalued stock in return (Shleifer and Vishny, 2003).

Toeholds have been found consistently to have a positive effect on the tender offer outcome (Walkling, 1985; Hirsleifer and Titman, 1990; Flanagan et al., 1998). I make a slightly contrary finding and confirm that toehold is a significant determinant and has a positive effect on the tender offer outcome but only in hostile offers. This result is in line with Betton et al. (2009) who associate toeholds mainly with hostile offers. Contrary to toeholds, I find that termination fees are mainly used in friendly offers. The use of termination fees is however, limited to US based targets and bidders. The inclusion of a termination fee has a significant positive effect on the outcome of the offer but it only holds in the sample consisting of US based targets.

1.4 Limitations of the Study

As in all research, there were some limitations to this study which are discussed here.

First, the lack of data, mainly missing data for offer or stock prices and the method of payment, forced me to eliminate almost 2000 tender offers from the initial sample. Further 2000 events were eliminated because they lacked historical stock price data necessary in the analysis of psychological reference points affecting the outcome of the offer. The heavy elimination of events probably hit observations outside the United States relatively more. This led to a bit unbalanced sample where almost 40% of the targets were from the US and nearly 80% of the targets were located in developed countries with the English common law system in place. This decreased the diversity of the sample and limited the amount of country-level comparisons. And of course, the sample could be better balanced in the light of successful and failed offers. Only 15% of all offers were failed ones.

Due to the scope of this thesis I had to leave variables, such as ownership structure and board and management ownership out, which could have been significant factors and added to the explanatory power of the models. These factors could have helped in explaining better the hostile reactions of the management as well as the amount and role of private benefits enjoyed by the management in cross-border offers and in differing investor protection environments.

Some compromises had to be made in the analysis of cross-border offers and investor protection. Observations from certain countries had to be left out as the shareholder protection index (Spamann, 2010) covers only 47 countries. The indices for creditor protection, law enforcement and corruption are dynamic and adjust in time but the shareholder protection index is a static one. This could have affected the results as the change in the level of shareholder protection is not reflected in the results. The ideal situation would be to construct a dynamic, more detailed index for all countries like Martynova and Renneboog (2010) have done for European countries and the US. One last thing I would have liked to include was an accounting standards index, but the only one I'm aware of is the one presented in La Porta et al. (1998) which is based on the accounting procedures of the year 1990. As there has been a significant development in the international accounting standards I decided not to use the index.

1.5 Key Terms

This part briefly explains the key terms used most frequently in the thesis.

Acquisition is a general term referring to a takeover in which one company takes over the control of another company. An acquisition can be conducted through a merger or a tender offer.

Tender offer is an offer made directly to target company shareholders to sell their shares to the bidder for a certain offer price.

Hostile offer is a tender offer which is not approved by the target management. The target management may aggressively resist the completion of the offer.

Competed offer is a situation where multiple bidders present offers for the target company shareholders and compete for the control of the target company.

Offer price is the price offered for the target shares in a tender offer.

Offer premium is the relative amount by which the offer price exceeds or is below the target stock price when the offer is made.

Toehold represents the percentage of target shares held by the bidder before the announcement of the tender offer.

Reference point is in this context an arbitrary level chosen by the investor to which the investor compares the offer price.

Investor protection is a general expression for shareholder and creditor protection.

1.6 Structure of the Study

The rest of the thesis is structured as following. In Section 2 I go through the existing literature on acquisitions, tender offers and corporate governance more thoroughly. The hypotheses based on the theory are presented after that in Section 3. Section 4 describes the dataset and research methods used. The empirical results are then presented in Section 5 and Section 6 concludes.

2 LITERATURE REVIEW

This section reviews the academic literature about acquisitions and tender offers and builds the necessary theoretical framework for evaluating the success of tender offers. I will first go through the general theories concerning mergers and acquisitions and factors that drive the takeover

market, and then plunge deeper into matters relating to tender offers and the determinants which academic literature has found to have the most significant effect on the tender offer outcome. In addition, I will provide reasons from the existing literature that why these factors are determinants of takeover success and what causes them.

The last part of the literature review concentrates on studies about different corporate governance and legal systems, their characteristics, and on the effects of country-level differences in investor protection in cross-border acquisitions.

2.1 Theories of Mergers and Acquisitions

There is said to be a market for corporate control in which managers compete with each other for the control of corporate resources (Manne, 1965). Jensen and Ruback (1983) define corporate control as the right to determine the management of corporate resources. Competition for these corporate resources arise as managers think they are able to use the resources more efficiently or apply an alternative operating strategy that will enable the more efficient use of those resources and increase the value of their company (Bradley, Desai and Kim, 1983). Managers can obtain the control of these resources through acquisitions of other companies or their assets.

Takeover methods

Acquisition is a general term which refers to any takeover. Manne (1965) defines two major takeover methods, direct purchase of shares and merger. The most common method of share purchase is to make an offer on the open market (tender offer) for a certain percentage of shares outstanding. Other option would be to buy the shares from large individual owners privately preserving secrecy and allowing negotiation on price. Also, the possible acquirer may make a bid for tenders, a request for the shareholders to make an offer for him for the shares. This method is inconvenient especially with companies which have a large shareholder base. In addition to direct share purchases a merger can be used to complete an acquisition. In a merger two companies combine their resources into a single company. Shares instead of cash are typically used as the method of payment. Mergers are the product of negotiations between the management of the bidder and the target so they are friendly acquisitions whereas a takeover through share purchases can be completed with or without target management's approval.

Agency problems and hubris

Halpern (1983) identifies two classes of different acquisition theories. The first one deals with non-value maximizing behavior of managers. Acquisitions of this type have no economic gains to be divided among the parties of the acquisition, the target and the acquirer. Any positive gains for other party will result in negative gains for the other. Acquisitions are attempts to maximize sales or assets and grow the “empire” that the managers control. This theory is supported by Jensen (1986) who argues that managers whose companies have performed well in the past and have abundant free cash flow are likely to engage in value-reducing acquisitions which increase the size of the company but decrease its shareholder value. Another supporting theory is laid down by Shleifer and Vishny (1989) who build a model of managerial entrenchment. According to the model managers will engage in investments that increase the value of managers to shareholders but do not increase value of the company itself.

Also psychological factors can lead into non-value maximizing acquisitions. Roll (1986) created a theory suggesting that managers engage into takeovers because they suffer from managerial hubris i.e. they believe that they are better in controlling assets than other managers. This leads into overbidding in takeover contests and shareholder value destruction. Hubris theory suggests that mergers can occur even if they have no effects on value. Another version of hubris is CEO overconfidence discussed by Malmendier and Tate (2008). They find that overconfident CEOs are more likely to make acquisitions, they overpay for targets and the acquisitions undertaken by companies led by overconfident CEOs are value-destroying.

Synergies

The second set of theories presented by Halpern (1983) is about value-maximizing acquisitions. These acquisitions result into positive economic gains which derive from multiple different sources. These sources include redeployment of excess cash held by the target or the acquirer, reducing the probability of default and increasing debt capacity through diversification, creation synergies and reduction of information asymmetries such as undervaluation of target shares only known only to the acquirer prior the acquisition. Value maximization can also be motivated by replacing the incumbent management or operating strategy with a more efficient one.

Synergies derive from control of the target which enables the acquirer to redeploy the combined assets of the two firms. Sources for value creation include more efficient management, economies of scale, improved production techniques, combination of complementary resources and increased market power (Bradley et al., 1983). Bradley et al. (1988) confirm the synergy hypothesis in their event study of tender offers and document that successful acquisitions increase the combined value of the target and the acquirer by 7.4% on average. Most of the gain is captured by the shareholders of the target but also acquiring firms realize significant positive abnormal returns. A more recent study by Moeller, Schlingemann and Stulz (2004) contradicts the prediction that both parties win in acquisitions. They find that acquirer returns are related to company size and large acquirers pay large premiums and gain negative returns. They link this result to the hubris hypothesis presented by Roll (1986).

Information asymmetries, industry shocks and merger waves

Information asymmetries and perceived under or overvaluation of companies has also been listed as a reason for acquisitions. Shleifer and Vishny (2003) present a model which implies that acquisitions are driven by stock market valuations. Overvalued firms know that they are overvalued and try to make acquisitions of undervalued firms with their own stock. Acquisition activity increases when dispersion of valuation among firms grows (acquiring with stock becomes more affordable). This can be industry-specific (certain sector of the market being overvalued), so acquisition activity centers on a certain industry creating merger waves, such as the conglomerate mergers of 1960s and the dot-com boom of the late 1990s which both occurred during periods of high market valuations. The paper by Rhodes-Kropf and Viswanathan (2004) also supports the theory that market valuations drive merger waves.

Other explanation given for merger waves and acquisitions in general has been the neoclassical theory (Mitchell and Mulherin, 1996). The neoclassical theory treats mergers as the response to industry shocks due to changes in an industry's economic, technological or regulatory environment. Harford (2005) investigates the two explanations given for merger waves, the neoclassical and behavioral theory (managers taking advantage of misvaluation) with the merger activity of 1980s and 1990s and concludes that in these cases the merger waves were caused by industry level shocks. Shocks are not the sole reason for merger waves as the forming of a wave also requires macro-level liquidity to support the continuous merger activity.

2.2 Tender Offers

As mentioned before a tender offer is one form of acquiring a company. Bradley (1980) defines a tender offer as a bid for the right to control the resources of the target firm. It is a proposal made by the management of a firm to purchase a significant fraction of the outstanding stock of another company. The offer is made directly to the stockholders of the target firm. The offer is successful if the acquirer manages to acquire the amount of shares required to control the company.

First, the bidder typically seeks the approval of the company board of directors and management. If the management favors the bid and recommends shareholders to accept it, the offer is said to be *friendly* and if the management opposes and does not recommend accepting it, the bid is *hostile*. However, the beauty of tender offers is that the target shareholders have the final vote with their wallets, so the bid can succeed even without management approval. The offer can be conditional or unconditional; in a conditional offer the acquirer requires that he will acquire a certain percentage of the target shares, otherwise he will not buy any shares at all. The offer can also be restricted or unrestricted; in a restricted offer the acquirer sets a limit of a maximum percentage of shares it is willing to buy.

In a hostile takeover the acquirer makes a tender offer for the shareholders of the target company despite the opposition of the target management. Hostility is perceived as aggressive rejection of the public tender offer (Schwert, 2000). Hostility can be used to reject the tender offer totally or it can be used in many cases as a negotiation tactic to increase the premium offered for the target shareholders. The target company can use all kinds of defensive measures to prevent the acquirer from completing the tender offer. It can use poison pills or even invite a white knight, an acquirer favored by target management, to acquire the shares of the target company.

Other characteristic of tender offers is that they can be contested. As the tender offer process is public, the announcement of the first bid may invite other competing bidders to bid for the control of the target as well. Bradley (1980), states that information produced by the initial offer enables other firms to make value-increasing changes in the target firm. The initial bid is a signal about the real value of the target company. However, management hostility and inviting white knights in play usually increases competition which can be a tactic used by the target to drag the offer price upwards (Schwert, 2000). Also Jennings and Mazzeo (1993) link hostility and competition closely together.

Some tender offers are required by legislation. Depending on the country and the legislative system a shareholder is required to make a mandatory bid to all other shareholders when its ownership stake in a company exceeds a certain limit (30%, 50% etc.). Also, usually if one shareholder owns over 90% of all the shares in a company he has the right and the obligation to tender the remaining shares and “squeeze-out” the remaining minority shareholders. On the other hand, the minority shareholders also have the sell-out right in the similar situation.

Tender offer process

The tender offer process is divided into three different time periods: pre-announcement, post-announcement and post-execution. Typically offers are announced two to three weeks in advance of the date of execution (Bradley, 1980). The time between announcement date and execution date is the offer period during which the shareholders have to decide whether to tender their shares or not. In this thesis I will concentrate on the pre-announcement period. The prediction of success is based on the factors known after the target is selected but before the offer is made.

Failure of tender offers

Not all tender offers succeed. Actually a major fraction of all tender offers do fail due to multiple reasons. The most influential single reason is the resistance of target management (Walkling, 1985). Bradley et al. (1983) record 112 initial unsuccessful tender offers in their total sample of 371 tender offers. Unsuccessful initial tender offers count for over 30% of their sample. However, Fabozzi et al. (1988) note that many of unsuccessful bids in their sample were revised bids. They confirm with this with a sample of their own spanning from 1977 to 1983 that approximately 17% of tender offers actually fail. Flanagan et al. (1998) show that 23% of takeovers between 1977 and 1988 were unsuccessful. The same is observed on the other side of the Atlantic. Holl and Kyriazis (1996) gather a sample of 238 tender offers from the UK during the 1980s. 60 bids or about 25% of the sample were unsuccessful.

Failing in a tender offer has its costs to both parties involved. The costs for the bidder are more straightforward and easier to comprehend. Screening for targets, planning and executing the offer take time, especially top management time, money and require many times the use of costly advisors. Also, if a company loses a tender offer contest to a close competitor it might drive the loser into a bad competitive position on the product market. Bradley et al. (1983) confirm that on

average the stockholders of unsuccessful bidding firms suffer a significant wealth loss after the termination of the offer. This happens only in situations where the company loses a contested bid to a rival bidder. If the bid fails but the target is not acquired by another company either there is no adverse wealth effect. They conclude that losing a bid for resources to a rival puts the company in a position of competitive disadvantage at the marketplace.

A failed tender offer has its implications on the target as well. Fabozzi et al. (1988) show that the premium offered disappears from the stock price the year after the announcement of the withdrawal. Second, the target is not able to generate any abnormal excess returns in the post-announcement year. Ruback (1988), finds that the loss of excess abnormal returns for the target can last three years after the termination of the offer, which implies that the failure of a control contest is costly also for the shareholders of the target firm.

2.3 Determinants of Tender Offer Success

The determinants of tender offer success can be divided into multiple categories according to their nature: deal specific unique to each deal, target and bidding company specific, determinants relating to industry and the relation between the two companies engaged in the offer. The focus of this thesis is on predicting the outcome of the offer based on the deal and relation specific matters with a few variables relating to company and industry specific matters.

I will not take financials or asset structure into consideration as those are factors which affect the selection of the target more than the actual outcome of the tender. Those have been already proven to be insignificant in determining the outcome of the offer by previous studies (Ebeid, 1974; Hoffmeister and Dyl, 1981). The movement of share prices is another factor that has been proved to predict the outcome of acquisitions, and is used in merger arbitrage (Brown and Raymond, 1986). Share price movements predict the outcome during the offer period after the offer is announced while I try to contribute to the prediction of the outcome before the announcement.

The single factor that contributes the most on the success of a tender offer is the attitude of the target management. Hostile reaction has a negative effect on the outcome of the offer. Another much discussed factor, the size of the offer premium divides opinions, although recent studies have linked the premium into psychological reference points and gained evidence about the

positive effect of the premium to the outcome. Other factors analyzed include pre-bid ownership in the target, competition and the method of payment as well as a few other less studied determinants.

First, I will go through the comprehensive studies about tender offer success prediction which take as many predicting variables into consideration as they see fit for the purpose. After, that I revise the literature that focuses more on single variables which have been proven to have an effect on the outcome of the offer.

Comprehensive studies

I begin the review of comprehensive studies relating to tender offer success prediction with the theoretical paper by Hirsleifer and Titman (1990). They present a model of tender offers in which the bid reveals perfectly the private information the bidder has about the target and the value improvement that can be generated by the takeover. The authors improve previous models of tender offers (Grossman and Hart, 1980; Shleifer and Vishny, 1986) by adding the possibility of failure to their own model. A fundamental property of the bidding game is that shareholders are more likely to accept high than low bids. This implies that bidders with high value improvements and consequently high valuations are more likely to win contests. The offered premium is also increasing with the number of bidders involved. The authors also take shareholder free-riding and potential management resistance into consideration. They notice that management resistance can sometimes affect the bid outcome positively as it reveals information about the target and encourages higher bids.

The model suggests that one of the key determinants of the outcome of the tender offer is the amount of information possessed by the target shareholders. If information is symmetric then the bidder can tailor its bid to reflect the value of the company. But if information is asymmetric even overbidding might not win the contest as target shareholders may consider the bid to low if they interpret that the post-takeover value of the company is higher. In addition to the premium offered and management resistance, Hirsleifer and Titman find that high initial shareholding (toehold) by the bidder and the possibility of dilution of minority shareholders increase the probability of successful offer outcome.

The most important empirical study on the subject of takeover prediction has been made by Walkling (1985). He tests the variables affecting to tender offer success empirically with a sample of 158 US cash tender offers registered during the period 1972 through 1977, with both linear and logistic regressions. Previous studies had used linear models but Walkling argues that logistic regression should be better suited for predicting probabilities. Previous papers also had results which contradict the standard economic theory. The studies had found that the tender offer premium is not a significant factor influencing tender offer outcome.

Walkling argues that the results are due to false specification of the offer premium. This can be due to the fact that in many cases the offer is published in newspapers before the SEC filing. To overcome this misspecification he uses three different percentage premiums measured at different points in time: premium based on the market price fourteen days before the SEC filing, premium based on market price fourteen days prior the earliest of SEC dates or offer announcement and the pro rata effect weighted average of the second premium. Other modeled variables include managerial resistance, pre-offer ownership in the target held by the bidder, solicitation fees paid to brokers by the bidder and competing bids. Bid success is defined as the situation in which the bidder acquires greater than the average number of shares sought.

The main results of Walkling are the following: management resistance has a significant negative impact on the offer outcome and bidder toehold in the target is a positively significant variable. The bid premium size is significant and positive contrary to previous results when measured prior the market has received any information about the offer. So, the specification of the premium is very important. Also solicitation fees to brokers increase the chance of success.

The earlier studies about this subject were all made with US data as well. Hoffmeister and Dyl (1981) model and study 84 cash tender offers made during 1976 and 1977, whose outcome was known and had enough public data for the study. They use linear regression models for their analysis. 17 independent variables were used to develop the model. Financial position variables included current ratio, profit margin, payout ratio, dividend yield, P/E ratio, return on equity and growth in earnings and dividends for the two years prior the offer. Industry position was measured by comparative current ratio, profitability and return to equity. Other variables included percentage of outstanding shares being sought, market value of the target, toehold owned by the bidder, the size of the bid premium two weeks before the tender announcement measured from

market and book values and the attitude of the management. Out of all these variables they confirm that management resistance is decisive in determining the outcome of tender offers. Other significant and negative variable was target firm size. Growth in earnings, current ratio, payout ratio and P/E ratio had lesser effect on the success. The tender offer premium was found to be an insignificant estimator of the success or failure of the tender offer.

Three Ph.D. dissertations by Quirin (1971), Pelligrino (1972) and Ebeid (1974) take a view on the factors affecting the outcome of tender offers. Ebeid tests twenty eight different variables measuring different operating, market and bid characteristics. Only target management resistance has an effect to the outcome of the bid. The same result is confirmed by Pelligrino's paper. The only paper from the 1970s stating that bid premium has an influence on the outcome of the bid is made by Quirin.

The most recent US based study about tender offer success is made by Flanagan et al. (1998). It is the most comprehensive one done so far with a sample size of 991 tender offers spanning over the time period of 1985 to 1994. The dataset is new compared to previous studies done in the 1980. They also use variables which had not been previously studied such as termination fees, family ownership of a target, nationality of a target and the payment method used in the transaction. The probability of tender offer success was positively affected by same primary industry status, cross-border status, the presence of termination fees and the size of the toehold the acquirer held at the day of the announcement. The probability of success was negatively affected by the use of a two-tier deal structure, competing bidders and negative target management reaction. Bid premium, target profitability or family ownership did not make a significant difference to tender offer outcome.

Although, the majority of tender offer studies have been made in the US and with US data, there are few studies done with European data as well. Holl and Kyriazis (1996) test the determinants of takeover success with a sample of 238 takeover attempts made in the UK during the 1980s. In addition to the usual variables used to predict the success of tender offers they also investigate the role of different types of share ownership. They find evidence which support the previous line of literature in the prediction of tender offer outcome. Management resistance and the wealth effects of the bid (premium) have a significant effect to the outcome. Also, pre-offer toehold and the ownership of the target directors are also significant factors contributing to the outcome.

