Sharing the Loot? – Shedding Light on the Uneven Distribution of M&A Success

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Abstract: Numerous empirical studies indicate that the involved parties of a merger transaction profit very unevenly from this transaction. While the abnormal returns of the targets' shareholders appear to be strong, the returns of the acquirers' shareholders turn out to be zero or negative. Using event-study methodology and analysing 3,361 public offerings worldwide that were announced and completed in the period between 01/01/1990 and 10/31/2017 we find that on average the major proportion of the economic benefits of value creating transactions goes to the acquirer, while only a minor share can be allocated to the target company. Vice versa, we show that in the majority of value destroying transactions the acquirers' shareholders carry all economic losses, while the target's shareholders still gain a benefit. The negative economic outcome for the acquirers' shareholders cannot be sufficiently explained by the fact that inflated premiums are paid for the transaction, rather we argue that acquirers on average enter into economically disadvantageous transactions due to agency-problems or hubris.

Keywords: event study, mergers & acquisitions, synergies, M&A, transaction

JEL Classification codes: G34

INTRODUCTION

According to the synergy hypothesis, takeovers occur because of economic gains that result from merging the resources of two companies (Berkovitch & Narayanan, 1993). This implies that merger transactions come along with positive stock price gains for both, buy-side shareholders as well as sell-side shareholders. However, numerous empirical studies indicate that the involved parties profit unevenly from the merger so that the synergy hypothesis may not be a sufficient explanation for merger transactions. Usually, sell-side shareholders achieve substantial stock returns when a merger transaction is announced, while the buy-side shareholders do not gain an advantage from the transaction or even incur substantial losses. The value weighted sum of sell-side and buy-side gains is typically significantly positive (e.g., Bruner, 2002, Martynova & Renneboog, 2008, Jensen & Ruback 1983, Andrade, Mitchell & Stafford, 2001, and Betton, Eckbo & Thorburn, 2008). As the synergy hypothesis does not fully hold up empirically, the literature draws on other theories to explain corporate takeovers, such as principal-agent theory (Jensen & Meckling, 1976) or behavioral theories (Roll, 1986).

The present study contributes to the discussion in the literature of how M&A success is distributed and reinterprets the decision to carry out a merger transaction as a decision on "sharing the loot" among the involved parties. The main lever of the distribution of the M&A result is the premium paid – a high premium will be to the advantage of the sell-side shareholders, a low premium will benefit the buy-side shareholders. The vast majority of acquisitions are friendly takeovers; it can therefore be assumed that the premium is based on a prior negotiation among the directors of the involved parties. Even a hostile takeover can be

considered as resulting from an implicit negotiation. However, considerations of a "fair" distribution resulting from these negotiations should rarely play a role. The share of each party's M&A result is determined by its negotiation power compared to the negotiation power of the respective antagonist. In the course of the negotiation, the weaker negotiating party is brought to the limit of its willingness to participate in the transaction, i.e. to the point where no share of a positive transaction result is obtained. Accordingly, each party has an acceptance range and a rejection range. Assuming symmetric information, a negotiated result can only be expected within the area in which the acceptance ranges of both parties overlap. All distribution results beyond the acceptance limits are clearly attributable to principal-agent conflicts or hubris, while all negotiation results inside both parties' acceptance ranges can be considered as normal – although possibly still biased by potential agency conflicts or hubris.

We are the first to introduce a relative measure of distribution of the transaction's outcome. Such a measure is needed because in a first step it has to be determined which economic advantages arise from the transaction, while in a second step it can be discussed how these advantages are distributed. This approach contrasts prior literature, which has separately studied the relative stock market returns (CAR) of both parties not considering value added, size and power relations. We apply this new method to a large international sample of M&A transactions and demonstrate that the benefits of, in their entirety, value-creating transactions either fully go to the buy-side shareholders or – in less common cases – are shared more justly. This result is counterintuitive at first sight as many previous studies point out the high stock price announcement returns of the sell-side shares. However, this effect accounts only for a very small proportion of the value created – even if controlled for the size relationships of the companies. Contrariwise, the loss from value destroying transactions is almost always fully born by the buy-side shareholders. Accordingly, there is a clear-cut distinction between two types of takeovers: value destroying transactions that are carried out by the acquirer from a position of weakness and value creating transactions carried out from a position of strength. Regardless of this result, it can be shown that acquisitions clearly put buy-side shareholders at a disadvantage. The right of shareholders to vote in the UK for or against an acquisition can only partly prevent this distribution pattern.

This study is structured as follows: In Section 1 the extant literature is briefly reviewed. Section 2 presents the applied sample and methodology of the empirical study. In section 3, the results of the study are presented, discussed, and checked for robustness. The paper ends with a conclusion.

1 LITERATURE REVIEW

Numerous empirical studies indicate that the involved parties profit unevenly from a merger. While the abnormal returns of the targets' shareholders appear to be strong, the returns of the acquirers' shareholders turn out to be zero or negative (Bruner, 2002, Jensen & Ruback, 1983, Andrade, Mitchell & Stafford, 2001, Moeller, Schlingemann & Stulz, 2005, Eckbo, 2014). Antoniou, Arbour, and Zhao (2008) demonstrate a negative and significant cumulative average abnormal return (CAAR) of -1.3% for the acquirer, while they find a significant positive CAAR for the targets' shareholders of +16.3% for a three-day event window around the announcement day. Similarly, Chidambaran et al. (2010) observe a significant CAAR for the target of +20% in the same three-day event window for publicly traded companies with an announcement date between 1988 and 2005. While, the authors document a statistically significant positive CAAR of 1.3% for the acquirer in the same period of time. However, recent literature contrasts these results and presents evidence for wealth gains for the acquirers' shareholders (Netter, Stegemoller & Wintoki, 2011).

One major lever of the redistribution of the success is the offered takeover premium. It should be noted that there is always room for negotiation as long as both parties benefit from the transaction. This range spans between the acquirer's shareholders price cap and the target's shareholders price floor. The distribution within this negotiation area can be explained, among others, by negotiation skills and power of the involved parties. Wealth distribution outcomes beyond the boundaries of the negotiation area can be explained by agency problems or managerial hubris.

The principal-agent theory originated by Jensen and Meckling (1976) addresses the problem of asymmetric information resulting in undetected self-serving activities of the management to the disadvantage of the shareholders. In this context, Jensen (1986) hypothesized that free cash flow entices managers to invest in opportunities such as takeovers in order to increase their power and authority, a phenomenon which is called empire building (Müller, 1969). More precisely, empire building implies a self-serving behaviour which is characterized by the desire to increase the size of the company as bonuses, equity interests and career opportunities depend on company size. Closely related to the problem of asymmetric information is Shleifer and Vishny's (2003) suggestion that merger waves occur after periods of abnormally high stock returns. According to their theory, transactions are motivated by incorrect stock market valuations of merging firms in imperfect stock markets. However, following the assumptions of this theory, managers act in a completely rational manner. They are aware of stock market inefficiencies and take advantage of them. The behaviouristic theory, which assumes non-rational behaviour in the decision makers, delivers another explanation for M&A-transactions. Roll (1986) postulated the hubris theory, which suggests that an incorrect value assessment of the combined firms can be attributed to the hubris of the acquirer's management. Hubris can be considered as the main reason for the winner's curse phenomenon, i.e. the phenomenon that winners of a bidding competition are exposed to a significant risk of engaging in poorly performing investments (Thaler, 1988). Malmendier and Tate (2008) have provided empirical evidence on the influence of managerial hubris on M&A transaction decisions. The authors observed that overconfident managers are 65% more likely to enter into M&A processes, given sufficient internal funding.

As takeovers seem to be accompanied by an uneven allocation of gains and losses between target's and acquirer's shareholders, this study is, in a greater context, relevant to the ongoing discussion on shareholder rights – especially in M&A transactions. Whereas the targets' shareholders are always asked for their consent – except in squeeze outs –, the acquirers' shareholders do not per se have a right to vote. The acquirers' shareholders' rights are regulated differently across nations: Shareholders of NYSE-listed acquirers can only vote on deals in which the transaction is financed with newly issued shares in excess of an additional twenty percent of the common shares outstanding. However, this rule is rather aimed at regulating capital increases and the dilution of voting rights of minority shareholders than at corporate transactions. Hence, managers can avoid a vote by funding the deal with a sufficient amount of internal funding. The rule can also be avoided by issuing preferred shares without voting power, which can be transferred into common shares after the completion of the transaction (Davidoff, 2010). Contrary to the United States (USA), the listing authority in the United Kingdom (UK) has devised a system in which shareholder voting on large acquisitions is mandatory, binding, and imposed via a series of threshold tests. If within several class tests the acquisition of a target is defined as large in relation to the acquirer, the UK Listing Rules require a vote. Each test employs a different measure of relative size: the ratio of gross assets, gross capital, and profits, and the ratio between the offer and the market capitalization of the acquirer. Transactions that exceed 25% in any of the tests (Class 1 transactions) require a mandatory shareholder vote, while transactions below 25% (Class 2 transactions) do not require a vote. In a recent study, Becht, Polo, and Rossi (2016) investigated whether mandatory shareholder voting, as implemented in the UK, can prevent value-destroying

acquisitions that harm shareholders' wealth. The authors found a significant difference in the performance of Class 1 and Class 2 transactions. In a univariate comparison, the abnormal announcement returns calculated for a three-day event window [- 1,+1] for Class 1 transactions were positive (CAAR: +2,5%) and highly significant larger than those of Class 2 transactions (CAAR: +0.8%). Moreover, the authors could show that voting of the shareholders caused higher acquirer returns. Although, the shareholders within their sample never voted against Class 1 transactions, the authors emphasized the deterrence effect of voting. Managers are forced to evaluate potential investments more intense and to determine the price more accurately in order to prevent a vote against the proposal.