Elsland and Weber (2006) present evidence from German tender offers in their working paper. They analyze 105 tender offers (mandatory, takeover and acquisition offers) made in Germany during the period between 2002 and 2005. What is novel in their approach in comparison to traditional papers predicting takeover success is that they combine the traditional determinants with behavioral factors, particularly with the reference point effect, which may influence the target shareholders' decision and thus the whole outcome of the tender offer. The authors use prospect theory by Kahneman and Tversky (1979) as the backbone of their argument. Prospect theory indicates that investors are risk-averse for gains and risk-seeking for losses. Reference point theory suggests that shareholders evaluate their selling decision relative to a mental reference point (Kahneman, 1992). Gains and losses realized by the investor are related to some familiar but possibly economically irrelevant reference point such as wage the investor has chosen as a benchmark. Because of this reference points are relevant in analyzing takeovers and the premiums offered and accepted.

In the paper of Elsland and Weber the 52-week high and low prices of the target and a 52-week relative compensation based on the high and low values are used as reference point over which the offer premium is calculated in addition to the premium measured with conventional methods. Their results are in line with the previous literature concerning the traditional determinants of tender offer success. Target management attitude and high tendering have a positive relationship. Also the type of the offer has an effect to the tendering behavior. The behavioral factors are found significant. The relative compensation measure and tender offer success have a positive correlation.

Another paper that includes behavioral variables into the prediction of takeover success is the working paper written by Baker et al. (2009). They use judgmental anchors or reference points to determine whether offer prices, deal success, market reaction and merger waves are affected by these reference points. Their sample consists of 7498 deals (of which 1522 are tender offers) from the period of 1984 to 2007 and probit regression is used to analyze the sample. The authors reason that the reference point theory complements other theories of mergers; especially in the case of analyzing the offer premia. They focus especially on the 52-week high as a judgmental reference point for investors as it is widely reported in financial press and thus provides an easy psychological benchmark for valuing a company . The paper finds evidence of offer prices being

biased toward 1s the 52-week high and that the probability of deal success increases when the tender offer price exceeds the 52-week high. In their sample the probability of success is 69.9% for deals in which the offer price does not exceed the 52-week high and 76.9% for deals in which it does exceed the 52-week high.

The 52-week high is measured for the 52-week period ending 30 days before the announcement date to avoid the effect of deal rumors on the offer premium. Other variables used include offer premium, payment method, target management attitude, deal type and the logarithm of target and bidder market capitalization. In addition to the positive effect of the offer price exceeding the 52-week high, Baker et al. note that target management hostility and target size reduce the probability of success while bidder size and the deal being a tender offer increase the probability of success.

After reviewing the comprehensive studies about takeover success I now proceed to analyze the studies which provide information about the single factors, some already covered in the comprehensive studies, which have an effect on the outcome of the takeover.

Target management resistance

Based on the comprehensive studies it is already clear that target management plays a huge role in deciding the outcome of the takeover attempt. Almost all comprehensive studies (Pelligrino, 1972; Ebeid, 1974; Hoffmeister and Dyl, 1981; Walkling, 1985, Hirsleifer and Titman, 1990; Holl and Kyriazis, 1996; Flanagan et al. 1998; Elsland and Weber, 2006; Baker et al. 2009) noted that target management resistance is the single largest factor affecting the outcome of takeovers and has mainly a negative effect on the probability of success.

Baron (1983) constructs a theoretical model of takeovers to resolve the puzzle of management resistance. To resist an offer the target may use multiple defenses such as purchase its own shares, file antitrust suits, attempt to acquire another firm or sell assets to make itself less attractive to the offeror. Also shark repellents which make acquiring a majority stake hard or charter provisions that require supermajority votes of shareholders for business combinations or classified boards serve as good defense mechanisms against takeovers. His hypothesis is that management resists takeovers because they think that the current offer is too low and does not represent the true value of the company. Other reason for resistance is the need for managers to

stay in control of the company. They find that managers also resist a bid that fully reflects the value of their company if they think that there might be a bidder with a higher valuation of the company who will join the contest. Baron concludes that rejection also acts as a signal of true value of the company. If a bid is rejected because the management acts in the interest of shareholders the initial value of the company should increase but if they reject just because they try to maintain control the initial value of the company will decrease. Jennings and Mazzeo (1993) give empirical evidence to the hypothesis that management resists bids that they believe to be too low. They find that resistance is decreasing with the size of the bid premium.

Schwert (2000) examines hostility in takeovers empirically in his paper. By analyzing a sample of 2346 takeover contests occurred in the US between 1975 and 1996 he tries to find differences between friendly and hostile deals and reasons for management resistance. He defines hostility as aggressive rejection of the bid by the target firm. He finds little difference in the financial variables, such as market-to-book ratio and return on equity that should measure poor managerial performance and differentiate friendly and hostile takeovers. However, he finds evidence that support the theory of using hostility as a tool for strategic bargaining. Managers are seeking-out competitors for bidders and declare hostile status to increase the premium offered. Because of this Schwert interprets hostility more as a bargaining strategy than a sign of managerial entrenchment.

Franks and Mayer (1996) study whether hostile takeovers act as a disciplinary device for managers and boards in the UK by examining hostile takeovers in 1985 and 1986. They find evidence of high board turnover and level of restructuring after the takeovers but little evidence of poor performance prior to bids suggesting that hostile takeovers. However, they find higher bid premiums in hostile takeovers. Rather than acting as a device of market discipline, hostility is due to dissatisfaction towards the terms of the offer.

Several other papers try to explain the reasons behind managerial resistance to takeovers by linking management resistance with managerial compensation, wealth and career prospects. Walkling and Long (1984) present a hypothesis that tender offers are an ideal setting to analyze agency problems since manager and shareholder interests are often in conflict. They analyze this by using a sample of cash tender offers. They find evidence about the relationship of target management compensation and their attitude towards tender offers. Positive wealth change to

managers was correlated with non-resistance and the potential wealth change was found to be significantly higher in uncontested offers. Also, at least one of the top two managers was employed at the company after the takeover in 81% of the successful offers which were not resisted. The figure was only 43% for takeovers which the management did resist.

Cotter and Zenner (1994) document a negative relationship between the likelihood of target management resistance and change in managerial wealth. The relation between takeover success and managerial wealth is therefore positive. On average they find that resistance does not increase the wealth of shareholders, managers and directors. This suggests that shareholders do not benefit from the resistance, but managers may benefit. By retaining the control of the company they keep the possible private benefits of control.

The paper by Agrawal and Walkling (1994) continue with the same theme and investigates the relation between takeovers and executive careers. They are the first to empirically examine the subject of executive careers after takeovers bids for their firms. They find clear reasons for resistance as target CEOs are more likely to get fired if the bid succeeds. In addition to difficulty of retaining their current CEO position the authors find that CEOs that lose their jobs in takeovers fail to find a new top management position during the following three years after the bid. On the other hand CEOs who managed to keep their position after the change of ownership experience an increase in their compensation if the level of compensation was not excessive prior to the bid. It provides evidence of market discipline and correction of inefficient incentive contracts.

One interesting case in management resistance to takeovers is the leveraged buy-out (LBO) which can be considered as a device of market discipline. Some attributes of LBOs should favor the target management resistance to but some should oppose it. In an LBO, usually private equity companies use large amounts of debt to buy a company and take it private. Large amount of debt is used partly as a control function (Jensen, 1986). In many cases LBOs alleviate agency problems of the top-level managers as they receive a considerable equity stake in the company as an incentive to perform, but they are also strictly monitored by the private equity owners. Berger and Ofek (1996) prove that firms that incur greatest value losses are most likely to be bought by LBO associations. These firms are usually diversified firms which suffer from heavy diversification discounts. Acquirers create value by “busting-up” these firms; breaking them up and selling the pieces or conducting heavy restructuring of the business otherwise. These bust-

ups break the empires created by the existing management (Jensen, 1986). So, LBOs are a double-edged sword for managers. On the other hand they get proper incentives to perform very well, but on the other hand they might get fired, at least lose control and private benefits, are monitored very closely and may end up with considerably lower base compensation as they receive more performance based compensation. No previous study about takeover success has taken LBOs into consideration as a possible explanation for target management hostility and as a factor affecting the outcome of a tender offer.

Competing offers

As tender offers are public in their nature, the initial public offer reveals information about the target and may attract other bidders to compete with the initial bidder if other bidders value the target higher than the initial bid was (Fishman, 1988). Another reason for competition in tender offers is hostile bids. If target management resists a bid made by an unwelcome bidder, they might ask a white knight, a friendly bidder favored by the target management, to join the bidding contest to prevent the hostile bidder from winning the control contest. Jennings and Mazzeo (1993) and Schwert (2000) confirm that target hostility increases the possibility of competition. Acquiring a toehold in the target could a way to reduce the probability of competition. Jennings and Mazzeo (1993) prove empirically that high premiums can reduce the probability of competition arising.

The relation between takeover success and competition should be quite clear. As the number of bidders increase, the probability of each individual bidder succeeding should decrease. Interestingly, many studies examining the probability of takeover success do not take competing offers into consideration as a determinant of the outcome. The empirical study by Flanagan et al. (1998) does and shows that competition has a significant, negative effect on the probability of winning the takeover contest.

An empirical study by Bradley et al. (1988) about the wealth effects of tender offer announcements presents results which show that competition among bidding firms increases the returns to target and decreases the returns of the acquirer. This implies that bidders pay higher premiums in contested offers which reflect the true value of the target better. The same result is modeled in theory by Berkovitch and Narayanan (1990). Their model implies that targets do

benefit from competition between bidders and realize larger gains. Betton and Eckbo (2000) observe lower initial bid premiums in multiple bidder contests than in situations with a single bidder (45% vs. 51%) but report that bid premiums increase significantly between subsequent bids. The median increase in the bid price between the first and second bid is 10% and the corresponding increase in the initial premium equals 31%.

The effect of competition to takeover success is not that well documented, but according to the results of Flanagan et al. (1998) and common sense competition will decrease the probability of takeover success. However, what is clear from literature is that competition definitely favors the target and increases premiums paid by bidders.

Tender offer premium

As already seen in the comprehensive papers about predicting takeover success, the tender offer premium and its significance as a predictor of tender offer success has been a subject which has divided opinions. According to standard economic theory the relation between premium size and probability of success should be straightforward. Higher premium should equal a higher probability of success. Otherwise, high premiums observed by empirical papers, such as Bradley (1980) who reports a premium of 49% paid by successful bidders, would not make any sense. This is proved in the paper of Hirschleifer and Titman (1990) who predict a linear relationship between bid premium and the probability of takeover success. Empirical research has found evidence for the bid premium being significant (Quirin, 1971; Walkling, 1985; Holl and Kyriazis, 1996) and against (Pelligrino 1972; Ebeid, 1974; Hoffmeister and Dyl 1981; Flanagan et al., 1998). Elsland and Weber (2006) and Baker et al. (2009) find that bid premium is significant when compared to a relevant psychological reference point. One reason for the division of results is probably the assumption of rational and shareholder value maximizing managers. As the literature about management resistance shows managers are not rational and in many cases put their own welfare before the shareholder value.

Despite of this empirical confusion there are still theoretical facts that favor the assumption that bid premium is a contributing factor to tender offer success. Fishman (1988) develops a model about takeover auctions that investigates the role of the premium offered in takeover contests. The assumption for the model is information is asymmetric and bidding reveals information

about the target to other potential bidders and bidders are able to learn from other bids. The higher the first bid is, the lower is the second bidder's expected return. Thus, Fishman proves that a high initial offer signaling high valuation of the target may pre-empt a second bidder from entering the contest and improve his probability of winning the control contest. Hirschleifer and Png (1989) report similar results in their theoretical paper.

Grossman and Hart (1980) provide an explanation with their "free-rider problem" why even a high premium offered might sometimes be turned down by the shareholders of the target. They present a theory about a widely-held company whose shareholders own such a small piece of the company that they do not have an incentive to monitor or improve the management. However, there is a corporate raider who can significantly improve the value of the company if he takes over. A single shareholder cannot affect the outcome of the tender offer, so when the raider tries to take over, the shareholders sense that they can benefit more (than from tendering their shares) from the value improvements applied by the raider if he takes over and choose not to tender their shares. This kind of "free-riding" can prevent the raider from taking over the company and all shareholders loose.

Even if the significance of the bid premium to the outcome of the takeover is divided academic opinions it seems that other factors such as competition (Walkling and Edmister, 1985) and management resistance (Schwert, 2000) will drive the premiums upward and are frequently used by target management as bargaining methods. Walkling & Edmister find empirical evidence that multiple bidders lead into higher takeover premiums on average. Schwert confirms this with hostile deals as well. Also, Schwert finds that in many cases hostility is connected to multiple bidder contests. Next, I will discuss bidder toeholds and how those can deter competition and lower the premium paid by acquirers.

Pre-bid ownership in target – "toehold"

Empirical studies have found strong evidence of the positive effects of toeholds preceding takeover offers or contests. Hirschleifer and Titman (1990) report initial holdings to be a factor that improves the probability of takeover success in their theoretical paper. Empirical studies on takeover success prediction by Walkling (1985), Holl and Kyriazis (1996), Flanagan et al. (1998) and Elsland & Weber (2006) have found a toehold to increase the probability of success.

The importance of a toehold has interested the academics for quite some time. I will first cover the theoretical papers and then provide some empirical studies on the subject of toeholds.

Shleifer and Vishny (1986) discuss the role of large minority shareholders to a company. Large shareholders are identified as families, pension and profit-sharing plans, and different kinds of financial companies. One benefit of large minority shareholders is that they alleviate the free-rider problem presented by Grossman and Hart (1980) by monitoring the management. But large shareholdings can have an effect on takeovers as well. If monitoring cannot be done, large shareholders can facilitate takeovers. When the shareholdings of a single shareholder grow, the probability of that shareholder taking over the company also increases. Also, the premium paid by that acquirer is likely be lower as the large shareholder is willing to take over for a smaller increase in the firm's profits as he gains most of the profits through larger ownership.

Bulow et al. (1999), state that toeholds have an enormous impact in takeover battles. It is also a profitable strategy as aggressive bids increase the value of the company and the value of the toehold the bidder already possesses. Bulow et al. concentrate on takeover battles between financial buyers (common-value auction) as they have usually similar strategies to generate returns in comparison to strategic buyers (private-value auction) which all may utilize the target assets in a different way. First, as a toehold creates an incentive to bid aggressively. This inflicts a winner's curse on the bidder who does not have a toehold in the company. This can lead to an exit by the non-toehold bidder and the toehold holder can takeover cheaply. If both bidders have a toehold it will result in aggressive bids and high premiums.

Goldman and Qian (2005) present a theory of optimal toehold size in takeover contests and answer why raiders do not acquire a toehold before bidding even though the literature supports it. They confirm that the probability of success is increasing with the size of the toehold. They assume that takeover success or failure signals the level of managerial entrenchment (private benefits) and the future value of the firm. Higher level of entrenchment implies a lower firm value to outside shareholders. So, if a takeover with large toehold fails due to management resistance it signals high level of managerial private benefits which bring the firm value down.

Also Bris (2002) provides a theory which opposes the general consensus of the benefits of a toehold in acquisitions. His argument is that acquiring a toehold will lead into a costly share price

run-up as the market anticipates the increased probability of a takeover and incorporates the potential value improvements to the target share price. So, acquirers will decrease their open market purchases to avoid this pre-bid share price run-up. So, toeholds and probability of takeover success and offer premium have a negative correlation. Schwert (1996) finds evidence of target share price run-ups which can result in additional costs to the bidder.

Betton and Eckbo (2000) study the effects of toeholds in takeover contests empirically and how they affect the nature of the contests. They measure the effects of toeholds with a sample of 2335 takeover bids from 1971 to 1990. They also structure the takeover contest in the form of a tender offer contest tree. They find that toeholds are largest, 20% on average, in single bidder contests whereas the size of the average toehold is only 5% in multi-bidder contests. The relation between toehold and offer premium is found to be negative, high toeholds implies a small takeover premium. This implies that holding a toehold decreases the probability of competition and also target management resistance. Despite these findings the authors find that only 53% of the bidders acquire pre-bid stakes in the target company. Overall, they find that offer premium, toehold and pre-bid tender agreement contribute significantly to the outcome of the bid.

Betton et al. (2009) inspects the toehold puzzle in a more recent paper as well. In their sample of US takeovers spanning over the period of 1973 to 2002 they find that toehold bidding is rare, only 13% of initial bidders seeking control over a public company have toeholds. However, when toeholds exist they are quite large, averaging to 20 % and 14% with toeholds purchased within half a year of the announcement. They associate toeholds more with hostile bids and bids over private than public companies. Toeholds are non-existent in friendly takeovers or mergers. Toeholds were frequent in the takeovers of 1980s but have declined since.

The fact that having a toehold in the target increases the probability of taking over the target successfully seems quite clear according to the literature. A toehold should also decrease competition and target management hostility which should decrease the premium required by target shareholders. But empirical studies have not found much evidence of friendly bidders acquiring toeholds but associate them mostly with hostile offers over private companies. This could be due the argument made by Bris (2002) that toeholds give away information about the target and lead to target share price run-ups prior to bids holds in the offers made to public companies.

Method of payment

The literature about the medium of payment in acquisitions seems to be closely linked with studies about competition between bidders. The most common methods of payment in takeovers are cash, shares or the combination of these two. Payment in cash is more concrete and easier to evaluate by the target while the value of shares is always relative and valuation subjective matter.

Travlos (1987) observes that cash is favored as a method of payment in tender offers whereas mergers are often paid by the shares of the acquiring company. Cash deals are quicker to register with the supervisory authorities which favor using cash in tender offers. Cash and stock payments convey different signals to investors and are also treated differently in taxation. Travlos confirms that stock exchange deals result in negative returns to acquirer shareholders which signal about the use of stock as a medium of exchange by overvalued acquirers. Shleifer and Vishny (2003) confirm that overvalued buyers will try to exploit this information asymmetry. Hansen (1987) concludes that because of proprietary information and the resulting information asymmetry overvalued acquirers will try to use their own shares and undervalued ones use cash as the medium of exchange.

Competitive auctions and the choice of payment method have been investigated closely together. In the model of Fishman (1989) information is asymmetric and high preemptive bids may be used to deter the competition and win the auction. Equity is offered by low valuing bidders and cash by high valuing bidders. The value of the acquirer's shares is uncertain because it is conditional on the profitability of the takeover. So, a bidder may signal high valuation by using cash as the method of payment. The use of cash will deter competition and decrease management resistance.

Berkovitch and Narayanan (1990) & Jennings and Mazzeo (1993) both find that the proportion of cash used as a part of the payment increases with the number of competing bidders. Berkovitch and Narayanan also prove that using cash increases the returns to both target and bidder shareholders. The empirical study by Jennings and Mazzeo, contrary to Fishman's (1989) findings, does not find that the use of cash as a payment method would deter competition and decrease the likelihood of managerial resistance to the bid. However, there is evidence of bid premium deterring both competition and management resistance.

Cash seems to be the weapon of choice for tender offer contenders. Its simplicity and favorable signaling qualities support the use of cash as method of payment. Even though there is no direct evidence that the choice of payment method would somehow affect the outcome of the takeover, it seems that the use of cash alleviates management resistance and competition between bidders which affect the outcome negatively. One could interpret that using cash then should improve the probability of takeover success.

Other determinants

In addition to the before mentioned main determinants of takeover success, there is some other less studied factors which affect or can be used to evaluate the probability of a successful takeover.

Hoffmeister and Dyl (1990) found target market size to be one negatively contributing factor to the probability of success. The same negative relationship is confirmed by Raad and Ryan (1995). They also find that target companies can defend against takeovers by increasing their leverage ratio.

Termination fees have also found to be effective in increasing the probability of success. Termination fee is essentially a fine for dissolving the tender offer agreement. The target usually pays the bidder a fixed fee if the deal fails or the target withdraws (Betton et al. 2009). Flanagan et al. (1998) observe that the presence of a target termination fee increases the success rate of takeovers.