2 METHODOLOGY

Sample Description

The present study is broad in nature: it considers worldwide M&A transactions that were announced and completed in the period between 01/01/1990 and 10/31/2017. The financial market data is extracted from Thomson Reuters Eikon database. 34,922 M&A transactions between listed companies were identified in this period of time. To avoid results driven by very small deals, we followed Fuller, Netter, and Stegemoeller (2002), Moeller, Schlingemann and Stulz (2004), Moeller, Schlingemann & Stulz (2005), and Antoniou, Arbour, and Zhao (2008) in applying a one-million-dollar threshold for the deal value. After excluding share repurchases, recapitalizations, equity exchanges and reorganizations, 26,141 transactions remained in the sample. 22,780 transactions had to be removed from the sample as a result of incomplete data, especially historical price data and historical financial data were missing from those companies that were bought in the transaction. Hereafter, 3,361 M&A transactions remained in the sample constituting the basis for the analysis.

Event-Study Methodology and Dependent Variables

The capital market's reaction to the announcement of an acquisition was analysed by applying an event-study. At this stage, daily abnormal returns ARt = Rt - ERt were determined as the difference between the daily stock returns Rt at day t of the corresponding shares and the expected returns ERt due to Sharpe's (1964) market model. To parameterize the market model, the time interval [- 221, - 21] was applied as estimation window in relation to the event date [0]. The calculation of model parameters ends 20 days prior to the announcement date because Dodd (1980) and Asquith (1983) have identified a possible leakage of merger information during that period. The return of the S&P 500 was chosen as an estimator for the market return. The S&P 500 covers a major part of the world's stock market capitalization. We calculated event specific CARes for the [- 1,+ 1] event window by aggregating the ARt in the respective time interval. The advantage of the shorter window used here is that the results are typically insensitive to the model chosen for expected returns (Bargeron et al., 2008). A shorter event window is less influenced by confounding events, but also collects less information that has previously echoed the market due to insider information or that has reached the market later due to market inefficiencies. For a longer event window, the opposite effect can be expected. For checking the robustness of our results, we also applied the [- 2,+ 2] and the [- 5,+ 5] event window.

To measure the actual distribution of the economic gains of corporate takeovers among the involved parties, we applied the variable DISTe according to Formula 1:

$$DIST_e = \frac{CAR_{e,A} \cdot MC_{e,A} - CAR_{e,T} \cdot MC_{e,T}}{\left| CAR_{e,A} \cdot MC_{e,A} + CAR_{e,T} \cdot MC_{e,T} \right|} \tag{1}$$

The gains or losses in the market value of the acquirer company *A* or the target company T at the time of the event e were obtained by multiplying the respective $CAR_{e,A}$ or $CAR_{e,T}$ with the

respective market capitalization $MC_{e,A}$ or $MC_{e,T}$. Thus, the denominator of the fraction equals the absolute value of the aggregated economic gains or losses of the transaction, which is the "loot to share" among the involved parties. It was used here for the normalization of the results. The numerator of the fraction indicates the fairness in sharing these economic gains. A positive numerator of the fraction implies an uneven distribution of the economic gains in favour of the acquirer, while a negative numerator expresses an uneven distribution in favour of the target. Accordingly, a $DIST_e$ value of one indicates that the acquiring company obtains the entire economic gain of the transaction or, alternatively, has no share in the case of an economic loss. Values above one result from extreme situations, in which the acquirer's monetary gain is positive and the target's monetary gain is negative. For values below zero, the pendulum will strike towards the target, and for values above zero towards the acquirer.

It can be argued that values below minus one constitute a compelling argument for the acceptance of the takeover offer by the shareholders of the target as these can take full advantage of the transaction or even achieve economic benefits beyond. At the same time, however, this range of values also constitutes a compelling argument for the rejection by the shareholders of the acquirer – if they were actually asked for a vote. Conversely, at values above one, the shareholders of the target should always reject, while those of the acquirer would typically agree to an acquisition if asked. The area between these two poles does not necessarily outline a fair distribution of the economic gains or losses of the transaction, but rather the parameters of a rectified behaviour of the parties involved. Nevertheless, both parties would agree in case of success, and both would reject in case of failure. Values below minus one clearly indicate the abuse of the control rights of the acquirer's board, while an unequal distribution above this value can also be attributed to unequal power relations between the parties.

Explanatory Variables, Controls, and Descriptives

The determinants of abnormal returns following merger transactions can be divided into deal characteristics and company characteristics. The information needed for the deal characteristic variables were mainly obtained from Thomson Reuters Dealscreener. The firm-specific financial information was provided by Thomson Reuters Eikon & Datastream. We made sure that no data was used that referred to the time period 21 days before the deal announcement to avoid a confounding distortion.

In order to address the problem of the skewness bias described by Barber and Lyon (1997), all variables included in the regression were winsorised, except for binaries or logarithmized variables. Skewness could lead to a biased test statistic and excessive rejections of the null hypothesis in favour of a lower-tail alternative. Thus, extreme values were given a lower weight, but are, however, not excluded from the sample. These control variables were winsorised at the 1st and 99th percentile. An overview of the variables used for the analysis is presented in table 1. Therein, the index e indicates event-specific variables, the index A indicates acquirer-specific variables, and the index T indicates target-specific variables.

Tab. 1 Variables, Data Sources, and extant Literature

	Variable	Definition	Expression	Thomson Reuters code	Literature source
Dependent variable	$CAR_{e,T}$	Cumulated abnormal return of target (winsorised)	$CAR_{e,T} = \sum_{t=-1}^{+1} AR_{t,T}$		

		$CAR_{e,A}$	Cumulated abnormal return of acquirer (winsorised)	$CAR_{e,A} = \sum_{t=-1}^{+1} AR_{t,A}$		
		$DIST_e$	Distribution of M&A-success (winsorised)	$\dfrac{CAR_{e,A} \cdot MC_{e,A} - CAR_{e,T} \cdot MC_{e,T}}{\left| CAR_{e,A} \cdot MC_{e,A} + CAR_{e,T} \cdot MC_{e,T} \right|}$	$MC_{e,A/T}$: TR.CompanyMarketCap (USD)	
Explanatory variables		$D\_VALCREA_e$	Value creation of the deal	Boolean variable "1" if $CAR_{e,A} \cdot MC_{e,A} + CAR_{e,T} \cdot MC_{e,T} > 0$ "0" otherwise		
		$PREM_e$	Premium (winsorised)		Dealscreener: Premium in % 4 weeks prior to announcement	Antoniou, Arbour, and Zhao (2008)
		$D\_REGION\_x_{e,A}$	Acquirer's region	Boolean variables Differentiation of ten regions: Africa, Asia, Australia, Canada, Continental Europe, Middle East, Russia, South America, United States of America, United Kingdom. United Kingdom serves as benchmark.	Dealscreener: Nation (Manual assignment to self-selected regions)	Becht, Polo, and Rossi (2016)
Control variables	**Deal characteristics**	D_CASH_e	Cash payment	Boolean variable "1" if transaction is fully paid by cash "0" if transaction is paid by mixed payment	Dealscreener: Consideration Structure	Travlos (1987), Walker (2000), Fuller, Netter, and Stegemoeller (2002), Goergen and Renneboog (2004), Faccio, McConnell, and Stolin (2006), Chidambaran et al. (2010), Martynova and Renneboog (2011), Golubov, Petmezas, and Travlos (2016)
		D_STOCK_e	Stock payment	Boolean variable "1" if transaction is fully paid by acquirer's stock "0" if transaction is paid by mixed payment	Dealscreener: Consideration Structure	Travlos (1987), Walker (2000), Fuller, Netter, and Stegemoeller (2002), Goergen and Renneboog (2004), Faccio, McConnell, and Stolin (2006), Chidambaran et al. (2010), Martynova and Renneboog (2011), Golubov, Petmezas, and Travlos (2016)
		$D\_FRIENDLY_e$	Friendly takeover	Boolean variable "1" if transaction is described as friendly takeover "0" if transaction is described as hostile/neutral	Dealscreener: Deal Attitude	Goergen and Renneboog (2004), Martynova and Renneboog (2011)

	D_DOMEST_e	Domestic takeover	Boolean variable "1" if acquirer's and target's nation match "0" otherwise	Dealscreener: Nation	Conn et al. (2005), Martynova and Renneboog (2011), Danbolt and Maciver (2012)
	D_RELA_e	Business relation	Boolean variable "1" if acquirer's and target's business sector match "0" otherwise	TR.TRBCBusinessSector	Walker (2000), Martynova and Renneboog (2011)
	$SIZEREL_e$	Size relation (winsorised)	$\dfrac{MarketCap_T}{MarketCap_A}$	TR.CompanyMarketCap (USD)	Asquith et al. (1983), Fuller, Netter, and Stegemoeller (2002)
	$D\_TIME\_t_e$	Year of the transaction	Boolean variables Differentiation of the years 1990 to 2016 with the year 2017 as reference	Dealscreener: Announcement Date	Jarrell and Bradley (1980), Bruner (2002)
Company characteristics (acquirer)	$L\_SIZE_{e,A}$	Size (logarithmised)	ln($MarketCap_A$)	TR.CompanyMarketCap (USD)	Moeller, Schlingemann, and Stulz (2004), Jansen, Sanning, and Stuart (2015), Fich, Nguyen, and Officer (2018)
	$LEV_{e,A}$	Leverage (winsorised)	$\dfrac{Total\ Debt_A}{Total\ Assets_A}$	Datastream: Total Debt Total Assets	Maloney, McCormick, and Mitchell (1993), Yook (2003), Schlingemann (2004), Martynova and Renneboog (2009), Harrison, Hart, and Oler (2014)
	$BMR_{e,A}$	Book to market ratio (winsorised)	$\dfrac{Total\ Equity_A}{MarketCap_A}$	Datastream: Total Shareholders' Equity Market Capitalization Fiscal Year End	Lang, Stulz, and Walkling (1989), Servaes (1991), Sudasarnam and Mahate (2003), Dong et al. (2006)