Cotter et al. (1997) examine the role of the board of directors and independent board members during takeover attempts by tender offer. The target shareholders receive a better price for their shares when the target board is independent and resistance is used for the gain of shareholders rather than because of entrenchment. On the other hand, the board composition is not a significant determinant of the outcome. The same result is reported with UK data by O'Sullivan and Wong (1998). Board composition and the presence of large external ownership do not influence the outcome of the bid.

The industry position and the nationality of the target and the bidder could influence the outcome of the proposed takeover. Antitrust legislation can prevent an acquisition on an industry where

the acquirer would gain too dominant a position if the acquisition succeeded. Contrary to this Flanagan et al. (1998) report a lower probability of success for diversifying acquisitions. These restrictions, in addition with growth prospects, force companies to expand beyond the borders of their domicile. This leads to cross-border acquisitions which might face trouble because of factors such as patriotism and protectionism which lead to government intervention in cross-border acquisitions. This kind of behavior has been documented in Europe with data from 1997 to 2006 in the working paper by Dinc and Erel (2010). Flanagan et al. (1998) report a higher probability of success for cross-border bids for US based companies. This could be because of the high level of sophistication and concentration of the US market.

Another approach to predicting the success of takeovers is presented by Samuelson and Rosenthal (1986). They take market prices as the most efficient indicators of takeover success and use the movement of target share price and the spread between the current share price and the offer price during the offer period as a determinant of the outcome of the offer. The lower the spread is, the higher is the probability of the takeover succeeding. This method is used especially with the trading strategy called merger arbitrage where profits are generated through betting on the success of an acquisition and exploiting the spread between the market price after the acquisition announcement and the offer price (Brown and Raymond, 1986; Baker and Savasoglu, 2002). The reason why I haven't discussed this method in higher detail is because of the difference in the time period when the prediction happens. Share prices can predict takeover success only during the offer period whereas I have focused on the factors that contribute already on the pre-announcement period.

2.4 Corporate Governance and Investor Protection

Although the outcome of tender offers and the effects of single factors affecting the outcome have been quite well studied in the past literature, the studies have focused on the most developed markets, mainly to the US but also to UK to some extent. No study has examined tender offers from a global perspective and the effect of different corporate governance systems and the resulting differing level of investor protection to the outcome of the offer in cross-border situations. Rossi and Volpin (2004) have already proved that investor protection is an important determinant of the M&A activity around the world.

A tender offer is an offer directly made to the target shareholders, so only the decision of the shareholders to tender or not should affect the outcome. But we have already seen that management can have a high influence on the outcome if they decide to resist the offer. And managers can resist because they think that the offer is insufficient or because of agency problems; they do not want to lose the control over the company. Control over a company can provide private benefits for the management. The value of private benefits is determined by the level of governance and investor protection in place (La Porta et al., 2000). The value of private benefits should vary according to the level of investor protection in each country.

Now, I first review the most common mechanisms of corporate governance observed to be in place around the world. Then I revise the different legal systems adopted by worldwide and finally present the effects of differing level of investor protection to acquisitions.

Different mechanisms of corporate governance

Shleifer and Vishny (1997) have written an extensive survey about the different corporate governance mechanisms and describe those in high detail. This part of this section focuses on their paper.

Shleifer and Vishny take a simple agency perspective on corporate governance. Agency problems are the reason why governance is required; if suppliers of capital (debt and equity) were certain that managers would pay them the return required without question, no governance would be needed. But, managers (and large shareholders) might be place their own interests above all else. Governance structures are required to prevent this expropriation of suppliers of capital and minority shareholders.

Legal protection of share and debt holders is the most obvious method of corporate governance. Different legal systems, which I will go through later, provide different quality of protection. Most common rights for shareholders should include right to own shares and the company recognizes the ownership, vote on important corporate matters, minority rights such as minority dividend and above all else all shareholders should be treated equally. Debt holder protection include the right to grab assets serving as collateral, demand the liquidation of the company, vote on the restructuring and remove managers in the restructuring process if the company is unable to serve its debt. One important aspect of determining the level of legal protection in addition to

laws in place is the willingness of courts to enforce these rights. La Porta et al. (1998) were the first to provide useful indices of shareholder and creditor protection for 49 countries in their paper. These indices have been corrected later on by Spämann (2010) for shareholder rights and by Djankov et al. (2007) for creditor rights.

Large shareholders (large minority or controlling owners) have an important monitoring duty over the managers if the legal protection is unable to monitor managers properly. Large shareholders have an incentive to monitor managers as they have substantial amount of wealth tied into the company. However, even if large shareholders can alleviate the expropriation problem of managers they might expropriate minority shareholders themselves. Also, a drawback of large shareholders is that they might be more risk-averse than normal as the large shareholding in a single company prevents efficient diversification of their holdings. Large shareholders are more common in countries with less developed legal systems and the degree of ownership required to be an efficient monitor is inversely related to the development of the legal system. *Large debt holders* may also act as efficient monitors of management and are common in Germany and Japan where banks have a major role in financing companies.

Other mechanisms include *takeovers* in the most developed markets such as the US and UK. Also, *debt* has a control effect on managers as they must concentrate on serving the debt to prevent bankruptcy. *LBOs*, again mostly observed in the most developed markets, combine many features alleviating agency problems by providing better aligned incentives to managers and using high amounts of debt to control them from using cash inefficiently.

Traditionally corporate governance has been divided into according to market and bank financed countries (La Porta et al., 2000). However, there are problems with this kind of classification. For example Japan has been considered as a bank centered country but it still has a quite large and widely owned equity market. Also, French civil law countries have both, undeveloped credit and equity markets, so it would be wrong to classify them as bank centered economies. Other way could be classifying countries according their adoption of Glass-Steagal like regulation affecting the ability of banks to hold equity stakes in industrial companies. These classifications have not been found to be significant in explaining the ownership structures detected across the world (La Porta et al., 1999a).

Different legal systems

Now that I have gone through the basic mechanisms of corporate governance, I continue to explain differences between different systems. La Porta et al. (1998) study the legal matters protecting investors in 49 countries and divide the legal systems into four major categories: *English, German, French and Scandinavian*. Different legal codes have evolved through history and have been passed from country to country by colonialism.

French, German and Scandinavian legal systems constitute the civil law family originating from Roman law which relies on legal scholars on the development and interpretation of laws. The French law was written under the rule of Napoleon and brought to Belgium, the Netherlands, part of Poland, Italy and Western regions of Germany by his armies. Later on the French law extended its reach to Near East, Northern parts of Africa, Indochina, Oceania and parts of the Caribbean. Other areas influenced include Luxembourg, Portugal, Spain, Italy and parts of Switzerland. Also Latin American laws are based on the French law. The German legal code also dates back to the 19th century but is not as widely adopted as the French one due to lesser amount of colonies. Countries affected by it include Austria, Czechoslovakia, Greece, Hungary, Italy, Switzerland, Yugoslavia, Japan and Korea, China and Taiwan. Scandinavian law is in place in Sweden, Norway, Denmark, Finland and Iceland. (La Porta et al., 1998).

English common law is formed by judges and their decisions instead of scholars. It is in place in the United Kingdom and adopted by its colonies such as United States, Canada, Australia, India and others. The major differences between the common and civil law systems are in the development of the system. Common law develops case by case as each court ruling may affect the next, while civil law develops through research. One may interpret that the development of common law is much faster and the legal rules are much more up-to-date than in civil law systems. (La Porta et al., 1998).

Consequences of the different legal systems

La Porta el al. (1998), find that investor protection varies greatly under different systems, investor are best protected under the English system while the French legal system provides the worst level of protection. German and Scandinavian countries fall in between. Laws are enforced best in Scandinavian and German civil law countries, then in English common law countries and

enforcement is worst in French common law countries. French civil law countries are found to be worst in protecting the investors regardless of income levels. However, enforcing laws improves with higher income level.

The most direct consequence of the various legal systems and the following difference in investor protection is the level of ownership concentration perceived under each system (La Porta et al., 1998). Overall, ownership concentration is found to be very high around the world, only the most developed English law countries have dispersed company ownership structures (La Porta et al., 1998). La Porta et al. (1999a) find that taking large and medium-sized companies into consideration only companies in the US and UK can be considered widely held. Other factor besides ownership structure, affected by the legal system and thus the level of investor protection is the development of capital markets. La Porta et al. (1997) present evidence that countries with worse investor protection have generally less developed and smaller capital markets (both debt and equity). In addition to finance, the legal system also affects the quality of government performance (La Porta et al., 1999b).

Critique against legal system based division of corporate governance

Lately, there has been critique against the findings of La Porta et al. (1997; 1998; 1999a; 1999b; 2000) as they utilize the same dataset in all their studies and their finding hold on country-level but not on firm-level investigation. They are also criticized of focusing only a few very large firms and making generalizations out of those results (Holderness, 2009).

Spamann (2010) revises the antidirector rights index, used by La Porta et al. in their studies, by a questionnaire made to lawyers in all the countries included and provides corrections for 33 of the 49 countries included and finds that the correlation between the old and corrected index is only 0.53. He also proves many of the findings of La Porta et al. false with the corrected index. He finds no relation between legal system and shareholder protection, ownership concentration or stock market size, results which had been long taken for granted.

Holderness (2008 and 2009) investigates the effect of legal systems to ownership concentration globally and in the US in his papers. He concentrates on firm-level data instead of country-level averages used by for example La Porta et al. He finds no evidence globally of any relation between investor protection and ownership concentration. He also discards the widely-held US

companies as a myth. The ownership concentration in the US is similar than elsewhere. Japan and UK are found to be countries with most diffuse equity ownership in companies. Franks et al. (2009) study the evolution of equity markets and ownership concentration in UK companies. They find that the UK already had an active equity market and high dispersion of ownership even before it was regulated, so investor protection cannot be the reason for the dispersion. They observe the same development in Germany and Japan with the distinction of lesser takeover activity.

In the light of the recent critique against the approach of La Porta et al. in studying the effects of investor protection and different legal systems it seems that the best approach is to use firm-level estimates and to avoid making assumptions based directly on legal systems. Using country-specific measures of investor protection is a better way according to the recent research. But it cannot be denied that legal systems differ and that countries under certain legal family share some common characteristics.

Investor protection and acquisitions

Several papers during the 2000s have examined the effects of cross-border M&A, taking both mergers and tender offers into consideration, to synergies gained from the acquisitions and how the synergies related to the difference of investor protection between the target and the bidder.

Rossi and Volpin (2004), who base their study on the indices of investor protection, constructed by La Porta et al. (1998), present a hypothesis that investor protection weakens the barriers to the market for corporate control. Targets in countries with low level of protection, and thus the highest level of expropriation, can gain the most from the transfer of control to a more efficient owner. They report higher M&A volume, premiums paid and amount of hostile deals in countries with better investor protection. Also, Rossi and Volpin state that cash deals are favored under less developed systems as stock deals require an environment with high investor protection.

Bris and Cabolis (2008a and 2008b) have written two papers about the importance of corporate governance in cross-border acquisitions. The level of corporate governance was measured with four criteria: shareholder protection, creditor protection, accounting standards and the level of corruption. They relate the resulting positive returns of cross-border acquisitions with better monitoring leading to a decrease in agency problems and expropriation in the target (Bris and

Cabolis, 2008b). Their first paper (2008a) deals with over 500 cross-border acquisitions, where 100% of target shares were acquired, in 39 countries between 1989 and 2002. They find that the announcement effect (synergies) were higher for a cross-border acquisition in which the target was in a country with worse shareholder protection than the acquirer than for a matching domestic acquisition. Takeover premiums increase with the level of investor protection of the bidder country and decrease with the level of the target country. This makes sense as there is less hidden value to be found in well governed targets. The second paper of Bris and Cabolis (2008b) supports their previous results but with industry-level data.

Martynova and Renneboog (2008) conducted a similar study in Europe. Instead of using the generic indices of corporate governance by La Porta et al. (1998), they construct their own, more sophisticated indices of shareholder, minority and creditor protection. But, their results are in line with Bris and Cabolis (2008a and 2008b) and they conclude that differences in corporate governance between the bidder and the target have an impact on the takeover returns. They also prove that the positive impact holds also for partial takeovers and not only for acquisitions of all target shares. Wang and Xie (2009) prove the theory of governance transfer valid and its positive effects to the value of the parties involved through acquisitions by examining domestic takeovers in the US and the firm-level differences in governance practices.

The level of investor protection and corporate governance overall seems to have a clear effect on the value of targets and synergies realized from through acquisitions. Higher announcement effects imply higher synergies in acquisitions where the investor protection in the country of the target is lesser than in the country of the bidder. The “hidden” value of these companies is explained by agency problems. The lower the level of investor protection is the higher are the agency problems, expropriation of shareholders by managers and large shareholders and thus the private benefits of control which all decrease the overall value of the company.

3 HYPOTHESES

This section presents the hypotheses of this thesis. The hypotheses are derived from the academic literature reviewed in the previous section. I divide the hypotheses into two classes: deal and country specific. Deal specific hypotheses include the hypotheses about the traditional determinants of tender offer outcome as well as the new behavioral determinant, the effect of

anchoring the offer premium to the 52-week high price of the target. Country specific hypotheses relate to the differences in investor protection between different countries and on the effects of these differences to the outcome of the offer.

3.1 Deal Specific

The first thing generally published anywhere about a corporate acquisition is the premium offered over the current share price for the shareholders of the target company. It is an important factor to the shareholders and has an impact whether to tender to shares or not. General economic theory and theoretical studies about the subject are clear that a higher premium should increase the probability of shareholders accepting the offer and the offer being successful (Hirschleifer and Titman, 1990). Some empirical studies have found premium significant (Walkling, 1985) while others have found no significance (Hoffmeister and Dyl, 1981) but Walkling argued that it might be because of misspecification of the premium.

H1. *Tender offer premium is a factor affecting the probability of tender offer success. The relationship between premium offered and the probability of success is positive.*

One reason for the uncertainty about the importance of the bid premium is due to investor psychology. The size might not matter as much as exceeding a certain psychological boundary. The price offered is compared to certain reference points which investors mentally use to benchmark their gains and losses (Kahneman, 1992). Baker et al. (2009), report that one common reference point in evaluating the selling decision in acquisitions is the 52-week high price which is widely reported in financial press. They find that offer prices are biased towards the 52-week high and that offers where premium exceeds the 52-week high are more likely to succeed.

H2. *Tender offer price higher than the target 52-week high price is a factor affecting the probability of tender offer success. The relationship between the offer price exceeding the 52-week high and the probability of success is positive.*

Target management resistance is widely reported to have a negative impact on the probability of success. Target management might resist as they think the offer to be too low or because they are afraid of losing their jobs and private benefits of running the company (Baron, 1983; Schwert,

2000). Empirical studies (Walkling 1985; Baker et al. 2009) have generally found a negative relation between target management resistance and the probability of deal success.

H3. *Target management resistance is a factor affecting the probability of tender offer success. The relationship between target management resistance and the probability of success is negative.*

Pre-bid ownership i.e. a toehold in the target company has been proven to significantly contribute to the success of a tender offer both in theory (Hirschleifer and Titman 1990; Bulow et al. 1999) and in empirical studies (Walkling, 1985). However, only a small minority of companies is buying a toehold before tender offers and mostly toeholds are associated with hostile bidders (Betton and Eckbo, 2000; Betton et al. 2009).

H4. *Toehold is a factor affecting the probability of tender offer success. The relationship between toehold and the probability of success is positive.*

Competing bids are an attribute associated with tender offers. Competition might arise if target management resists the bid and invites a favored acquirer, a white knight to bid for the target (Schwert, 2000) or as the initial bid reveals positive information about the value of the target (Fishman, 1988). Flanagan et al. (1998) report that competition bids have a negative effect on the probability of tender offer succeeding.

H5. *Competition among bidders is factor affecting the probability of tender offer success. The relationship between competition and the probability of success is negative.*

The method of payment in acquisitions is generally cash, stock or the combination of these two. Using cash is more common in tender offers. Valuing a cash offer is simpler for the target shareholders than a stock offer as stock is more likely to be used as a method of payment by acquirers who are overvalued by the market (Hansen, 1987; Shleifer and Vishny, 2003).

H6. *The method of payment is a factor affecting the probability of tender offer success. The relationship between using cash and the probability of success is positive.*

The size of the deal can influence the final outcome of the offer. Deals targeting large targets are more complex than smaller ones and the amount of shareholders is higher. These factors affect tender offers. Both Hoffmeister and Dyl (1981) & Raad and Ryan (1995) that target size has a negative effect on the outcome of the offer.

H7. *Target firm size is a factor affecting the probability of tender offer success.*

The relationship between target firm size and the probability of success is negative.

Deal specifics can include termination fees in which the target has to pay a fine to the bidder if the deal fails or the target withdraws. The inclusion and the effect of these fees in tender offers is a subject which has been less studied in the literature. Flanagan et al. (1998), report that the inclusion of termination fees increases the probability of deal success.

H8. *Termination fees are a factor affecting the probability of tender offer success. The relationship between termination fees and the probability of success is positive.*

Other factors which could also explain the outcome of the offer, but are no formal hypothesis is presented are used as control variables. These include financial buyer (LBO), cross-industry and cross-country status. On the other hand LBOs provide a possibility of highly lucrative compensation for managers but are also associated with heavy restructuring activity. Antitrust issues may block acquisitions in a specific industry. Cross-border deals tend to be more complex due to differences in corporate cultures. Even such factors as patriotism and protectionism by target country government may affect the outcome of the deal.

3.2 Country Specific

We have already learned from the existing literature that the outcome of the tender offer is not always rationally decided, but agency problems may also play a role in determining the outcome. Because of that, agency perspective is also a natural way to go in searching the proper hypothesis for country level differences affecting the outcome of a tender offer.

Papers about cross-border mergers and acquisitions (Bris and Cabolis 2008a, 2008b; Martynova and Renneboog, 2008) which affect the level of investor protection either in the target or in the

acquirer (a corporate governance transfer occurs) have found that investor protection enhancing transactions enjoy higher announcement returns than comparable transactions without any corporate governance transfer. The authors of the previous papers tie the higher returns to improvements in monitoring the management leading to fewer agency problems and less severe expropriation of share and debt holders. It also implies that management enjoys high private benefits of control in countries with low level of investor protection. As already proven by Rossi and Volpin (2004) countries with more developed systems will have a higher amount of LBOs, hostile takeover attempts and tender offers overall which all are identified as devices of market discipline for poorly performing companies. This tells a story about high control over the company exercised by the management in less transparent systems of corporate control, and that deals have to be privately negotiated beforehand to be successful in countries which provide lesser protection for investors.

High value of private benefits in less developed corporate governance systems imply that managers will do everything to stay in control in order to preserve these benefits. A change in the control of the company, which would improve the level of investor protection of the target company, and decrease the value of private benefits of the target management, will encounter resistance. And from this perspective I derive my hypothesis about cross-border tender offers improving the level of investor protection.

H9. *The difference between the level of investor protection in the bidder and target country is a factor affecting the outcome of the offer. The effect of an offer improving investor protection, where the bidder country has a higher level of protection relative to the target country, on the probability of success is negative.*

I measure investor protection in a country with the two major classes defined by Shleifer and Vishny (1997): investor and shareholder protection. The level of corruption is used as well, as the level of corruption in a country has a clear relation to the value of private benefits that control can provide. Accounting standards are used in the papers by Rossi and Volpin (2004), Bris and Cabolis (2008a and 2008b) and Martynova and Renneboog (2008) but they either use the index created by La Porta et al. (1998) or have constructed indices of their own. As the index created by La Porta et al (1998) ranks the accounting standards of a country by the level of 1990,

I will not use this index as it might not be the best fit for my dataset ranging from 1986 to 2010. During this time the accounting standards have taken leaps forward with the adoption of IFRS standards and the Sarbanes-Oxley legislation to mention a few improvements in the international accounting environment.

3.3 Summary of Hypotheses

The hypotheses used in this thesis and the expected effects of the hypotheses are summarized in this part.