Econometric Models

Based on the findings of De La Bruslerie (2013) and Alexandridis et al. (2013), we performed the analysis with and without including the premium in the regression model. We therefore applied two regression set-ups: model 1 excludes the premium variable and model 2 includes the premium as explanatory variable. Except for the premium, the control variables within the multiple regressions stay the same. All models were applied for our three dependent (DEP_e) variables: $CAR_{e,T}$, $CAR_{e,A}$, and $DIST_e$. In total, we generated six regression models which are based on Equation 2.

$$
\begin{aligned}
DEP_e = \ & \beta_0 & +\beta_1 \cdot D\_VALCREA_e & \quad +\beta_2 \cdot PREM_e & +\beta_3 \cdot D\_CASH_e & \quad +\beta_4 \cdot D\_STOCK_e \\
& +\beta_5 \cdot D\_FRIENDLY_e & +\beta_6 \cdot D\_DOMEST_e & \quad +\beta_7 \cdot D\_RELA_e & +\beta_8 \cdot SIZEREL_e & \\
& +\beta_9 \cdot L\_SIZE_{e,A} & +\beta_{10} \cdot LEV_{e,A} & \quad +\beta_{11} \cdot BMR_{e,A} & & \\
& \textstyle\sum +\beta_{12,x} \cdot D\_REGION\_x_e & \textstyle\sum +\beta_{13,t} \cdot D\_TIME\_t_e & \quad +\varepsilon_e & &
\end{aligned}
\tag{2}
$$

3 RESULTS AND DISCUSSION

3.1 Descriptives

We observe a highly significant mean $CAR_{e,T}$ of 11.6% (p-value = 0.000) for the targets' shareholders and an insignificant mean $CAR_{e,A}$ of 0.1% (p-value = 0.261) for the acquirers' shareholders. Half of the targets' shareholders generate a $CAR_{e,T}$ of more than the median of 6.5% (p-value = 0.000). It is exactly half of the acquirers' shareholders to report a negative $CAR_{e,A}$, according to the observed median of 0.000 (p-value = 0.903). These results are fully in line with the extant literature (Bruner, 2002, Martynova & Renneboog, 2008).

The newly introduced variable $DIST_e$ shows with a mean value of - 1.075 (p-value = 0.000) that M&A transactions do not only cause an unbalanced distribution of the transaction results that strongly favours the targets' shareholders. Moreover, on average, these transactions generate dollar gains for the target's shareholders while acquirer's shareholders suffer dollar losses. Thus, from an economic point of view, the acquirers' shareholders would reject these transactions, if they were asked for approval ex-ante. This result indicates that, on average, M&A transactions are accompanied by agency problems resulting in a wealth redistribution from the acquirer's to the target's shareholders. Values below minus one clearly indicate the misuse of control rights of the acquirer's board. Furthermore, at least 50% of the transactions considered in our sample report an unbalanced distribution of transaction results that favours the target, expressed through a median value of $DIST_e$ of - 0.511 (p-value = 0.000).

Of 3,361 deals included in the analysis, 1,977 transactions result in a positive, and the remaining 1,384 transactions in a negative total dollar gain. This result is in line with the extant literature, finding a positive total gain for the combined parties on average (Bruner, 2002, Martynova & Renneboog, 2008). In case of a positive total dollar gain, 1,328 transactions result in positive gains for both parties involved and, thus it can be assumed, that these transactions would have been approved by both parties irrespective of the distribution of transaction results. Out of these transactions, the gain of the target's shareholders is greater than the gain of the acquirers' shareholders in 473 cases. In 855 transactions the distribution of total gains is vice versa. 396 transactions with positive total dollar gains result in extreme distributions towards the target, hence, generate gains for the target while losses for the acquirer. In 253 the result is vice versa.

In case of a negative total gain, 471 transaction result in negative gains for both parties involved and, thus it can be assumed, that these transactions would have been rejected by both parties if asked or if they were able to anticipate the results beforehand. While in 332 cases the loss of the targets' shareholders is smaller than the one of the acquirers' shareholders, in 139 cases the result is vice versa. 812 transactions with a negative total dollar gain, result in extreme distributions towards the target, hence, generate gains for the acquirers' shareholders while losses for the targets' shareholders. In 101 transactions the result is vice versa.