Table 1: Hypotheses of the study

Hypothesis	Expected sign
H1 The size of the tender offer premium increases the probability of success.	+
H2 Tender offer premium higher than the target 52-week high price increases the probability of success.	+
H3 Target management resistance decreases the probability of success.	-
H4 The size of the toehold held by the bidder in the target increases the probability of success.	+
H5 Competition among bidders decreases the probability of success.	-
H6 The proportion of cash used as the method of payment increases the probability of success.	+
H7 The size of the target firm decreases the probability of success.	-
H8 Inclusion of a termination fee increases the probability of success.	+
H9 Difference in the level of investor protection between target and acquirer countries decreases the probability of success.	-

4 DATA AND METHODOLOGY

In this section I explain the data collection process, describe the samples used, go through the logit regression method used as the research method to examine the factors affecting the outcome of tender offers and the probability of success as well as describe the variables used in the regression model. Descriptive statistics of the samples are included at the end of this section.

4.1 Data Collection and Samples

The data about tender offers is collected from SDC Platinum from all continents around the world. The criteria for the data to be included in the dataset was that the acquisition type is a tender offer, the acquirer is seeking to own at least a majority stake (over 50%) in the target if the acquisition is successful, the offer is clearly completed or withdrawn, the target is a publicly listed company and the minimum deal size is \$US 50 million. The last two parameters were to ensure that sufficient data about the deal would be available, as the disclosure tends to be worse in smaller, private deals. Acquirer public status was not required as I wanted to include LBOs in the sample, and companies executing LBOs are mainly private investment companies. Stock price data for the 52-week high prices for the target prior to the announcement of the tender offer were taken from SDC when available and supplementary data for the missing values is gathered from Thomson ONE Banker.

Initial sample

The initial sample consisted of 5591 tender offers with targets from 73 countries announced during the time period spanning from January 1, 1970 to December 31, 2010. Events were removed from the sample mainly because of lacking stock price and offer premium data, or because of unknown method of payment.

Final sample

The final sample consists of 3783 tender offer announcements, of which 1406 are cross-border deals, made during January 30, 1986 and December 23, 2010 from 38 countries. This dataset is complete for all variables except the comparison of offer premium to target 52-week high stock price prior the announcement. Complete data also for this variable is retrieved for 1854 events, of which 620 are cross-border deals. Description of the dataset is given later in this section.

The main reason for the missing stock price data was the lack of company identifiers (CUSIP, Sedol or ticker) for target companies retrieved from SDC. The stock price data was either not available or could not be found with the identifiers at hand. Another important factor for eliminating events from the dataset is that the antiderector rights index (Spamann, 2010) is available only for 46 countries.

4.2 Logit Regression

This part explains the statistical methods used in this thesis. Studies about tender offer success have used several methods in determining the outcome and the determinants affecting the outcome of the tender offer. Older studies such as Quirin (1971), Pelligrino (1972), Ebeid (1974) and Hoffmeister and Dyl (1981) all use multivariate linear regression analysis. However, Walkling (1985) presented points for using logistic regression instead of linear one, as linear models have some weaknesses when evaluating variables and outcomes which take a value between 0 and 1. As the prediction of tender offer outcome takes a binary form, the logit model should be a potent tool for analyzing the outcomes of tender offers.

The theory behind logistic regression can be found for example from Cramer (1991) or Dougherty (2007). In addition to these two books, Press and Wilson (1978) present a comparison between logistic regression and discriminant analysis in their paper. Based on the Dougherty's book I go through the assumptions behind the model and present the idea how estimation using a logit regression model is conducted and how the model can be evaluated.

The logit model is a binary choice model where the outcome of an event is assigned a value, 1 if the event occurs and 0 if the event does not occur.

Predicted probabilities from traditional linear regression models can violate meaningful zero-one boundaries. In other words, the predicted probability can be higher than 1 or less than 0 for extreme values of the independent variables. Also, the use of linear model with a binary dependent variable can cause heteroskedasticity as the distribution of the error term consists only of two values, 0 and 1. The problem with heteroskedasticity is dealt with by fitting the model with a technique called maximum likelihood estimation instead of least squares.

The problem with irrelevant probabilities is solved by first defining a variable Z that is a linear function of the explanatory (independent) variables:

$$Z = \beta_1 + \beta_2 X_2 + \cdots + \beta_k X_k$$

Then, probability p is a sigmoid (S-shaped) function of Z. Below and above certain values; at the extreme ends of the curve small changes in independent variables are unlikely to affect the total outcome. In between these values the probability is sensitive to the value of Z. One popular

mathematical form for the function is the logistic function, used in the logit model and the other is cumulative normal distribution which is utilized by the probit model. Both models should give quite satisfactory and similar results.

In the logit model the probability of the occurrence of the event is determined as

$$p_i = F(Z_i) = \frac{1}{1+e^{-Z_i}}$$

The boundaries for p are defined as following. When Z tends to infinity, e^{-Z} tends to 0 and p has a limiting upper bound of 1. As Z tends to minus infinity, e^{-Z} tends to infinity and p has a limiting lower bound of 0.

The marginal effect of Z on the probability p , which will be denoted $f(Z)$, is the derivative of this function with respect to Z :

$$f(Z) = \frac{dp}{dz} = \frac{e^{-Z}}{(1+e^{-Z})^2}$$

The model is fitted by using maximum likelihood estimation. The method uses an iterative process to estimate the parameters. It is used in cases where the assumptions for using OLS estimators not satisfied. Maximum likelihood estimation should yield estimators which are consistent but also efficient in large samples. I will not go further into the details of this estimation technique but the detailed proof of the power of the method can be found from Dougherty (2007).

Fit and evaluation of the logit model

The fit of the model in regular linear regression is measured with the R^2 measure. However, there is no equivalent measure of fit in maximum likelihood estimation.

The R^2 measure used with logistic regression is called the pseudo- R^2 . The pseudo- R^2 compares the log-likelihood of the model with the log-likelihood of a model including only the intercept. Contrary to the conventional R^2 it does not have a clear interpretation according to its value. Nevertheless, some pseudo- R^2 measures have been developed to predict the fit of the model. One of these measures is the generalized R^2 proposed by Nagelkerke (1991) who transforms the

measure in such a way that it takes values from 0 to 1, a value of zero implying a poor fit and value of one predicts a good fit of the model.

The other measures of fit used include the number of outcomes predicted correctly. In this approach, denoting the actual outcome in observation i as Y_i with $Y_i = 1$ if the event occurs and 0 if it does not, and the probability of the event occurring as p_i , the observation i is taken as 1 if p_i greater than 0.5 and 0 if it is less.

The standard significance tests are similar to the standard regression models. The significance of an individual coefficient can be evaluated via its t statistic. However, the standard error is only valid in large samples, but the same applies to the t distribution, which converges on the normal distribution in large samples.

4.3 Definition of Variables

The variables used in the regression analysis are defined and described in this part. They are derived from the hypotheses of this study described before. A few additional variables are used as control variables. First, I define the dependent variable and then the deal and country specific independent variables used.

Dependent variable

Offer success is the dependent variable used in the regression analysis. It is a binary variable and assigned a value of 1 if the tender offer was successful and the value of 0 if the tender offer failed. A tender offer is defined successful if it is defined as completed by SDC. A tender offer is defined failed is it is defined as withdrawn by SDC. Only offers marked clearly completed or withdrawn were taken into account when selecting the sample.

Independent variables – Deal specific

Target attitude is a binary variable indicating the reaction of the target management to the offer. It is assigned a value of 1 if the offer is classified as hostile or unsolicited by SDC. Friendly, neutral or other offers are assigned a value of 0.

Competition is a binary variable assigned a value of 1 if the offer is competed i.e. there are more than one bidder. If there is only one offer made for the target shareholders the variable is assigned a value of 0.

Three different variables for the offer premium are introduced next. I have included three different variables for the offer premium as Walkling (1985) notes that the premium is affected by rumors already before the announcement of the offer. Schwert (1996) confirms that takeover announcements are preceded by a “run-up” in the target stock price. However, only one measure for premium is used in the final analysis after defining which measure for the premium provides the best fit. The premium data is collected from SDC.

Premium 1 day measures the premium offered, in percentage terms, for the target shareholders, relative to the closing price of the target the day before the announcement of the tender offer. The variable is continuous.

Premium 1 week measures the premium offered, in percentage terms, for the target shareholders, relative to the closing price of the target one week before the announcement of the tender offer. The variable is continuous.

Premium 4 weeks measures the premium offered, in percentage terms, for the target, relative to the closing price of the target four weeks before the announcement of the tender offer. The variable is continuous.

One other variable is also linked to the premium offered, and relates to the psychology associated with the offer premium. It is the measure used by Baker et al. (2009) whether the offer price exceeds the 52-week high stock price of the target. I decided to use this measure instead of the relative compensation used by Elsland and Weber (2006) because of its simplicity and the clearer anchoring effect into a single reference point. The 52-week premium is measured for the prior 52- week period beginning 30 days before the announcement. The data for the 52-week high prices is collected from SDC when available and supplemented with data from Thomson ONE Banker.

Premium over 52-week high is a binary variable assigned a value of 1 if the offer price exceeds the target 52-week high stock price and a value of 0 if it does not.

The bidder's pre-announcement ownership e.g. toehold in the target is measured with the same method as Betton et al. (2009). They classify missing toeholds as having a zero percent toehold. This method seems valid as the data is missing mainly for withdrawn offers and it is reasonable to assume that they did not hold any shares in the target.

Toehold is a continuous variable. It measures the percentage of target shares held by the bidder prior the announcement of the offer. The toehold is calculated by subtracting the amount of shares acquired in the offer from the amount of shares owned by the bidder after the completion of the offer.

The method of payment is also measured with multiple variables. First, only the method used is classified to be cash or something else. The second approach is to use the exact percentage of cash used in the payment structure, so it is more a more sophisticated measure of the payment structure. Again, as with the premium, only one of these variables is used in the final analysis.

Method of payment is a binary variable assigned a value of 1 if the payment method in the offer is classified to be "Cash Only" in SDC. If there is only one offer made for the target shareholders the variable is assigned a value of 0.

Percentage of cash is a continuous variable measuring the proportion of cash in percentage terms in the payment structure of the offer.

Target size is used as the general measure of the size of the offer. It is measured by the market capitalization or equity value of the target retrieved from SDC.

Target size is the natural logarithm of the target market (equity) value denoted in millions of US dollars four weeks prior the announcement of the offer. The variable is continuous.

Termination fee is a fine paid by the target to the bidder if the target withdraws. The data for termination fees is collected from SDC.

Termination fee is a binary variable. It is assigned a value of 1 if it is indicated in SDC that the target is required to pay a termination fee if the offer fails. Otherwise it is assigned a value of 0.

Several control variables are used in addition to the previously mentioned ones. These include cross-border and cross-industry status, type of buyer and the year of the offer. These are variables that do not have their own hypothesis but may affect the outcome of the offer.

Cross-border offer is a binary variable. It is assigned a value of 1 if SDC has classified the deal as a cross-border deal and the target and bidder nations differ and a value of 0 otherwise.

Cross-industry offer is a binary variable. It is assigned a value of 1 if the two-digit SIC codes of the target and the bidder differ and a value of 0 otherwise.

Financial buyer is a binary variable. It is assigned a value of 1 if SDC has classified the offer as an LBO and a value of 0 otherwise.

Year is a binary variable and each year between 1986 and 2010 is assigned its own dummy variable. The value of 1 represents the year the offer is announced. As acquisition activity follows the cycles it is important to take out the year effects which might affect the results.

Independent variables – Country specific

Now I define the country specific variables acting as the measure of investor protection in each country. These are used in the analysis of cross-border tender offers. They show how high the influence of shareholders and creditors is in individual countries. I use indices created previously by scholars to measure the level of corporate governance in individual countries.

Shareholder protection is measured by the antidirector rights index originally created by La Porta et al. (1998) but revised and corrected by Spamann (2010). The corrected index measures the level of shareholder protection as a sum of six factors: proxy voting by mail allowed, shares not blocked before the annual general meeting, cumulative voting allowed, oppressed minorities mechanism in place, preemptive rights to new issues and percentage of share capital required to call an extraordinary shareholder's meeting. . Index data is retrieved from Spamann's web page¹.

¹ Holger Spamann's publications - <http://www.spamann.net/>

The data package also contains a detailed explanation of the process how the index is constructed.

Target shareholder protection is a continuous variable. The target is assigned a value ranging from 0 to 6 according to how many shareholder rights are in place in the target country.

Acquirer shareholder protection is a continuous variable. The acquirer is assigned a value ranging from 0 to 6 according to how many shareholder rights are in place in the bidder country.

Creditor protection is measured with the index presented in the paper of Djankov et al. (2007). The index constitutes of the following creditor rights measured separately for each year from 1978 to 2003: creditor consent in reorganization, the ability of secured creditors to seize their collateral after the petition for reorganization, whether secured creditors are paid first in liquidation and whether an administrator is responsible for running the firm during reorganization. The index is used as a general measure of creditor power in a country. The data for the index is retrieved from Shleifer's web page².

Target creditor protection is a continuous variable. The target is assigned a value ranging from 0 to 4 according to how many creditor rights are in place in the target country.

Acquirer creditor protection is a continuous variable. The acquirer is assigned a value ranging from 0 to 4 according to how many creditor rights are in place in the bidder country.

Both shareholder and creditor rights indices are multiplied by the “Rule of Law” measure corresponding to the announcement year (scale transformed from -2.5 to 2.5 to a range of 0 to 1) provided by the World Bank³, which indicates the level of law enforcement in a country. This

² Professor Andrei Shleifer's Data Sets - <http://www.economics.harvard.edu/faculty/shleifer/dataset>

³ The Worldwide Governance Indicators Project - <http://info.worldbank.org/governance/wgi/index.asp>

gives a more realistic picture of the true level of rights the investors have in a specific country. Enforcement of laws is also noted as one of the key factors of successful corporate governance by Shleifer and Vishny (1997).

These variables are used independently but also the difference between them is measured and used separately in regressions as for example (Bris and Cabolis 2008a; 2008b) have done.

Difference: shareholder protection is a continuous variable. It is formed by deducting the target shareholder protection score from the bidder shareholder protection score.

Difference: creditor protection is a continuous variable. It is formed by deducting the target creditor protection score from the creditor protection score.

The level of corruption, also retrieved from the World Bank database³, and scaled to range from 0 to 5 in the target and acquirer country is used as a control variable.

Table 2: Summary of variables

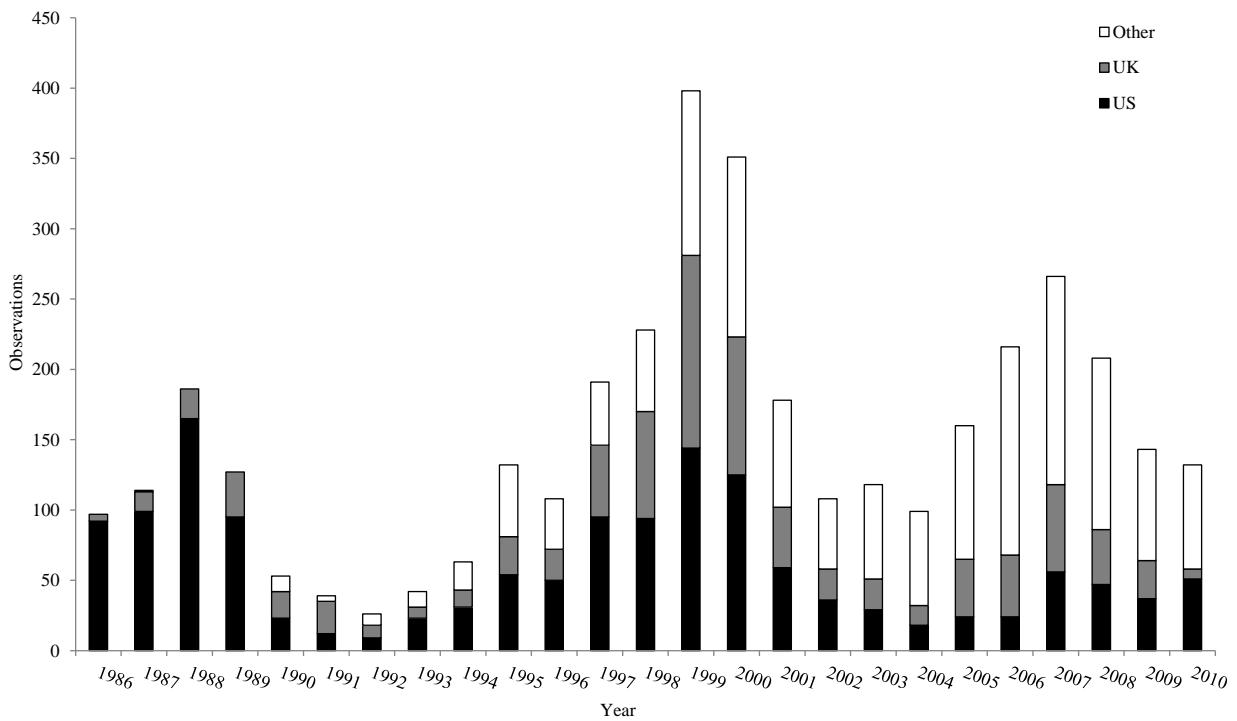
This table summarizes the main and control variables used in the study, their type and definition.

Variable	Type	Definition
<i>Main variables</i>		
Offer success	Binary	Dependent variable: offer completed (1) or withdrawn (0)
Target attitude	Binary	Reaction of the target management: hostile (1) or other (0)
Competition	Binary	Multiple bidders (1) or single bidder (0)
Premium 1 day	Continuous	Offer price compared to the closing price one day prior the announcement
Premium 1 week	Continuous	Offer price compared to the closing price one week prior the announcement
Premium 4 weeks	Continuous	Offer price compared to the closing price four weeks prior the announcement
Premium over 52 week high	Continuous	Offer price exceeds the target 52 week high (1) or does not exceed (0)
Toehold	Continuous	The percentage of target shares held by the bidder prior to the announcement of the bid
Method of payment	Binary	Cash (1) or other (0)
Percentage of cash	Continuous	The percentage of cash used in the total consideration
Target size	Continuous	Natural logarithm of the target equity value in USDm measured 4 weeks prior the announcement of the bid
Termination fee	Binary	Whether termination fee included (1) or not (0)
Target shareholder protection	Continuous	The value of the shareholder rights index in the target country (between 0 and 6)
Acquirer shareholder protection	Continuous	The value of the shareholder rights index in the bidder country (between 0 and 6)
Target creditor protection	Continuous	The value of the creditor rights index in the target country (between 0 and 4)
Acquirer creditor protection	Continuous	The value of the creditor rights index in the bidder country (between 0 and 4)
Difference: Shareholder protection	Continuous	Difference between the shareholder rights index value in the bidder and target country
Difference: Creditor protection	Continuous	Difference between the creditor rights index value in the bidder and target country
<i>Control variables</i>		
Cross-border	Binary	Whether the offer is flagged as a cross-border deal (1) deal by SDC or not (0)
Cross-industry	Binary	Whether the two-digit SIC codes of the target and the bidder match (0) or do not match (1)
Financial buyer	Binary	Whether the offer is flagged as an LBO (1) by SDC or not (0)
Year	Binary	Dummy variables representing each year in the sample
Target corruption	Continuous	The value of the corruption index in the target country (between 0 and 5)
Acquirer corruption	Continuous	The value of the corruption index in the bidder country (between 0 and 5)
Difference: Corruption	Continuous	Difference between the corruption index value in the bidder and target country

4.4 Descriptive Statistics

This part presents the characteristics of the samples used. I first show statistics about the distribution of the full sample by year, country and then summary statistics for the categorical and non-categorical variables and for several subsamples. Figure 1 shows the distribution of tender offers by year and target nation.

Figure 1: Distribution of tender offers by year and target nation



I have divided the observations into three groups whether the target is from United States, United Kingdom or from some other country. This is done as a major portion of all tender offers occur in the US or in the UK as Table 1 shows. As can be interpret Figure 1 demonstrates clearly how tender offer activity follows the general business cycle. The amount of offers spikes during the booms in late 1980s, 1990s and mid-2000s and correspondingly decreases heavily during the recessions that have followed. One notable thing is that before year 1990 tender offers are only observed in the US and UK. The tender offer activity in rest of the world has caught up with these developed markets during the past 15 years. Part of this could be explained by local crises such as the bursting of the asset price bubble in Japan in 1990, the Asian and Russian financial

crises in 1997 and 1998, the bursting of the dot-com bubble affecting the US the most in early 2000s as well as the recent financial crisis which began in 2007.