Irrespective of the outcome of the combined parties, we observe a redistribution effect towards the target in 2,013 of 3,361 transactions considered in the sample, hence with a value of $DIST_e$ below zero. In 1,208 of these transactions the distribution effect is extreme in the sense that $DIST_e$ is below -1. Accordingly, in 1,348 transactions the effect oscillates towards the acquirer, implying a value of $DIST_e$ above zero. Extreme distribution effects with a value of $DIST_e$ above one are observable in 354 transactions.

Overall, the acquirers' shareholders would have accepted 1,682 deals of our sample as all of them imply gains – although the target shareholders might have gained relatively more. 2,536 transactions would have been approved by the targets' shareholder if they had known the

result beforehand. Only 1,328 should have been realized, as both sides would have approved them if they were asked beforehand.

3.2 Model results

The results of the main models without and with acquisition premium as explanatory variable and for $CAR_{e,T}$, $CAR_{e,A}$, and $DIST_e$ as explained variable are summarized in table 2.

Tab. 2 Model results of OLS-Regressions

	Model 1			Model 2		
	- a -	- b -	- c -	- a -	- b -	- c -
	CAR_T	CAR_A	DIST	CAR_T	CAR_A	DIST
	coeff.	coeff.	coeff.	coeff.	coeff.	coeff.
	(t-value)	(t-value)	(t-value)	(t-value)	(t-value)	(t-value)
Intercept	0.0463	-0.0523 ***	-3.4479 ***	0.0053	-0.0511 ***	-3.3033 ***
	(1.5079)	(-5.1293)	(-4.8966)	(0.188)	(-5.0196)	(-4.6859)
W_PREM				0.1342 ***	-0.0038 *	-0.4738 ***
				(14.9745)	(-1.8668)	(-3.6792)
D_VALCREAGAIN	0.0787 ***	0.0693 ***	1.1923 ***	0.0709 ***	0.0695 ***	1.2201 ***
	(14.8523)	(43.3552)	(9.6351)	(14.6428)	(43.6059)	(9.8393)
D_MPCash Only	0.0349 ***	0.0037 **	0.1762	0.027 ***	0.0039 **	0.2043
	(6.2106)	(2.1478)	(1.2669)	(5.2202)	(2.2729)	(1.4667)
D_MPStock Only	-0.0001	0.0007	0.0676	-0.0053	0.0008	0.0859
	(-0.0125)	(0.2347)	(0.3345)	(-0.7185)	(0.2846)	(0.4252)
D_DAFriendly	0.0386 ***	0.0015	-0.3932 ***	0.0378 ***	0.0015	-0.3903 ***
	(6.5466)	(0.7033)	(-2.9113)	(6.4367)	(0.7145)	(-2.8991)
D_GEODomestic	-0.0133 **	-0.0029	0.3477 **	0.0013	-0.0033 *	0.2962 *
	(-2.0335)	(-1.563)	(2.2789)	(0.2102)	(-1.768)	(1.937)
D_RELARelated	0.0094 *	0.001	-0.0541	0.0042	0.0011	-0.036
	(1.757)	(0.5919)	(-0.4159)	(0.8679)	(0.6767)	(-0.2776)
W_SIZEREL	-0.0243 ***	0.0008	0.2566 ***	-0.017 ***	0.0006	0.2309 ***
	(-9.2608)	(0.5101)	(4.3182)	(-7.1087)	(0.3786)	(3.8687)
L_SIZE	0.0025 *	0	0.0768 **	0.0042 ***	-0.0001	0.0708 **
	(1.7105)	(-0.0506)	(2.3508)	(3.1142)	(-0.1519)	(2.1575)
W_LEV	-0.0421 ***	0.0136 ***	0.4969	-0.0313 **	0.0133 ***	0.4587
	(-2.7266)	(2.6735)	(1.3732)	(-2.1949)	(2.6112)	(1.2684)
W_BMR	-0.0138 ***	-0.0004	0.1173	-0.0159 ***	-0.0003	0.1245
	(-3.4016)	(-0.2644)	(1.3393)	(-4.2318)	(-0.224)	(1.4278)
D_Region_USA	0.0419 **	0.0012	-1.2678 ***	0.0191	0.0018	-1.1873 ***
	(2.4909)	(0.2362)	(-4.87)	(1.2659)	(0.3645)	(-4.5898)
further region dummies	…	…	…	…	…	…
time dummies	…	…	…	…	…	…
R^2	0.2545	0.3614	0.0653	0.3823	0.3624	0.0688
adj. R^2	0.2441	0.3526	0.0523	0.3735	0.3533	0.0556
df	46/3314	46/3314	46/3314	46/3314	46/3314	46/3314
F-statistics	24.5900	40.7800	5.0340	43.6200	40.0600	5.2090
p-value	0.0000 ***	0.0000 ***	0.0000 ***	0.0000 ***	0.0000 ***	0.0000 ***