Table 3 lists the 38 countries included in the dataset, their legal origin and system and the amount of tender offers occurred in each country. The number of observations per country is reported both by target and acquirer. Over 60% of the target companies are from the US and the UK and nearly 60% of all bids are made by companies located in those two countries.

Although division between legal systems is not a proper way to classify the characteristics of individual countries, there is a clear link between the legal system in place in a country and the tender offer activity experienced. The distribution of tender offers made to targets in different legal systems is shown in Figure 2. Out of the total 3783 offers, 3034 tender offers were made for a target residing in a country where English common law is in place. Even though the French civil law is the most common legal system among the countries in the sample (adopted by 15 countries whereas English common law is adopted by 13 countries) the number of tender offers made in those countries (284) is less than one tenth of the total number of offers made to companies under the English system.

Figure 2: Distribution of tender offers according to legal system

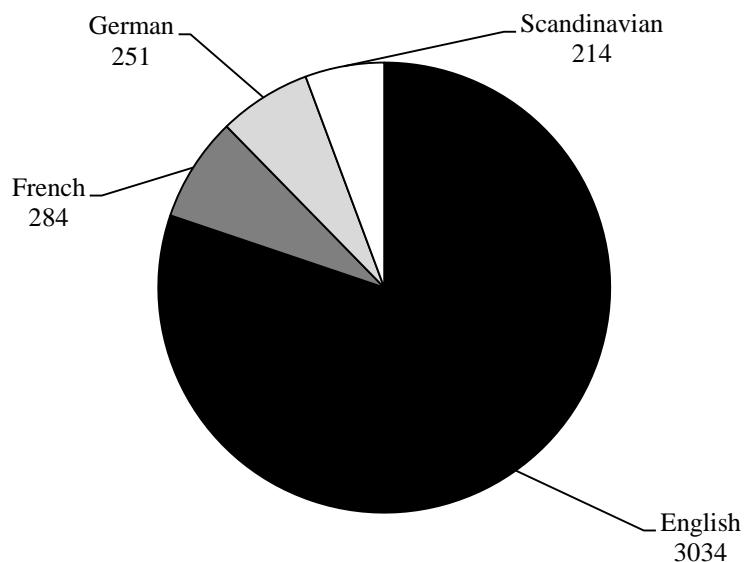


Table 3: Distribution of tender offers by target and acquiring country

This table presents the distribution of tender offers by target and acquiring country and shows the relative amount of tender offers in each country. Each country is also classified according their legal origin and system.

Countries	Legal origin	Legal system	Target	% of total	Acquirer	% of total
Argentina	Civil	French	4	0.1 %	3	0.1 %
Australia	Common	English	275	7.3 %	208	5.5 %
Austria	Civil	German	5	0.1 %	10	0.3 %
Belgium	Civil	French	10	0.3 %	26	0.7 %
Brazil	Civil	French	3	0.1 %	9	0.2 %
Canada	Common	English	184	4.9 %	185	4.9 %
Chile	Civil	French	8	0.2 %	2	0.1 %
Denmark	Civil	Scandinavian	33	0.9 %	24	0.6 %
Egypt	Civil	French	4	0.1 %	2	0.1 %
Finland	Civil	Scandinavian	16	0.4 %	17	0.4 %
France	Civil	French	87	2.3 %	160	4.2 %
Germany	Civil	German	41	1.1 %	106	2.8 %
Greece	Civil	French	9	0.2 %	10	0.3 %
Hong Kong	Common	English	36	1.0 %	56	1.5 %
India	Common	English	9	0.2 %	14	0.4 %
Ireland-Rep	Common	English	28	0.7 %	26	0.7 %
Israel	Common	English	2	0.1 %	5	0.1 %
Italy	Civil	French	28	0.7 %	51	1.3 %
Japan	Civil	German	166	4.4 %	194	5.1 %
Malaysia	Common	English	33	0.9 %	35	0.9 %
Mexico	Civil	French	6	0.2 %	12	0.3 %
Netherlands	Civil	French	74	2.0 %	107	2.8 %
New Zealand	Common	English	20	0.5 %	22	0.6 %
Norway	Civil	Scandinavian	61	1.6 %	28	0.7 %
Peru	Civil	French	2	0.1 %	0	0.0 %
Philippines	Civil	French	1	0.0 %	3	0.1 %
Portugal	Civil	French	5	0.1 %	5	0.1 %
Singapore	Common	English	54	1.4 %	44	1.2 %
South Africa	Common	English	18	0.5 %	25	0.7 %
South Korea	Civil	German	4	0.1 %	8	0.2 %
Spain	Civil	French	42	1.1 %	55	1.5 %
Sweden	Civil	Scandinavian	104	2.7 %	96	2.5 %
Switzerland	Civil	German	28	0.7 %	69	1.8 %
Taiwan	Civil	German	7	0.2 %	8	0.2 %
Thailand	Common	English	8	0.2 %	5	0.1 %
United Kingdom	Common	English	875	23.1 %	752	19.9 %
United States	Common	English	1492	39.4 %	1400	37.0 %
Venezuela	Civil	French	1	0.0 %	1	0.0 %
Total			3783	100 %	3783	100 %

In addition to US and UK, Australia and Canada are countries with high tender offer activity (275 and 184 offers respectively). Another interesting finding is that Sweden, although a very small country has more tender offers in the sample than for example Germany, France or Spain. This could of course be due to the elimination of data from the sample, so there might be a bias towards countries which have disclosed information about tender offers in the best way.

On the other hand, the division could be a signal of two things. First, acquisition activity is overall higher in countries which have adopted the English legal system, especially in the US and the UK, which are perceived to have the most developed capital markets in the world. Secondly, the discrepancy could derive from cultural differences. It could be that in most cultures large deals such as acquisitions are preferred to be negotiated in private and generally in friendly terms. So, a major part of acquisitions outside the US and the UK might be friendly mergers, negotiated between the managements of the companies involved, instead of tender offers directly to the shareholders.

Summary statistics

Now that I have gone through the composition of the sample according to country and legal system I continue to describe the composition of the sample in the light of variables and subsamples. Table 4 presents the summary statistics for the categorical variables in different samples and subsamples.

Panel A shows that the failure rate of tender offers in the whole sample is around 15%, a bit lower, but quite much in line with the previous studies. For example Fabozzi et al. (1988) report 17 % of the bids in their sample to be unsuccessful and Flanagan et al. (1998) note that 23% of all tender offers reported by SDC were not successful. The slightly smaller failure percentage in my sample may be because of the data elimination process. It is more likely that withdrawn offers are the ones which have missing data and have been eliminated due to that. Hostile offers and offers with multiple bidders have clearly higher failure rates, 55% and 40% respectively. Interestingly cross-border offers seem to fail less often as the rate is only 12%. Otherwise it seems that offers for targets outside the US and the UK fail more often.

Table 4: Tender offer success rate and characteristics of the sample

The table below lists the full sample and several subsamples and presents their characteristics. The number of observations and the percentage of observations falling into each category are reported. Table A covers the full sample and Panel B the sample which includes the comparison of the offer premium to the 52-week high price of the target prior the announcement.

Panel A: Full Sample Sample	Success rate			Observations							
	Observations	Successful	Failed	Hostile	Competition	Termination	Cash only	Toehold	Cross-border	Cross-industry	LBO
Full	3783	3232	551	558 15 %	700 19 %	1066 28 %	2671 71 %	1116 30 %	1406 37 %	2137 56 %	453 12 %
Hostile	558	253	305		216 39 %	30 5 %	378 68 %	289 52 %	172 31 %	289 52 %	28 5 %
Competition	700	419	281	216 31 %		152 22 %	482 69 %	215 31 %	255 36 %	382 55 %	83 12 %
Cross-border	1406	1236	170	172 12 %	255 18 %	378 27 %	1100 78 %	395 28 %		716 51 %	87 6 %
<i>Target nation</i>											
US	1492	1299	193	234 16 %	295 20 %	848 57 %	1299 87 %	308 21 %	428 29 %	835 56 %	172 12 %
UK	875	753	122	120 14 %	138 16 %	97 11 %	354 40 %	203 23 %	366 42 %	512 59 %	139 16 %
Other	1416	1180	236	204 14 %	267 19 %	121 9 %	1018 72 %	605 43 %	612 43 %	790 56 %	142 10 %
<i>Acquirer nation</i>											
US	1400	1195	205	223 16 %	307 22 %	637 46 %	1144 82 %	305 22 %	340 24 %	809 58 %	192 14 %
UK	752	654	98	100 13 %	113 15 %	143 19 %	351 47 %	168 22 %	240 32 %	450 60 %	140 19 %
Other	1631	1383	248	235 14 %	280 17 %	286 18 %	1176 72 %	643 39 %	826 51 %	878 54 %	121 7 %
Panel B: Sample with 52 week high as reference point											
Full	1854	1541	313	293 16 %	351 19 %	758 41 %	1563 84 %	556 30 %	620 33 %	1070 58 %	225 12 %
Premium higher	1122	948	174	176 16 %	248 22 %	470 42 %	960 86 %	329 29 %	386 34 %	641 57 %	146 13 %
Premium lower	732	593	139	117 16 %	103 14 %	288 39 %	603 82 %	227 31 %	234 32 %	429 59 %	79 11 %

Approximately 15% of the bids in the whole sample are hostile bids. Hostility is most certainly linked to multiple bidders as 31% of the competed offers are also hostile. Competition among bidders seems more frequent when the bidder is based in the US.

Termination fees are used mainly with US targets and bidders. Overall, termination fees were used in 1066 deals and 848 of those were with US targets. On the other hand buying a toehold in the target prior the announcement of the tender offer is more popular with targets and acquirers coming from outside the US and UK. It also seems that termination fees are favored by friendly bidders, as 28% of all offers but only 5% of hostile deals report a termination fee, but 52% of all hostile deals include a toehold. This finding supports the result of Betton et al. (2009) that toeholds are mainly used in hostile bids.

Panel B presents the sample which includes the data for target the target 52-week share price. The success rate is three percentage points higher for the deals in which the offer prices exceeds the 52-week high price than in deals which it does not. Otherwise the composition of the smaller sample is quite close to the characteristics of the main sample presented in Panel A.

Table 5 presents the summary statistics for the non-categorical variables. I begin the description of the sample from the premium measures. The average one week premium offered for a target is 43.7% in the full sample. It is clear from all samples that a run-up in the target share price occurs before the announcement. The difference between 4 week and 1 day premiums on average is over 10 percentage points in almost every sample.

Premiums are higher in situations with multiple bidders, over 10 percentage points higher than in the full sample, but not clearly higher in situations where target management opposes the bid. The finding about competition increasing premium supports the finding of Bradley et al. (1988) who find higher wealth effects for target shareholders in multiple bidder situations. Higher than sample average, premiums are also paid in cross-border deals. US targets are paid and US bidders pay higher premiums than targets and bidders from the UK or other countries.

The average deal size measured by target market capitalization is \$US934.97 million. However, deal size significantly is higher in the subsamples consisting of other countries than the US and the UK. This could be because of more active acquisition market in the US and UK, so tender offers are used in smaller acquisitions as well. It could also be that in the US and UK even

smaller firms are publicly listed and that affects the average size in this sample which consists of only publicly listed targets. It is also notable that targets, measured by market value 4 weeks before the announcement, are larger in hostile and contested bids than the sample average.

Generally the use of cash seems to be the dominating method of payment. On average 82.1% of the payment structure consists of cash. This could be somewhat again due to the data elimination process, as many events were eliminated because of unknown method of payment. The proportion of cash used is higher with US targets and acquirers and in cross-border deals where cash equals over 88% of the total consideration on average. Rossi and Volpin (2004) justify the higher than average use of cash in cross-border deals with the differences in corporate governance. The use of shares as a medium of exchange requires a high level of investor protection.

The average toehold size equals 5.25%. It is somewhat higher, 6.51% in hostile bids. In the subsamples toeholds are lowest with US targets and acquirers and highest with targets and acquirers coming from other countries than the US and the UK.

Panel B of Table 5 again shows the statistics for the smaller main sample. The average premiums seem to be consistently higher than in the full sample. The average size of the offers in which the offer price exceeds the 52-week high is almost double compared to offers where the offer price does not exceed the 52-week high. That could be a sign that bidders in large acquisitions tend to overpay for the targets (Moeller et al., 2004).

Averages and standard deviations for shareholder and creditor protection for each sample are also reported. Generally it looks that the investor protection is slightly better on average in the target than in the acquirer country. Interestingly, higher variation in the average and standard deviation of creditor protection is observed in all samples. And the general level of creditor protection seems lower than the level of shareholder protection. One reason could be that over one-third of the observations come from the US which scores well on the shareholder protection index (6 out of 6) but poorly on the creditor protection measure (1 out of 4). But similar results are observed in the subsamples consisting of targets and acquirers outside the US and the UK.

Table 5: Summary statistics of non-categorical variables

The table presents summary statistics, means and standard deviations for non-categorical variables for the full sample and subsamples in Panel A and for the sample including the comparison of the offer price to the 52-week high price of the target prior the announcement. Premiums, amount of cash and toehold are presented in percentage terms. Target size is the market value of the target in millions of US dollars, measured 4 weeks prior to the announcement of the offer. Shareholder and creditor protection indices are both scaled with the “Rule of Law” index. Shareholder protection index takes values between 0 and 6 while the creditor protection index ranges between 0 and 4.

Panel A: Full Sample		Premium				Payment		Toehold		Target size		Shareholder protection				Creditor protection					
		1 day		1 week		4 weeks		% Cash						Target		Acquirer		Target		Acquirer	
Sample		Mean	St. Dev.	Mean	St. Dev.	Mean	St. Dev.	Mean	St. Dev.	Mean	St. Dev.	Mean	St. Dev.	Mean	St. Dev.	Mean	St. Dev.	Mean	St. Dev.		
Full		38.2 %	0.56	43.7 %	0.60	48.7 %	0.64	82.1 %	0.34	5.25 %	0.12	934.97	3582.7	4.55	0.57	4.47	0.64	1.71	1.57	1.65	1.57
Hostile		39.4 %	0.42	44.6 %	0.45	48.8 %	0.43	80.1 %	0.35	6.51 %	0.10	1 836.52	6549.6	4.59	0.56	4.52	0.65	1.68	1.09	1.59	1.09
Competition		48.5 %	0.47	54.9 %	0.59	62.1 %	0.85	83.6 %	0.30	3.97 %	0.09	1 568.90	5935.1	4.59	0.56	4.50	0.69	1.62	1.07	1.53	1.04
Cross-border		41.0 %	0.58	47.0 %	0.60	52.5 %	0.65	88.3 %	0.28	5.14 %	0.11	1 181.20	4550.2	4.51	0.60	4.32	0.74	1.84	1.12	1.66	1.10
<i>Target nation</i>																					
US		42.3 %	0.42	49.2 %	0.49	57.8 %	0.69	89.9 %	0.22	2.48 %	0.08	566.93	1154.6	4.87	0.11	4.67	0.50	0.81	1.82	1.14	1.98
UK		36.8 %	0.33	41.9 %	0.37	43.7 %	0.38	76.0 %	0.39	3.71 %	0.09	1 051.63	4686.6	4.17	0.05	4.28	0.47	3.33	0.04	2.47	1.19
Other		34.7 %	0.77	38.9 %	0.78	42.1 %	0.69	77.6 %	0.39	9.14 %	0.15	1 250.67	4368.5	4.43	0.81	4.39	0.79	1.65	0.86	1.68	0.95
<i>Acquirer nation</i>																					
US		42.3 %	0.39	48.6 %	0.48	56.0 %	0.67	88.6 %	0.24	2.67 %	0.08	583.56	1287.8	4.75	0.35	4.87	0.12	1.18	2.05	0.81	1.88
UK		35.3 %	0.44	41.3 %	0.45	43.6 %	0.47	73.2 %	0.40	3.50 %	0.09	977.04	4690.7	4.31	0.39	4.17	0.05	2.72	1.05	3.33	0.04
Other		36.0 %	0.72	40.6 %	0.73	44.8 %	0.67	80.6 %	0.36	8.28 %	0.14	1 217.21	4246.6	4.48	0.72	4.27	0.85	1.70	0.98	1.59	0.90
Panel B: Sample with 52 week high as reference point																					
Full		41.8 %	0.48	47.8 %	0.54	53.8 %	0.69	88.3 %	0.26	5.28 %	0.12	945.74	3861.8	4.69	0.53	4.56	0.62	1.20	1.80	1.37	1.86
Premium higher		44.9 %	0.47	50.8 %	0.55	58.5 %	0.74	89.7 %	0.24	4.72 %	0.11	1153.99	4650.3	4.72	0.49	4.58	0.59	1.15	2.20	1.36	2.27
Premium lower		37.1 %	0.51	43.2 %	0.52	46.6 %	0.61	86.0 %	0.29	6.14 %	0.13	626.54	2115.0	4.65	0.58	4.51	0.66	1.29	0.85	1.40	0.94

Country and country group level subsamples

Table 6 presents the last descriptive statistics table which reveals the country level differences in the characteristics of tender offers. Panel A shows individual countries with over 100 events each and Panel B the groups of other countries divided by their legal system. It shows how the offer characteristics differ even between developed countries using the same legal system.

Probability of failure, hostility and competition is highest in Canada and Australia. Japan and the group of other countries with the German legal system experience the least failed offers, hostility and competition among bidders. Also Shleifer and Vishny (1997) note, that hostile takeovers are rare in these countries.

Termination fees are used mainly in the US, UK, Canada and Australia, all belonging to the family of English common law. The use of termination fees is non-existent Japan and Sweden and almost non-existent in the other countries with German or Scandinavian legal systems (1 and 2 events with termination fee observed respectively). On the other hand the use of toeholds is more common especially in Japan where 70 % of tender offers include a toehold and the toehold is also quite significant in size, 11.6% on average. This could be explained by the cross-holdings distinctive to Japanese companies (La Porta et al., 1999a) High toeholds, 15.9 % on average are observed with targets from the group English.

Highest premiums are again observed with targets from the US. This could be explained by the average target size which is also smallest in the US, so relative premiums tend to be higher. The average size seems to be higher for less active takeover markets with the exception of United Kingdom which has the second highest amount of observations but also a high average target size.

The level of shareholder protection seems to be generally higher than the level of creditor protection. Scandinavian countries have the highest value of shareholder protection while the best protection for creditors is provided by the UK.

Table 6: Statistics for target countries and country groups

This table presents statistics of categorical variables and means for non-categorical variables for certain individual countries and groups constructed of the remaining countries. Countries with over 100 events, measured by being a target in an offer, are presented individually in Panel A and the rest of the countries are grouped together according to their legal system in Panel B. The four groups consist of the following countries; English: Hong Kong, Singapore, Ireland, India, Israel, Malaysia, New Zealand, South Africa and Thailand; French: Argentina, Belgium, Brazil, Chile, Egypt, France, Greece, Italy, Mexico, Netherlands, Peru, Philippines, Portugal, Spain, Venezuela; German: Austria, Germany, South Korea, Switzerland and Taiwan; Scandinavian: Denmark, Finland and Norway. Target size is the market value of the target in millions of US dollars, measured 4 weeks prior to the announcement of the offer. Columns *Shareholder* and *Creditor* show the sample average value of shareholder and creditor protection. Shareholder and creditor protection indices are both scaled with the “Rule of Law” index. Shareholder protection index takes values between 0 and 6 while the creditor protection index ranges between 0 and 4.

Panel A: Single countries	Success rate			Characteristics								Mean								
	Observations	Successful	Failed	Hostile	Competed	Termination	Cash only	Toehold	Cross-border	Cross-industry	LBO	Premium:	1 day	1 week	4 weeks	% Cash	Toehold	Target size	Shareholder	Creditor
United States	1492	1299	193	234 87 %	295 20 %	848 57 %	1299 87 %	308 21 %	428 29 %	835 56 %	172 12 %		42.3 %	49.2 %	57.8 %	89.9 %	2.5 %	566.9	4.87	0.81
United Kingdom	875	753	122	120 86 %	138 16 %	97 11 %	354 40 %	203 23 %	366 42 %	512 59 %	139 16 %		36.8 %	41.9 %	43.7 %	76.0 %	3.7 %	1 051.6	4.17	3.33
Canada	184	148	36	41 80 %	52 28 %	66 36 %	118 64 %	44 24 %	76 41 %	68 37 %	4 2 %		43.1 %	47.2 %	50.5 %	71.8 %	3.0 %	959.2	4.21	0.84
Australia	275	207	68	79 75 %	79 29 %	36 29 %	161 59 %	113 41 %	103 37 %	139 51 %	10 4 %		36.3 %	41.8 %	43.5 %	65.9 %	7.7 %	558.6	5.07	2.54
Japan	166	157	9	6 95 %	6 4 %	0 0 %	166 100 %	116 70 %	26 16 %	127 77 %	49 30 %		42.0 %	42.8 %	42.2 %	99.7 %	11.6 %	548.0	4.58	1.54
Sweden	104	86	18	10 83 %	10 17 %	0 0 %	71 68 %	28 27 %	57 55 %	64 62 %	14 13 %		30.8 %	36.5 %	42.9 %	72.3 %	6.8 %	891.4	5.16	0.87
Panel B: Country groups																				
English	208	168	40	15 81 %	25 19 %	6 3 %	160 77 %	119 57 %	88 42 %	134 64 %	14 7 %		29.3 %	33.2 %	37.9 %	83.4 %	15.9 %	634.8	4.14	2.13
French	284	244	40	37 86 %	61 14 %	10 13 %	191 67 %	117 41 %	131 46 %	151 53 %	28 10 %		31.7 %	36.7 %	40.4 %	74.2 %	9.5 %	3 320.9	3.66	1.17
German	85	79	6	5 93 %	10 7 %	1 6 %	66 78 %	33 39 %	59 69 %	46 54 %	10 12 %		24.3 %	30.8 %	36.5 %	85.6 %	8.6 %	1 373.9	3.93	1.84
Scandinavian	110	91	19	11 83 %	24 17 %	2 10 %	85 77 %	35 32 %	72 65 %	61 55 %	13 12 %		35.2 %	37.0 %	40.7 %	80.3 %	8.2 %	593.0	5.25	1.88

5 RESULTS

This section presents the empirical results of this thesis. First, I discuss the selection of variables and present the correlation between all independent variables. Then I move forward to the results of the different regressions.

First, regressions with the full sample are presented. In the second of the regression analysis I analyze the effect of the offer premium to the offer outcome with the reference point variable linking the offer price to the 52-week high price of the target. In addition the results of several subsamples are shown in the next subsection. The last part of the regression analysis in this section discusses the effect of country-level investor protection to the outcome of cross-border tender offers. The final part presents the magnitude and effect of individual independent variables to the probability success.

5.1 Selection of Variables

This part discusses the selection of independent variables based on the correlation between independent variables. Correlations between all variables are presented in Table 7.

I have multiple choices for premiums and for the method of payment of which I choose one variable for each. The correlations between one day, one and four week's premium are very high. The one week premium has a correlation coefficient over 0.8 with both one day and four week premium. It is also less correlated with target size than the four week premium. So, one week premium is selected as the variable used for offer premium.

The method of payment and percentage of cash variables are correlated and the value of the correlation coefficient is 0.658. However, the method of payment is also correlated with different investor protection variables. As the percentage of cash provides a more sophisticated measure of the payment structure used than the binary variable, it is selected as the variable to represent the method of payment used.

The different measures for investor protection are almost all correlated, but the individual measures and the measures of difference are not used in the same regression equations.

Table 7: Correlation between independent variables

This table presents the Pearson's correlation between all independent variables. Variables having an absolute correlation higher than 0.2 have been highlighted with grey color. One day, one and four week premiums are highly correlated, but only one is used in the regressions. Also, the method of payment and percentage of cash are highly correlated. Only one of these measures is used in the regressions. Target attitude and competition are positively correlated. Termination fees are negatively correlated with target attitude, toehold and the level of target creditor protection and corruption. The measures for investor protection and differences among them are also highly correlated, but are not used simultaneously in regression. Out of the investor protection variables it seems that creditor rights and level of corruption are positively correlated and shareholder and creditor rights have negative correlation.

Variables	Target attitude	Premium 1 day	Premium 1 week	Premium 4 weeks	Premium > 52w high	Toehold	Competition	Payment method	Percentage of cash	Target size	Termination	Difference: Shareholder	Difference: Creditor	Difference: Corruption	Target: Shareholder	Target: Creditor	Target: Corruption	Acquirer: Shareholder	Acquirer: Creditor	Acquirer: Corruption	Financial buyer	Cross-border	Cross-industry
Target attitude	1.000																						
Premium 1 day	0.040	1.000																					
Premium 1 week	0.031	0.898	1.000																				
Premium 4 weeks	0.028	0.758	0.845	1.000																			
Premium > 52w high	-0.004	0.147	0.126	0.171	1.000																		
Toehold	0.189	-0.069	-0.079	-0.089	-0.025	1.000																	
Competition	0.216	0.156	0.151	0.155	0.100	0.012	1.000																
Payment method	-0.026	0.049	0.063	0.081	0.043	0.069	-0.018	1.000															
Percentage of cash	-0.024	0.087	0.089	0.083	0.031	0.105	-0.006	0.658	1.000														
Target size	0.123	-0.174	-0.210	-0.242	0.096	0.112	0.086	-0.111	-0.090	1.000													
Termination	-0.211	0.046	0.072	0.103	0.025	-0.273	-0.069	0.193	0.056	-0.017	1.000												
Difference: Shareholder	0.010	-0.011	-0.014	-0.027	-0.014	0.010	0.016	-0.088	-0.012	-0.017	-0.097	1.000											
Difference: Creditor	-0.012	-0.029	-0.012	-0.003	0.029	-0.003	-0.018	0.113	0.005	0.015	0.181	-0.283	1.000										
Difference: Corruption	-0.021	0.017	0.031	0.049	0.041	-0.021	-0.071	0.076	0.016	0.028	0.175	-0.436	0.446	1.000									
Target: Shareholder	0.040	0.034	0.036	0.071	0.033	-0.028	0.041	0.209	0.027	-0.071	0.192	-0.373	0.192	0.158	1.000								
Target: Creditor	-0.013	-0.081	-0.089	-0.126	-0.101	0.063	-0.039	-0.318	-0.082	-0.028	-0.387	0.153	-0.419	-0.258	-0.252	1.000							
Target: Corruption	-0.025	-0.134	-0.147	-0.178	-0.147	0.098	-0.009	-0.195	-0.089	0.050	-0.326	0.150	-0.233	-0.404	-0.276	0.583	1.000						
Acquirer: Shareholder	0.048	0.045	0.044	0.058	0.028	-0.025	0.044	0.123	0.029	-0.086	0.106	-0.460	-0.117	-0.237	0.563	-0.106	-0.148	1.000					
Acquirer: Creditor	-0.023	-0.110	-0.101	-0.127	-0.054	0.054	-0.057	-0.210	-0.085	-0.028	-0.213	-0.122	0.420	0.166	-0.089	0.570	0.360	-0.209	1.000				
Acquirer: Corruption	-0.045	-0.125	-0.130	-0.140	-0.089	0.087	-0.070	-0.145	-0.074	0.069	-0.185	-0.257	0.169	0.388	-0.128	0.349	0.613	-0.367	0.513	1.000			
Financial buyer	-0.089	-0.023	-0.035	-0.047	0.033	-0.054	-0.002	0.038	0.125	-0.016	-0.041	0.060	-0.006	-0.063	-0.052	0.037	-0.013	-0.006	0.025	-0.060	1.000		
Cross-border	-0.055	0.048	0.061	0.067	0.025	-0.024	-0.007	0.129	0.143	0.070	-0.022	-0.155	-0.063	0.078	-0.017	0.108	0.121	-0.156	0.040	0.179	-0.137	1.000	
Cross-industry	-0.039	-0.038	-0.040	-0.043	-0.015	0.082	-0.018	0.102	0.153	-0.054	-0.058	0.040	0.014	-0.028	0.000	0.029	-0.026	0.030	0.048	-0.055	0.263	-0.086	1.000

It seems that creditor rights and level of corruption are positively correlated and shareholder and creditor rights have negative correlation. As there is significant amount of correlation observed between these variables it may cause multicollinearity in the regressions. I have to look out for inconsistencies in the standard errors of the coefficients while conducting the regressions.

5.2 Main Samples

Table 8 shows the logit regression results for the full sample. The results are very clear and consistent throughout the development of the model as the number of variables is increased.

Target attitude and competition are highly significant as expected, consistently at 1% level in each equation. The sign for both is negative, so the effect is clear, both hostile attitude of the target management and competing bidders decrease the probability of a single offer being successful. This is nothing special as almost all previous studies about tender offer success have shown that target attitude is probably the single most important contributor to the probability of success. Competition is less studied predictor of success, but Flanagan et al. (1998) found it to decrease the probability of success as well.

In addition, I find the offer premium being a significant determinant of the offer success. It is significant at 1% level in all models except number four in which the level of significance drops to 5%. But again the results are consistent enough to say that the level premium increases the probability of tender offer success. The role of the premium has been the determinant which has seen the most contradictory results in different studies. This result is in line with Quirin, (1971), Walkling (1985) and Holl and Kyriazis (1996) but contradicts the results of Pelligrino (1972), Ebeid (1974), Hoffmeister and Dyl (1981) and Flanagan et al., (1998). It is understandable that the older studies did not find premium as a significant determinant as they might have had some errors with the specification as deal rumors might have affected the size of the premium (Walkling, 1985). Flanagan et al. (1998) used only a US dataset retrieved from SDC as I have done. One reason for the insignificance could be that premiums paid for US targets are generally already on a high level. I will return to this result in the country level subsamples.

Table 8: Logit regression results for the full sample

This table presents the results of the logit regression for the full sample. Tender offer success is the dependent variable. Target attitude, competition, termination, cross-border, cross-industry and financial buyer are all dummy variables. Premium, percentage of consideration paid in cash and toehold are continuous variables denoted in percentage terms. Target size is the natural logarithm of the market capitalization of the target in \$US million four weeks prior to the offer. Year dummies represent each year present in the sample. *p*-values for the coefficients are in parentheses. ***, ** and * indicate significance at 1, 5 and 10% level with the two-tailed test.

Models						
Variables	Expected	(1)	(2)	(3)	(4)	(5)
Target attitude	-	-2.528*** (0.000)	-2.534*** (0.000)	-2.363*** (0.000)	-2.360*** (0.000)	-2.484*** (0.000)
Competition	-	-1.743*** (0.000)	-1.835*** (0.000)	-1.846*** (0.000)	-1.845*** (0.000)	-1.928*** (0.000)
Premium 1 week	+		0.442*** (0.003)	0.422*** (0.006)	0.385** (0.011)	0.429*** (0.006)
% of cash	+		0.464*** (0.003)	0.386** (0.014)	0.378** (0.022)	0.344** (0.043)
Toehold	+			0.039 (0.938)	0.097 (0.848)	0.252 (0.625)
Termination	+			1.086*** (0.000)	1.087*** (0.000)	1.115*** (0.000)
Target size	-			0.031 (0.427)	0.018 (0.642)	0.032 (0.434)
Constant		2.959 (0.000)	2.429 (0.000)	2.087 (0.000)	2.222 (0.000)	1.965 (0.000)
<i>Control variables</i>						
Cross-border					0.198 (0.109)	0.230* (0.068)
Cross-industry					-0.199* (0.094)	-0.229* (0.057)
Financial buyer					0.001 (0.995)	-0.035 (0.854)
Year dummies		No	No	No	No	Yes
<i>Statistics</i>						
Correct predictions		87.60 %	87.84 %	87.79 %	87.68 %	88.21 %
Nagelkerke R ²		0.361	0.368	0.385	0.388	0.399
Pseudo R ²		0.274	0.280	0.295	0.297	0.307
Observations		3783	3783	3783	3783	3783

Also the percentage of cash used as consideration and the inclusion of termination fees are significant determinants of success. The signs are positive as expected, increasing the percentage of cash used and including a termination fee binding the target increase the probability of success. Termination fee is consistently significant at 1% level while the significance of percentage of cash drops from 1% level to 5% with the addition of variables. The results are as expected as cash is the most concrete and easiest to understand method of payment. There are no valuation effects, such as bidder overvaluation (Shleifer and Vishny, 2003) which the target shareholder should take into consideration. Termination fees make it costly for targets to withdraw so their inclusion should also act in the favor of the bidder. Flanagan et al. (1998) also found the inclusion of termination fees to increase the probability of success.

Toehold and target size are found to be insignificant determinants of tender offer success. The sign for toehold is positive as expected but interestingly, and unexpectedly positive for target size as well. However, the significance level for both variables is very low. The insignificance of toehold contradicts Walkling (1985), Holl and Kyriazis (1996), Flanagan et al. (1998) and Elsland & Weber (2006), but the reason could be that toeholds are observed and associated mainly with hostile bids (Betton et al., 2009). I return to this puzzle in the next subsection where I present the results for the subsamples containing only hostile bids.

The cross-border and cross-industry control variables both somewhat contribute to the success of a tender offer. Both are significant at 10% significance level. The sign for cross-border deals is positive which indicates that those should succeed more often, and negative for cross-industry deals. Flanagan et al. (1998) find the same effects for these variables. They offer an explanation for cross-border deals being more successful in the simple fact that local management is less likely to be fired after the acquisition because of their knowledge of the local business environment. The reason for cross-industry deals being less successful could be that bidders from other industries are do not have the necessary expertise in the target industry, do not understand the value-creation in that industry and end up bidding too low.

The fit of the model is average as the value of Nagelkerke R² for the final model is 0.399. However, the fit improves with the addition of main and control variables. The amount of correct predictions is 88.21% in the final model. The amount of correct predictions stays in the same level throughout the development of the model. Table 9 presents statistics about the predictive

ability of the model. The predictive ability for positive outcomes is good at 89.60% but remarkably lower for negative outcomes. The model can predict only 69.81% of the negative outcomes correctly, but that is probably evident as only 15% of the offers in the sample failed.

Table 9: Prediction accuracy of the logistic regression model

This table shows the prediction accuracy of the logistic model for positive and negative outcomes and the amount and percentage of observations which are correctly and incorrectly classified.

		Observed		% Correct
		1	0	
Outcome	1	3152	366	89.60 %
	0	80	185	69.81 %
Total		3232	551	88.20 %

Sample with the 52-week high measure

The second set of regressions adds the behavioral premium variable, the use of 52-week high as a reference point for the offer price, used by Baker et al. (2009) to shed more light into the dilemma experienced with the role of the premium offered for the target shareholders as a determinant for the offer's success. As already mentioned previous studies have revealed ambiguous results about the significance of the premium. Baker et al. (2009), reason that the reference point theory complements other theories of mergers; especially in the case of analyzing the offer premia. They focus especially on the 52-week high as a judgmental reference point for investors as it is widely reported in financial press and thus provides an easy psychological benchmark for valuing a company.

Results of the second regression analysis are shown in Table 10. The effect and significance of other variables remain steady and enhance the results of the first regression with the large sample presented in Table 8.

Only changes are the sign for target size variable is now negative, cross-border variable loses its significance and the significance of the percentage of cash used and cross-industry variables increases. These changes can be due to the smaller sample size and elimination of certain events that did not have share price data.

Table 10: Logit regression results with the 52-week high measure

This table presents the results of the logit regression for the sample which includes the 52-week high measure. *Premium > 52w high* is a dummy variable that is assigned a value of 1 if the offer price exceeds the 52-week high price and the value of 0 otherwise. All other variables remain the same. Premium 1 week is replaced with Premium > 52w high in model one. Premium 1 week is added in model two. Models 3 and 4 add control variables and year dummies. *p*-values for the coefficients are in parentheses. ***, ** and * indicate significance at 1, 5 and 10% level with the two-tailed test. 9 observations are omitted from model 4 due to year dummy for 1992 predicting the outcome perfectly.

Models					
<i>Variables</i>	<i>Expected</i>	(1)	(2)	(3)	(4)
Target attitude	-	-2.399*** (0.000)	-2.416*** (0.000)	-2.425*** (0.000)	-2.638*** (0.000)
Competition	-	-1.247*** (0.000)	-1.282*** (0.000)	-1.264*** (0.000)	-1.531*** (0.000)
Premium 1 week	+		0.298 (0.125)	0.252 (0.191)	0.284 (0.130)
% of cash	+	0.807*** (0.002)	0.792*** (0.002)	0.845*** (0.001)	0.802*** (0.004)
Tohold	+	-0.058 (0.928)	0.034 (0.958)	0.155 (0.813)	0.545 (0.422)
Termination	+	1.485*** (0.000)	1.476*** (0.000)	1.473*** (0.000)	1.730*** (0.000)
Target size	-	-0.078 (0.142)	-0.056 (0.303)	-0.077 (0.168)	-0.285 (0.629)
Constant		1.683 (0.000)	1.475 (0.000)	1.685 (0.000)	1.640 (0.003)
Premium > 52w high	+	0.469*** (0.003)	0.426*** (0.008)	0.434*** (0.007)	0.310* (0.073)
<i>Control variables</i>					
Cross-border				0.211 (0.225)	0.242 (0.186)
Cross-industry				-0.312* (0.064)	-0.402** (0.022)
Financial buyer				-0.073 (0.761)	-0.298 (0.232)
Year dummies		No	No	No	Yes
<i>Statistics</i>					
Correct predictions		87.70 %	88.08 %	87.38 %	87.97 %
Nagelkerke R ²		0.421	0.422	0.427	0.460
Pseudo R ²		0.318	0.320	0.324	0.353
Observations		1854	1854	1854	1845

The first model replaces the variable Premium 1 week with the variable Premium > 52w high, which is the dummy variable whether the offer price exceeds the 52-week high price of the target measured for the 52 past weeks 30 days prior the offer. The rest of the models add back the conventional premium measure, control variables and year dummies.

The behavioral premium variable is highly significant at 1% level when used alone and with the one week premium variable. The significance decreases to 10% level with the addition of year dummies. The reason could be that the annual division of the sample is skewed towards the 2000s which could cause the year dummies to have such an effect. As the significance of the behavioral premium is very high, the significance of the conventional premium measure (observed to be significant at 1% level in Table 9) fades away and becomes insignificant.

These results help to understand the ambiguous results gained for the significance of the tender offer premium. The significance of the behavioral premium and the insignificance of the conventional premium measure suggest that the absolute level of the premium is not everything but investor psychology plays also a role when evaluating the offer. Target shareholders clearly use psychological anchors or reference points in evaluating the premiums offered. Exceeding the reference point price, in this case the 52-week high price of the target increases the probability of the offer being successful. The same result is obtained by Baker et al. (2009) in their paper.

The amount of correct predictions, 87.97% is in line with the number of correct predictions in the full sample. However, the fit of the model is better, the Nagelkerke R² being 0.460. The fit of the model is better as the sample is smaller and the behavioral premium variable could also add into the predictive power of the model.

Country level regressions

The analysis for country and country group subsamples is conducted to supplement the main regression analyses. Table 11 presents the results. It shows some country level differences between different countries and areas and acts as an example that similar tender offer tactics are not effective in every country. But as most of the countries have been grouped together according to their legal system no final conclusions can be drawn from the analysis. The grouping is done as a very high amount of the observations are from the US and the UK, and only 6 countries had

over 100 observations each in the full sample, measured by the amount of tender offer targets. Out of these six, Japan and Sweden had to be merged to the country groups according to their legal system, as the regressions for those countries suffered from too many perfectly predicting variables which affected the results of the model.

But the subsamples provide some interesting details to the main analysis. Again in every sample, target attitude and competition variables are highly significant at 1% level. This is observed even in subsamples English and German where the amount of hostile offers is very low and competition among bidders rare.