*) $p \leq 0.1$, **) $p \leq 0.05$, ***) $p \leq 0.001$

All regressions show highly significant model statistics; thus, these models have a strong explanatory power. The adjusted explained variance (adj. R2) for the two CAR variables is in both settings comparatively higher than for the DIST variable, indicating, that the explanatory variables elucidate the success of the merger better than the distribution of the success. However, the adjusted explained variance is remarkably higher when including the acquisition premium into the model. Hence, including the premium into the model results in additional explanatory power. Applying an ANOVA-test, we observed the change in the explained variance to be significant in all cases. The model statistics are slightly weaker compared to some other studies in the extant literature. Nevertheless, our study is very diversified in terms of geographical distribution and industry characteristics and is therefore less homogeneous.

3.3 Is there a systematic redistribution of wealth?

When examining the intercept of the first regression model which excludes the premium as explanatory variable, the results indicate insignificant positive abnormal returns for the target (const. = 0.046, p-value = 0.132) and highly significant negative returns for the acquirer (const. = - 0.052, p-value = 0.000) that are not explained by any of the explanatory variables. These results are perfectly in line with the extant literature (Bruner, 2002, Martynova & Renneboog, 2008) and indicate, that – even controlled for a multitude of variables – there is a distribution of transaction results between the involved parties that favours the targets' shareholder. This observation does not necessarily lead to a significant change of the $DIST_e$ variable. Here, however, this is the case: in model 1c a strong distribution of results to the advantage of the target and the disadvantage of the acquirer is observable (const. = - 3.448, p-value =0.000), independently of the influence of all other explanatory variables and, thus, unexplained so far. As the value is smaller than - 1 and highly significant, it can be concluded that the acquirers' gain is negative whereas the target faces a positive gain. Hence, M&A-transactions that belong to the reference group are on average beneficial for the target shareholders but detrimental for the acquirers' shareholders. At first sight, this result seems to contradict to the findings of Becht, Polo, and Rossi (2016) who report positive $CAR_{e,A}$s for UK acquirers. However, in a multiple regression the authors detect factors that negatively influence the positive results of UK acquirers such as the ownership status of the target. Accordingly, the authors observe a negative and significant influence of publicly traded targets on the acquirer's $CAR_{e,A}$. Hence, in the light of this information, a negative intercept in model 1c is still in line with the observations of Becht, Polo, and Rossi (2016), as the sample applied in the present study only includes public targets.

When integrating the premium as explanatory variable in the regression models 2a-c, we observe that the magnitude of the intercepts stays all in all constant if compared to model 1a-c without including the premium. In terms of the target's $CAR_{e,T}$ the coefficient is slightly positive but insignificant (const. = 0.005, p-value = 0.851). In terms of the acquirer's $CAR_{e,A}$ the intercept remains also unchanged when controlling for the premium (const. = -0.051, p-value = 0.000). As the intercept in model 2c is reduced only slightly (const. = -3.303, p-value = 0.000), the unbalanced distribution towards the targets' shareholders that we observed in model 1c cannot be resolved by the takeover premium. Accordingly, large parts of the distribution effect towards the targets' shareholders remain unexplained and significant.

3.4 Does the distribution of the M&A-results depend on the success of the transaction?

All observed models strongly depend on whether the acquisition creates or destroys value. It goes without saying that the group of value-added acquisitions is generating positive stock market reactions from both acquirers (coef. = 0.078, p-value = 0.000) and targets (coef. = 0.069, p-value = 0.000), as this is more or less the definition of adding value. Less self-evident, on the other hand, is the fact that the variable $DIST_e$ variable indicates a clear shift of wealth towards the acquirer and to the disadvantage of the target (coef. = 1.192, p-value = 0.000).

The high explanatory power remains unchanged while considering the premium in all three models 2a-c in comparison to models 1a-c. The value creation shows a highly significant impact on the target's $CAR_{e,T}$ (coef. = 0.071, p-value = 0.000), on the acquirer's $CAR_{e,A}$ (coef. = 0.070, p-value = 0.000), as well as on the $DIST_e$ variable (coef. = 1.220, p-value = 0.000).

This result clearly indicates, that the "share of the loot" of the acquirer is positively related to value creation. As this result is corrected for absolute firm size of the acquirer as well as relative firm size of both companies involved, the reason for this behaviour cannot be seen in the

negotiation power of the acquirer alone – although this cannot be fully ruled out. Rather, this finding supports the hypothesis that target shareholders will be released from all project risks by the payment of the takeover offer and therefore will not participate in either positive or negative M&A-results.