Premium is significant only in UK and in English civil law countries, at 5% level in both. Same result is drawn by Holl and Kyriazis (1996) for the UK. These are countries for which the average one week premium is lower than the average for the full sample. For example the US and Canada experience insignificant premiums but both countries have higher than average premiums overall. But as other subsamples also have lower than average premiums and not significant results no conclusions can be drawn. This only shows that different samples will give differing results.

However, toehold positive and is significant at 10% level for US and UK but significant at the same level and negative for the sample English. It is also negative but insignificant for samples German and Scandinavian. Significant positive effect confirms the results of Walkling (1985) in the US and Holl and Kyriazis (1996) in the UK. Negative sign in the other subsamples could be explained by the relation of toehold and hostility (Betton et al., 2009).

The country level analysis confirms that the significance and use of termination fees concentrates to the US. In samples English and French the sign is even negative. Termination fees, which are fines for withdrawing from the offer could be interpreted as a sign of distrust in certain cultures and thus have a negative effect on the outcome of the offer. Termination fees are very rare in the samples German and Scandinavian and the variable was omitted from the model.

Percentage of cash is negative and significant at 5% level in sample English while target size has a negative and significant effect at 10% in sample French.

Table 11: Logit regression results for country and country group subsamples

The regression results for different countries and country groups are presented here. The subsamples are taken from the full sample, so the behavioral premium variable is not used. *p*-values for the coefficients are in parentheses. ***, ** and * indicate significance at 1, 5 and 10% level with the two-tailed test. Variable *Financial buyer* is omitted from the sample for Australia and variable *Termination* from German and Scandinavian country group samples as those variables predicted the outcome perfectly. Other reason for omitting events from the subsamples was the perfect predicting ability of certain year dummies.¹ Too many variables predicted success perfectly and had to be omitted from subsamples for Japan and Sweden, so those country samples were merged with the German and Scandinavian samples, respectively.² *Percentage of cash* is substituted for the dummy variable *Cash* in this subsample due to perfect predicting power.

Variables	Models									
	Individual countries						Country groups			
	US	UK	Canada	Australia	Japan ¹	Sweden ¹	English	French	German	Scandinavian
Target attitude	-2.836*** (0.000)	-2.902*** (0.000)	-2.182*** (0.000)	-2.295*** (0.000)			-3.745*** (0.000)	-1.855*** (0.000)	-7.341*** (0.000)	-3.187*** (0.000)
Competition	-1.591*** (0.000)	-2.780*** (0.000)	-2.138*** (0.000)	-1.720*** (0.000)			-2.913*** (0.000)	-2.166*** (0.000)	-3.020** (0.016)	-2.814*** (0.000)
Premium 1 week	0.255 (0.339)	0.854** (0.038)	0.748 (0.299)	-0.013 (0.965)			1.802** (0.035)	0.598 (0.274)	-1.355 (0.226)	1.423 (0.238)
% of cash	0.136 (0.789)	0.410 (0.259)	-0.462 (0.552)	1.450*** (0.005)			-1.210 (0.185)	-1.972** (0.039)	-1.600 ² (0.603)	0.552 (0.425)
Toehold	2.685* (0.091)	2.856* (0.056)	6.142 (0.170)	2.510 (0.160)			-3.254* (0.052)	2.710 (0.160)	-2.584 (0.496)	-0.513 (0.726)
Termination	1.652*** (0.000)	0.332 (0.618)	1.145 (0.106)	0.309 (0.651)			-1.181 (0.380)	-0.586 (0.652)		
Target size	0.050 (0.532)	0.141 (0.130)	0.139 (0.478)	-0.181 (0.249)			0.039 (0.866)	-0.285* (0.085)	-0.277 (0.592)	0.048 (0.830)
Constant	1.455 (0.131)	0.954 (0.491)	-0.308 (0.868)	3.357 (0.025)			4.357 (0.034)	5.913 (0.004)	10.554 (0.035)	2.473 (0.151)
<i>Control variables</i>										
Cross-border	0.699** (0.011)	-0.106 (0.719)	0.605 (0.323)	-0.601 (0.162)			0.782 (0.153)	0.506 (0.308)	-0.551 (0.615)	-0.178 (0.743)
Cross-industry	-0.320 (0.164)	-0.146 (0.579)	0.722 (0.215)	-0.609 (0.121)			-1.44** (0.026)	0.091 (0.856)	-2.123 (0.171)	-0.242 (0.660)
Financial buyer	-0.396 (0.218)	0.203 (0.579)		-2.327** (0.013)			0.291 (0.762)	2.025 (0.114)	-1.897* (0.081)	0.614 (0.514)
Year dummies	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes
<i>Statistics</i>										
Correct predictions	91.64 %	88.80 %	85.71 %	80.88 %			82.22 %	86.94 %	96.98 %	87.10 %
Nagelkerke R ²	0.507	0.430	0.474	0.403			0.362	0.483	0.66	0.463
Pseudo R ²	0.412	0.337	0.353	0.284			0.259	0.381	0.597	0.348
Observations	1471	875	161	272			180	268	199	186

The last point from this country level analysis is the significance of the variable financial buyer representing the deal type being an LBO in samples Australia and German. In both of these samples the effect of the deal being an LBO is negative. The level of significance is 5% in Australia and 10% in the German sample. This results hints that culture has an effect to the attitude towards LBOs as well.

5.3 Hostile and Competed Offers

As target attitude and the number of bidders has been proven to be the most significant factors affecting the outcome of the offer in the previous regressions I wanted to examine these subsamples more carefully, as more information about the role of the premium and toehold could be revealed. Table 12 presents the results for subsamples in which the bid is hostile (1), non-hostile (2), there are multiple bidders (3) or there is only a single bidder (4).

I begin to discuss the results from models 1 and 2, hostile and non-hostile samples. First, my interest turns to the variable toehold, which is highly significant at 1% level in both hostile samples. The sign is positive, so buying a toehold in the target prior to the tender offer increases the probability of success. Acquiring a toehold could scare the competition away although the offer is hostile. This explains my previous results and confirms the observation by Betton et al. (2009) that toeholds are mainly observed in hostile bids. Toeholds lead into pre-announcement run-up in the target share price (Schwert, 1996; Bris, 2002), but as hostile offers are associated usually with competition the level of premiums is already high and the run-up does not matter.

The opposite is observed in non-hostile bids in which the sign for toehold is negative and significant at 10% in the full sample. The run-up could cause the premium offered to shrink and have a negative effect on the outcome of the offer. The variable is not significant in models 3 and 4 which deal with multiple and single bidder situations. According to Bulow et al. (1999) toeholds should have a significant effect in takeover battles, but I find evidence of that. The differing result is partly explained by the difference in samples. Bulow et al. (1999) focus only in takeover contests between financial buyers.

Table 12: Logit regression results for hostile and competed offers

The results for the logit regression according to the target attitude and number of bidders are presented here. Both samples, full and the smaller one with the behavioral premium variable, are analyzed. Models 1 and 2 present results for regressions for hostile and non-hostile offers, while models 3 and 4 do the same for multiple and single bidder situations. In order to avoid collinearity variable *Target attitude* is omitted from models 1 and 2, and variable *Competition* is omitted from models 3 and 4 for the same reason. *p*-values for the coefficients are in parentheses. ***, ** and * indicate significance at 1, 5 and 10% level with the two-tailed test.

Models								
Variables	Full Sample				Sample with 52w high			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Target attitude			-1.783*** (0.000)	-2.914*** (0.000)			-2.234*** (0.000)	-2.973*** (0.000)
Competition	-1.268*** (0.000)	-2.410*** (0.000)			-1.276*** (0.000)	-2.067*** (0.000)		
Premium 1 week	0.520** (0.043)	0.336* (0.098)	0.555** (0.013)	0.353 (0.102)	0.273 (0.387)	0.316 (0.213)	0.375 (0.322)	0.347 (0.143)
% of cash	0.167 (0.578)	0.454** (0.037)	0.576* (0.066)	0.249 (0.247)	0.891 (0.137)	0.973*** (0.004)	1.49*** (0.017)	0.665** (0.043)
Toehold	2.891*** (0.004)	-1.012* (0.091)	1.13 (0.280)	-0.188 (0.758)	4.781*** (0.004)	-0.479 (0.535)	2.486 (0.148)	0.237 (0.762)
Termination	2.242*** (0.000)	0.836*** (0.000)	1.058*** (0.000)	1.106*** (0.000)	4.231*** (0.000)	1.345*** (0.000)	1.273*** (0.001)	1.986*** (0.000)
Target size	0.087 (0.182)	0.163 (0.765)	0.072 (0.238)	0.010 (0.857)	0.061 (0.547)	-0.037 (0.639)	0.088 (0.387)	-0.059 (0.441)
Constant	-2.198 (0.012)	3.043 (0.000)	-0.156 (0.841)	2.188 (0.000)	-2.800 (0.016)	2.498 (0.001)	-1.035 (0.330)	1.959 (0.005)
Premium > 52w high					0.059 (0.859)	0.304 (0.159)	0.058 (0.867)	0.425** (0.043)
<i>Control variables</i>								
Cross-border	0.201 (0.357)	0.228 (0.153)	0.036 (0.852)	0.346** (0.041)	-0.026 (0.940)	0.444* (0.066)	0.046 (0.890)	0.321 (0.163)
Cross-industry	-0.214 (0.292)	-0.307* (0.052)	-0.095 (0.619)	-0.363** (0.023)	-0.133 (0.678)	-0.653*** (0.006)	-0.342 (0.287)	-0.570** (0.011)
Financial buyer	-0.383 (0.393)	-0.028 (0.899)	-0.171 (0.619)	0.102 (0.688)	-0.686 (0.217)	-0.296 (0.330)	-0.255 (0.565)	-0.184 (0.564)
Year dummies	Yes							
<i>Statistics</i>								
Correct predictions	69.09 %	92.48 %	72.05 %	92.15 %	71.43 %	91.69 %	79.47 %	91.17 %
Nagelkerke R ²	0.227	0.225	0.281	0.329	0.300	0.258	0.394	0.449
Pseudo R ²	0.135	0.183	0.173	0.268	0.187	0.209	0.258	0.362
Observations	550	3206	694	3083	280	1553	341	1495

Then to the analysis of the one week premium variable, which is significant at 5% level and positive in hostile and multiple bidder situations. So, a higher premium helps the success of a single offer in hostile bids and in bidding contests. The result supports the theory by Fishman (1988) that high bids help winning control contests and the results of Schwert (2000) that managers use hostility tactically to solicit higher premiums from bidders. The premium variable is positive and barely significant at 10% level in the non-hostile sample as well which makes sense as that sample includes both contested and non-contested offers. The premium is insignificant in the sample with a single bidder (4). These results improve the understanding about the role of the size of the offer premium. The premium is significant and affects the outcome positively especially in situations where management uses hostility as a negotiating tactic and in situations where there is a multiple bidder contest for control. In single bidder situations other factors have a higher impact on the outcome of the offer.

The behavioral premium is significant at 5% level and has a positive effect on the outcome of the offer in single bidder situations. The explanation is logical. In multiple bidder situations the target shareholders can compare the competing bids and premiums but with a single offer they have to benchmark the offer with some other reference point. So, the effect of exceeding the psychological price level is positive especially when there is only one bid outstanding.

The method of payment, percentage of cash is positive and significant especially in non-hostile and multiple bidder situations. This is consistent with (Berkovitch and Narayanan, 1990; Jennings and Mazzeo, 1993) who both report that the proportion of cash used in the payment structure increases with additional bidders. So, a higher percentage of cash used increases the probability of tender offer success. The variable is also positive and significant at 5 % level with the smaller sample in single bidder situations.

The significance of cross-border and industry status seems to escalate in non-hostile and single bidder offers. Especially cross-industry status has a significant negative impact on the outcome of the offer. Cross-border status has a positive but less powerful and significant effect on the outcome. The effect of the cross-border status is easier to understand as cross-border offers provide higher premiums on average which increases the probability of success. The strong negative effect of cross-industry deals is more difficult to comprehend. One already mentioned

reason could be the lack of target industry knowledge held by the bidder which leads to lower than expected offer premiums. Other explanation could be the value destruction observed with conglomerate mergers and highly diversified companies (Lamont and Polk, 2002).

5.4 Cross-border Offers

In this final part of presenting my empirical results I concentrate on cross-border offers and add variables representing the level of investor protection in each target and acquirer country. Acquisitions where positive corporate governance transfer occurs, when a company from a better governance environment acquires a company from a worse environment, has been observed to yield abnormal returns by Bris and Cabolis (2008a and 2008b) and by Martynova and Renneboog (2008). Now I test whether the differences in the level of investor protection affect the outcome of the tender offer. First, I use differences for shareholder and creditor protection and level of corruption to represent the corporate governance transfer that would occur if the tender offer succeeded.

Table 13 presents the results for the first regressions with cross-border offers. Results without (1) and with (2) the investor protection variables are included. The results prove to be very similar. Target management attitude and competition have a negative effect on the outcome and are highly significant in all models. One week premium and percentage of cash used have no effect as the premium offered and amount of cash used are higher than average in cross-border offers. The frequency of use of termination fees is similar to the full sample but the significance of the effect of the termination fees is lesser in cross-border offers.

The behavioral premium (Premium > 52w high) is positive and significant at 10% in both models which validates the conclusion that psychology definitely plays a part in evaluating the tender offer premium offered and that exceeding the chosen reference point, the target 52-week high in this case, improves the probability of success.

The variables representing changes in investor protection are all not significant. The sign for difference in shareholder protection is negative as expected, which somewhat signals that tender offers resulting in positive corporate governance transfer have a smaller probability of succeeding.

Table 13: Logit regression results with investor protection differences

This table presents the results for logistic regressions of cross-border tender offers with the investor protection difference variables. Model 1 analyses cross-border offers without the investor protection variables which are added in model 2. Difference between shareholder and creditor protection and level of corruption is calculated by deducting the target value from the acquirer value. Shareholder protection index ranges from 0 to 6, creditor protection from 0 to 4 and level of corruption from 0 to 5 (0 indicating poor level and 4,5 and 6 high level). Variable *Cross-border* is omitted to avoid collinearity. *p*-values for the coefficients are in parentheses. ***, ** and * indicate significance at 1, 5 and 10% level with the two-tailed test.

Variables	Expected	Models			
		Full Sample		Sample with 52w high	
		(1)	(2)	(1)	(2)
Target attitude	-	-2.718*** (0.000)	-2.272*** (0.000)	-3.913*** (0.000)	-4.053*** (0.000)
Competition	-	-2.129*** (0.000)	-2.144*** (0.000)	-1.927*** (0.000)	-1.991*** (0.000)
Premium 1 week	+	0.286 (0.215)	0.280 (0.230)	0.313 (0.311)	0.334 (0.287)
% of cash	+	0.242 (0.531)	0.260 (0.502)	0.324 (0.632)	0.336 (0.621)
Toehold	+	0.365 (0.692)	0.354 (0.702)	1.384 (0.335)	1.359 (0.350)
Termination	+	0.669** (0.027)	0.600* (0.054)	1.231** (0.012)	1.042** (0.037)
Target size	-	0.104 (0.152)	0.108 (0.138)	0.064 (0.605)	0.086 (0.493)
Constant		2.224 (0.006)	2.250 (0.006)	2.155 (0.074)	2.065 (0.090)
Premium > 52w high	+			0.649* (0.089)	0.644* (0.094)
<i>Investor protection</i>					
Difference: Shareholder	-		-0.005 (0.962)		-0.149 (0.399)
Difference: Creditor	-		0.107 (0.122)		0.166 (0.230)
Difference: Corruption			-0.041 (0.565)		0.127 (0.332)
<i>Control variables</i>					
Cross-industry		-0.139 (0.948)	-0.033 (0.879)	-0.525 (0.148)	-0.499 (0.183)
Financial buyer		-0.251 (0.538)	-0.251 (0.539)	0.033 (0.965)	0.170 (0.830)
Year dummies		Yes	Yes	Yes	Yes
<i>Statistics</i>					
Correct predictions		90.09 %	90.09 %	91.90 %	91.72 %
Nagelkerke R ²		0.402	0.404	0.549	0.561
Pseudo R ²		0.319	0.321	0.448	0.459
Observations		1403	1403	580	580

However, the results are far from significant so no conclusions can be drawn from here. I find no signs of resistance occurring due to the managers' fear of losing their private benefits. The sign for the difference in creditor protection is positive, but again the coefficient is not significant. The positive sign could be explained by a matter discussed by Bris and Cabolis (2008a). They note that the transferability of creditor rights is not as good as with shareholder rights so the difference in creditor rights should not create additional resistance.

The reliability of the results should be on a good level as the amount of correct predictions and R^2 measures are higher than in the full sample. In addition I did not notice any significant changes in the standard errors with the addition of the investor protection variables.

The fact that acquisitions improving target governance yield positive abnormal returns but have no effect on the probability of the offer succeeding can be explained. As the acquirer can create more value with targets coming from worse corporate governance environments, the acquirer coming from can also pay higher premiums for the target which should decrease the resistance. The target attitude variable has a very strong influence on the outcome and can absorb many kinds of effects. One very interesting aspect to study in conjunction with the corporate governance transfer and private benefits of the managers would be the stock ownership of the target management. It could provide additional information about the subject.

As the difference approach proved to be unfruitful in explaining hostility, resistance or other effects to the outcome of the offer in cross-border deals I continue to examine the matter with individual variables for investor protection next.

Regressions with individual investor protection variables

The regressions results with individual investor protection variables for the target and acquirer are shown in Table 14. The variables are added progressively so the effects of high correlation between the variables can be monitored. However, I did not find any significant changes in the standard errors of the investor protection variables, so I can rule out collinearity. In the first model, only variables for the target are included (1) then acquirer variables are added (2). The last model (3) also adds the level of corruption variable for both target and acquirer.

Table 14: Logit regression results with individual investor protection variables

The results for logit regressions with individual investor protection variables for both target and acquirer are presented here. Variable *Cross-border* is omitted to avoid collinearity. *p*-values for the coefficients are in parentheses. ***, ** and * indicate significance at 1, 5 and 10% level with the two-tailed test.

Variables	Models					
	Full Sample			Sample with 52w high		
	(1)	(2)	(3)	(1)	(2)	(3)
Target attitude	-2.751*** (0.000)	-2.763*** (0.000)	-2.258*** (0.000)	-4.060*** (0.000)	-4.088*** (0.000)	-4.050*** (0.000)
Competition	-2.138*** (0.000)	-2.150*** (0.000)	-2.159*** (0.000)	-2.056*** (0.000)	-2.157*** (0.000)	-2.109*** (0.000)
Premium 1 week	0.278 (0.220)	0.284 (0.208)	0.285 (0.204)	0.326 (0.317)	0.346 (0.285)	0.386 (0.243)
% of cash	0.229 (0.556)	0.225 (0.562)	0.227 (0.559)	0.139 (0.836)	0.225 (0.743)	0.192 (0.778)
Toehold	0.555 (0.558)	0.593 (0.534)	0.599 (0.529)	2.091 (0.171)	1.894 (0.211)	2.005 (0.189)
Termination	0.541* (0.084)	0.549* (0.080)	0.525* (0.098)	1.080** (0.030)	1.124** (0.025)	1.018** (0.046)
Target size	0.010 (0.176)	0.098 (0.187)	0.094 (0.207)	0.077 (0.546)	0.063 (0.622)	0.064 (0.621)
Constant	3.482 (0.006)	3.660 (0.008)	4.355 (0.004)	3.641 (0.062)	4.616 (0.031)	5.542 (0.022)
Premium > 52w high				0.705* (0.070)	0.696* (0.074)	0.652* (0.098)
<i>Investor protection</i>						
Target: Shareholder	-0.161 (0.375)	-0.148 (0.418)	-0.136 (0.459)	-0.059 (0.836)	-0.034 (0.906)	-0.072 (0.804)
Target: Creditor	-0.250** (0.012)	-0.252** (0.012)	-0.239** (0.027)	-0.560*** (0.006)	-0.527** (0.010)	-0.407* (0.091)
Acquirer: Shareholder		-0.037 (0.777)	-0.088 (0.524)		-0.275 (0.239)	-0.285 (0.231)
Acquirer: Creditor		-0.047 (0.624)	0.000 (0.996)		0.032 (0.842)	0.080 (0.644)
Target: Corruption			-0.058 (0.635)			-0.251 (0.283)
Acquirer: Corruption			-0.136 (0.202)			-0.080 (0.676)
<i>Control variables</i>						
Cross-industry	0.003 (0.988)	0.011 (0.958)	-0.026 (0.903)	-0.581 (0.115)	-0.559 (0.132)	-0.553 (0.145)
Financial buyer	-0.220 (0.590)	-0.211 (0.608)	-0.194 (0.640)	-0.023 (0.977)	0.125 (0.877)	0.221 (0.788)
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
<i>Statistics</i>						
Correct predictions	89.95 %	89.95 %	90.16 %	91.90 %	92.07 %	92.41 %
Nagelkerke R ²	0.409	0.409	0.411	0.566	0.569	0.572
Pseudo R ²	0.325	0.326	0.327	0.464	0.465	0.470
Observations	1403	1403	1403	580	580	580

The results for other variables than the ones measuring investor protection are exactly the same as for the first set of regressions of cross-border offers reported in table 13. I will not go further into those results as they have been discussed already.