3.5 Does the acquisition premium trigger the wealth transfer?

The premium, defined as the percentage by which the offered price exceeds the stock market value of the target company, is often suggested in practice to be the main lever of the unequal distribution of the transaction success. It is often lost sight of the fact that the takeover premium represents only a small dollar amount compared to the significant distortions on the stock markets around the announcement day. Nevertheless, it allows further insights to include the premium in the regression, as this is a direct transfer of wealth from the acquirer to the target and should ideally induce a positive $CAR_{e,T}$ exactly to the extent of the premium. If the model is corrected for the premium, influencing factors that are included in the premium will then show lower explanatory power.

As expected, the coefficient of the variable $PREM_e$ is positive and highly significant (coef.= 0.134, p-value = 0.000) for the target's shareholders. This result is not surprising, as the offer typically exceeds the current market price of the target company. For the acquirer's $CAR_{e,A}$, the variable $PREM_e$ is negative, however extremely small and insignificant (coef. = - 0.004, p-value = 0.062). In other words: the market does not react on the offer independent of its size. This is a remarkable result, as there can be no question of an "overpayment" at all. However, the premium obtains a highly significant negative effect on the variable $DIST_e$ and hence triggers an unbalanced distribution of transaction results towards the target to the disadvantage of the acquirer (coef. = -0.474, p-value = 0.000). Consequently, this effect is rather due to the rise in the target's share prices than in a reduction of the acquirer's.

3.6 Does the British institutional setting have an impact on the distribution?

We observe the target's $CAR_{e,T}$ to be significantly larger when acquired by a company from the USA (D_REGION_USA) compared to a UK acquirer (coef. = 0.042, p-value = 0.013). The result for the acquirers' shareholders $CAR_{e,A}$ is not as distinct as the targets' shareholders. Its coefficient is extremely small and not significant (coef. = 0.001, p-value = 0.813). However, we observe US acquirers causing a highly significant unbalanced distribution of transaction results that strongly favours the targets' shareholders (coef. = -1.358, p-value = 0.000) and thus, find evidence that the British institutional setting with a voting right on M&A-transactions effectively improves the acquirer's shareholders position. The positive effect on the target's $CAR_{e,T}$ of being acquired by a company from the USA (D_REGION_USA) decreases when controlling for the premium (coef. = 0.019, p-value = 0.206) and loses its' significance. Hence, US acquirers seem to pay higher premiums in comparison to UK acquirers. However, a positive and yet unexplained effect remains. The coefficient in model 2b did not remarkably change in comparison to model 1b (coef. = 0.002, p-value = 0.716). However, in line with the results in model 2a, the newly introduced control variable $PREM_e$ reduces the unbalanced distribution of transaction results towards the target (coef. = - 1.187, p-value = 0.000). Yet, similar to model 1a, a great part of the difference in the distribution of transaction results between transactions initiated by US and those initiated by UK acquirers, remains unexplained, even controlled for the premium.

CONCLUSION

Theoretically M&A transactions should come along with positive gains for both, acquirer's as well as target's shareholders. However, numerous empirical studies indicate that the involved parties profit unevenly from the merger. As takeovers seem to be accompanied by an uneven allocation of gains and losses between targets' and acquirers' shareholders, this study sheds light on the economic rationale and characteristics of M&A transactions and applies a new approach. We analyse the announcement effect of 3,361 worldwide M&A transactions that were announced and completed in the period between 1990 and 2017. Although, the issue of wealth creation cannot be completely separated from the issue of wealth distribution, this study focusses explicitly on the distribution of the M&A success or the "sharing the loot" between the involved parties, respectively. In line with existing empirical findings, we can show that the distribution of M&A success among the involved parties is systematically biased in favour of the targets' shareholders. We find that on average the major proportion of the economic benefits of value creating transactions goes to the acquirer, while only a minor share can be allocated to the target company. Vice versa, we show that in the majority of value destroying transactions the acquirers' shareholders carry all economic losses, while the targets' shareholders still gain a benefit. Thus, the targets' shareholders benefit from takeovers in both cases. We hypothesize that a minor share of these value gains is granted to the targets' shareholders by paying the transaction premium to uphold their willingness to participate in the transaction   even if the market subsequently evaluates the transaction as negative. Accordingly, a negative overall market result will be carried by the acquirers' shareholders. We find that the majority of transactions are value destroying for the acquirer, which we explain by agency problems or managerial hubris. We find the takeover premium to be a significant lever of redistribution of merger success towards the targets' shareholders. Nevertheless, the negative economic outcome for the acquirer's shareholders cannot be sufficiently explained by the fact that inflated premiums are paid for the transaction, rather we argue that acquirer's on average enter into economically disadvantageous transactions. To minimize the impact of agency problems and management hubris, UK has granted the shareholders of the acquirer's company a voting right on certain transactions. In line with Becht, Polo, and Rossi (2016) we could observe that in the UK there is a significant improvement in the situation of the acquirers' stockholders in comparison to the US, where such a setting is not in place. Acquirer's shareholders thus have the opportunity to express their displeasure about a certain transaction at a general meeting instead of realizing it without further complaints.

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