Variables for both target and acquirer shareholder protection are negative but insignificant. That is not surprising as target shareholders can have their say in tender offers by just accepting or rejecting the offer. The level of shareholder protection should not matter as long as the ownership of shareholders in the target company is acknowledged. Acquirer shareholders should not affect the outcome of the offer if an offer is already made. They should be able to have their say already when the acquiring company is making the decision whether to tender or not. This provides additional evidence of the explanatory power of the anti-director rights index. Previously Spämann (2010) has also proven many of the older findings based on the anti-director rights index by La Porta et al. (1998) false. The level of corruption variable is not significant either for the target or for the acquirer.

What is surprising but not unexpected is the significance of the target creditor right variable. The coefficient is negative, so the improvement in target country creditor rights decreases the probability of the offer being successful. It is consistently significant at 5% level apart from a few exceptions. The deviations from this significance level are probably due to the absence of acquirer investor protection variables in model 1 and the addition of level of corruption variables in model 3. There is high correlation between these variables which can cause the differences.

Creditors and banks are highly influential in some countries and creditor influence increases with the improvement of creditor rights. And not just as financiers but can also have significant influence over operational decisions as well. As Shleifer and Vishny (1997) note, debt holders have an incentive to monitor the company and its operations closely when they have large amounts of money at stake.

However, I have to dig deeper into the literature to find a credible explanation for these results; that better target creditor rights have a negative impact on the outcome of the offer.

Strong influence of banks in the decision making of industrial companies could be one reason. Germany and Japan act as prime examples. Franks and Mayer (1994) state that banks have a high

influence in company matters and can interrupt contests for corporate control in Germany where creditor rights are at a high level and takeover codes further make it harder for acquirers to gain control in companies. This happens even though the bank might not even be a majority shareholder. In many cases the bank has representation in the supervisory board of the company. Bank representation in the boards of industrial companies is observed in Japan as well (Sheard, 1994). Bank equity ownership in industrial companies is common in both countries. However, the strong influence of creditors persists in other countries as well. Djankov et al. (2007) find in their study of 129 countries that high creditor protection implies a larger private credit sector. In countries with high creditor protection the role of private creditors as lenders is higher measured by the relative amount of private credit to GDP. Thus the influence of private creditors is higher in these countries.

A more general theory which could explain especially the negative nature is the asset substitution problem. The asset substitution problem presented by Jensen and Meckling (1976) is a conflict between the share and bondholders of the firm. The conflict arises from shareholders trying to increase the riskiness of the company assets and the value of equity at the cost of the bondholders. A tender offer could be interpreted as a similar situation when a bidder notices a low risk company and makes a bid for it with a plan to increase value of the company by undertaking riskier projects. As the lenders of the company become worried about their returns they use their influence over the current company management to resist the takeover attempt. And in countries with high-quality creditor rights the private credit sector is larger and creditors hold significant influence over corporate matters.

The asset substitution theory is supported by the results of Acharya et al. (2009) who find that companies in countries with strong creditor rights follow less risky operating strategies, have lower cash flow risk, lower leverage and make diversifying acquisitions that decrease risk. In the light of these results it makes sense that efficient creditor rights in target countries have a negative effect on the outcome of a tender offer as lenders of the target perceive the acquisition attempt as a risk-increasing action threatening the cash flows for the lenders.

Furfine and Rosen (2009) find, contrary to previous beliefs, that mergers actually increase the default risk of the acquirer. Reasons for increasing risk include the increase in the level of debt by

the acquirer, the use of option-based compensation encouraging risk-taking for the management and asymmetric information and idiosyncratic stock volatility of the acquirer. When information is asymmetric it is easier to cover idiosyncratic volatility and the risk-increasing nature of the merger. Although these results are achieved with mergers, it is likely that similar effects are associated with tender offers as well, and that the increased riskiness of the acquirer is reflected in the acquired target as well.

One additional reason for the result concerning target creditor rights is presented by Stulz and Williamson (2003) and relates to cultural differences between countries. They find culture affecting creditor rights more than shareholder rights. Religion explains the strength of creditor rights in a country, Lutheran countries having stronger rights than Catholic countries. I find greater cross-country variation in creditor rights than in shareholder rights, so creditor rights could reflect cultural aspects better and could be a possible explanation but would require further study.

It would have been interesting to replicate the results of Acharya et al. (2009) relating to the riskiness of business operations with my own data, but unfortunately, the lack and the low quality of the financial statement data available made it very unreliable, which forced me to forfeit any extra analysis. In the preliminary regressions, the overall fit of the model measured by the R^2 measure was so low (less than 0.05) that any results would be quite difficult to justify.

I decide to stick with the asset substitution theory for explaining the result of better target creditor rights decreasing the probability of tender offer success. In countries with better creditor rights the lenders have higher influence over companies. And a tender offer for a company is potentially a risk-increasing event that has the possibility to disrupt the cash flows of the target. Because of this the lenders of the target use their influence over the target management and resist the tender offer and its asset substituting effects.

5.5 Analysis of Success Probabilities

In addition to the significance of the independent variables it is important to analyze the marginal effects of single independent variables to the probability of an offer being successful even though very few earlier papers have done this. Table 15 presents the results of the marginal effect analysis. The analysis is conducted by changing the value of a single independent variable while

holding the value of the rest constant at their mean values. Dummy variables vary from 0 to 1 while the effect of continuous variables is measured by altering their value by one standard deviation from the mean value.

Overall, all independent variables held at their average values, the probability of a tender offer succeeding is almost 92%. Hostility and multiple bidders have a huge negative effect on the probability of success. The effect of hostility ranges from 37% to 60% while competition decreases the probability of success at least by 18%. Compared to the effect of these two variables, the impact and economic significance of most other independent variables is diminutive.

Termination fees can be observed to have a major positive impact on the probability of success while the same effect is experienced with having a toehold in hostile offer situations. The high positive effect of termination fees arises a question that why those are not used practically at all outside the United States.

The analysis on the effect of single variables in hostile and competed offers reinforces the earlier observation that an increase in the tender offer premium is most helpful in overcoming management resistance and beating competition. A one standard deviation increase in the premium increases the probability of success by 8.8% in hostile offers and by 7.7% in multiple bidder situations. In the full sample the effect of a similar increase is only 1.9%. In hostile and competed offers the marginal effect of the size of the premium is higher than effect of offer price exceeding the 52-week high price of the target ($\text{Premium} > 52\text{-week high}$). Generally, the offer price exceeding the 52-week high price improves the probability of success by 2.5%. Baker et al. (2009) find the increase to be between 3% and 4%.

The negative effect of one standard deviation change in the target country creditor protection varies from 1.5% to 1.7%. The modest effect is reasonable, as powerful the creditors might be their influence over corporate decisions and especially in tender offers should be quite limited.

The last point to highlight is the small effect of any independent variable besides target management attitude in single-bidder offers. It certainly proves the remarkable influence of the

incumbent management over all company matters, even those at which they should play no part at all.

Table 15: Marginal effect of significant variables to success probability

This table presents the probability of success and the marginal effects of individual, significant variables to the probability of tender offer being successful in different types of situations. Model 1 presents the effects with the base models while model 2 present results for regressions for hostile offers. Models 3 and 4 do the same for multiple and single bidder situations. Model 5 presents the effects in cross-border offers. The models used are the full developed regression models for which the results are reported earlier. Only marginal effects of the significant variables are reported. The change in probability for dummy variables (*Target, attitude, Competition, Termination, Premium > 52w high, Cross-Border and Cross-Industry*) represent the marginal effect of the particular independent varying from 0 to 1. The change in probability for continuous variables (*Premium 1 week, % of cash, Toehold, Target: Creditor*) represent the marginal effect of the particular independent variable varying by one standard deviation. The marginal effects are calculated by changing the value of one variable while holding the other independent variables constant at their mean values.

	Models									
	Full Sample					Sample with 52w high				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Probability of Success	0.918	0.458	0.616	0.954	0.939	0.913	0.375	0.663	0.949	0.953
<i>Variables</i>										
Target attitude	-0.368		-0.417	-0.358	-0.376	-0.409		-0.500	-0.387	-0.596
Competition	-0.242	-0.300			-0.232	-0.182	-0.281			-0.191
Premium 1 week	0.019	0.058	0.077	0.009	0.008	0.012	0.030	0.034	0.008	0.010
% of cash	0.009	0.015	0.041	0.004	0.004	0.169	0.007	0.080	0.009	0.002
Toehold	0.002	0.075	0.023	-0.001	0.004	0.0051	0.103	0.048	0.001	0.011
Termination	0.071	0.448	0.226	0.041	0.027	0.129	0.664	0.315	0.095	0.043
Premium > 52w high						0.025	0.014	0.013	0.021	0.032
<i>Investor protection</i>										
Target: Creditor					-0.015					-0.017
<i>Control variables</i>										
Cross-border	0.017	0.050	0.009	0.015		0.019	-0.006	0.010	0.015	
Cross-industry	-0.017	-0.050	-0.022	-0.016	-0.002	-0.032	-0.031	-0.076	-0.027	-0.025
<i>Statistics</i>										
Observations	3783	550	694	3083	1403	1845	280	341	1495	580

6 CONCLUSION

This section summarizes and discusses the empirical results of the study, presents ideas for further study and concludes this thesis.

6.1 Summary and Discussion of the Empirical Results

The purpose and objective of this thesis was to examine the determinants significantly affecting the outcome of a tender offer and investigate the role of differing investor protection in cross-border tender offers. The sample consisted of 3783 tender offers spanning from 1986 to 2010. The targets were from 38 countries across the globe. However, despite the relatively high number of countries included in the sample, country level comparisons were left a bit short as the final sample was highly concentrated towards tender offers conducted in the United States, United Kingdom and other countries which have adopted the English common law system.

Tender offers are found to be a takeover mechanism typical especially for countries which have adopted English common law as their legal system. 80 % of all offers are conducted in these countries. These countries include the United States and the United Kingdom which are considered to have the most sophisticated capital markets in the world. The result is baffling when taking into account that the French civil law is the most wide-spread system among the countries in my sample but less than 300 tender offers are made for targets in French civil law countries. This hints about the cultural differences between countries and the effect of those differences in deciding the proper method for corporate acquisitions. I suspect that private negotiations are strongly favored in countries other than the UK or the UK as a transfer mechanism of corporate control.

The first objective of this thesis was to find the generally significant determinants affecting the outcome of tender offers. Table 16 provides a summary of the empirical results discovered in this thesis. First, the attitude of the target management and competition among bidders are found to be the most significant determinants of tender offer success. Both are negative and highly significant at 1 % level in every model studied in this thesis. The negative effect of hostility to the outcome of an offer ranges from 37% to 60% while competition among bidders decreases the probability of a single offer succeeding at least by 18%. Compared to the effect of these two

variables, the impact and economic significance of most other independent variables is diminutive.

Table 16: Summary of the empirical results

This table presents the summary of the expected and the realized empirical results. A few additional notes to the results: 1. Toehold is found to be significant and has a positive effect on the outcome of the offer, but only in the case when the offer is hostile. 2. Termination fees are mainly observed with US based targets and bidders and the use of termination fees is found affecting the outcome positively only with US based targets.

Hypothesis	Expected sign	Result	Sign
H1 The size of the tender offer premium increases the probability of success.	+	Significant	+
H2 Tender offer premium higher than the target 52-week high price increases the probability of success.	+	Significant	+
H3 Target management resistance decreases the probability of success.	-	Significant	-
H4 The size of the toehold held by the bidder in the target increases the probability of success.	+	Significant ¹	+
H5 Competition among bidders decreases the probability of success.	-	Significant	-
H6 The proportion of cash used as the method of payment increases the probability of success.	+	Significant	+
H7 The size of the target firm decreases the probability of success.	-	Not significant	+/-
H8 Inclusion of a termination fee increases the probability of success.	+	Significant ²	+
H9 Difference in the level of investor protection between target and acquirer countries decreases the probability of success.	-	Not significant	-

This confirms the results of previous studies (Pelligrino, 1972; Ebeid, 1974; Hoffmeister and Dyl, 1981; Walkling, 1985, Hirsleifer and Titman, 1990; Holl and Kyriazis, 1996; Flanagan et al. 1998; Elsland and Weber, 2006; Baker et al. 2009) which also found the target management resistance to be the foremost reason for a tender offer failing. The reason for resistance is found to be two-fold; it can be due to strategic bargaining in order to increase the price offered or the result of managerial entrenchment (Schwert, 2000). I find the offer premium being significant and positive in hostile offers which implicates that hostility is used as a negotiation tactic. The

negative effect of competition among bidders has also been found significant previously by Flanagan et al. (1998).

Like the theoretical model of Hirsleifer and Titman (1990) predicts I find the one week offer premium to be a significant predictor of the outcome of a tender offer. This also confirms the empirical results of Walkling (1985). The effect is positive, so a higher premium improves the probability of success. Observing hostile and competed bids also confirms the role of a higher premium in improving the probability of success. The positive effect of the premium is less significant in non-hostile and single-bidder situations. There is however variation in the significance and even in the effect on the premium when examining different countries and country groups. The premium is not significant in cross-border offers when the overall level of premiums offered is already high.

To better understand the ambiguity around the significance of the tender offer premium I included a variable whether the offer price exceeds the past 52-week high price of the target as a psychological reference point, which has been proven meaningful by Baker et al. (2009). When this variable was included the significance of the one week premium faded while the new variable was found to be highly significant and have a positive effect on the outcome of the offer. This confirms that after exceeding a certain level the significance of the premium is low. The result from cross-border offers ratifies this conclusion as when the overall premium level is high the one week premium is not significant while the offer price over 52-week high variable is. I also found the offer price exceeding the 52-week high to have a positive effect on the outcome in single-bidder situations when the target shareholders cannot compare competing bids but have to evaluate the relative level of the offer against some other benchmark.

Cash is definitely the favored method of payment in tender offers. On average 82.1% of the total consideration is paid in cash. The higher the level of cash used also increases the probability of success significantly. The explanation is simple as using cash signals a high valuation of the target and deters competition (Fishman, 1989) and there is no valuation considerations involved when using cash. A cash offer is easy to evaluate even by a layperson and there is no fear of receiving overvalued stock in return (Shleifer and Vishny, 2003).

Toeholds have been found consistently to have a positive effect on the tender offer outcome (Hirsleifer and Titman, 1990; Walkling, 1985; Holl and Kyriazis, 1996; Flanagan et al., 1998; Elsland & Weber, 2006). I make a slightly contrary finding and confirm that toehold is a significant determinant and has a positive effect on the tender offer outcome but only in hostile offers. The country level examination reveals that toehold is somewhat significant generally in the US and UK but significance and the negative sign in other English common law countries tips the scale to assume that toeholds are mainly associated with hostile offers (Betton et al., 2009).

Contrary to toeholds, I find that termination fees are mainly used in friendly offers. The use of termination fees also limits heavily to US based targets and bidders. The inclusion of a termination fee has a significant positive effect on the outcome of the offer but it only holds in the sample consisting of US based targets. In some samples the sign is negative, so the inclusion of a termination fee can be interpreted as a sign of distrust between the parties in countries belonging to English or French legal system. The use of termination fees is almost nonexistent in Japan and other countries belonging to the German and Scandinavian legal groups. The use of termination fees has been investigated previously only by Flanagan et al. (1998) who also found the inclusion of termination fee increase the probability of success with US targets. The target size is found to be insignificant determinant of success and even the sign varies in different samples.

Out of the control variables cross-industry status seems to significantly decrease the probability of success. Cross-border status seems to increase the probability of success in some samples. The credible explanation for these effects lies in the size of the premium. Cross-border deals are associated with generally higher premiums than average offers which increases the probability of success. The opposite holds for cross-industry deals. The bidder might lack industry expertise in the target industry and make an offer which does not fully reflect the value of the target.

The role of investor protection

The second objective of this thesis was to examine cross-border offers and evaluate the effect of investor protection differences in target and bidder countries to the outcome of tender offers.

First, I used an approach presented by Bris and Cabolis (2008a) and Martynova and Renneboog (2008) and test the effect of corporate governance transfer to the outcome of tender offers. The idea is to see whether an improvement or deterioration in investor protection due to the acquisition has any effects to the potential outcome of the offer. The before mentioned authors have found positive abnormal returns relating to these kind of cross-border acquisitions and associated the returns with the resulting improved monitoring and governance of the target company and its management. I do not find any evidence of these differences being significant determinants of tender offer outcome. Corporate governance transfer does not explain the success or failure of tender offers.

However, when I test the investor protection variables for the target and the bidder individually I find a bit surprising results. Shareholder protection is found to be insignificant as a determinant of tender offer outcome. However, as shareholders vote with their wallets in tender offers the result makes sense. All that is required is that the ownership of the individual shareholders is recognized. This adds to the line of results published by Spamann (2010) who revises the anti-director rights index constructed originally by La Porta et al. (1998). Spamann discards many previous results with the corrected index and I can add that shareholder protection does not explain the outcome of tender offers either.

But I find consistent evidence that the level of target shareholder protection has a significant, negative effect on the outcome of a tender offer. The reason for this lies in the risk-averse nature of creditors. Companies based in countries with a high level investor protection follow less risky operating and investment strategies (Acharya et al. 2009). Creditors are also more influential in these countries. In countries with higher creditor protection the relative size of the private credit sector, measured by the proportion of private credit to GDP, is larger, and thus, it is more influential (Djankov et al, 2007). An acquisition by an outside bidder could aim to create value by increasing the riskiness of the target company's operations which would make its cash flows also more volatile. That poses a threat to target creditors, so they react negatively. This kind of setting can be seen as an asset substitution problem (Jensen and Meckling, 1976) in which the creditors resist the change of control over the target assets as a change in control would increase the riskiness of the target assets. The negative effect on the outcome is due to creditors using their influence over the target management to resist the bid.

6.2 Suggestions for Further Studies

Plenty of areas still remain which could be examined further in the research of tender offers and their success. Although I employed a relatively diverse dataset I was unable to conduct proper country-level comparisons due to lack of country-level data. This could be done with a more balanced dataset.

Target management attitude seems to be the most crucial factor affecting the outcome of a tender offer. It is interesting as the offer should be directed towards shareholders and not for the management. Hostility has been quite well studies especially with US based companies, but I would find it interesting to add factors such as ownership structure of the company, management and board ownership and other variables relating to the management of the target company to see whether these affect the outcome and the explanatory power of hostility.

As the higher creditor protection was found to have a negative effect on the outcome offer and the consequence of value creation by asset substitution by the potential buyer. This could be studied further by examining cross-border tender offers and the operating characteristics of the target firms before and after the offer to see whether the riskiness of operating strategies actually increases.

The corporate governance variables I added in this thesis are closely connected to cultural differences, so my last suggestion for further research would be to add variables describing cultural differences to see whether they have an effect on the takeover process and the outcome of the offer.

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