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What Determines The Choice of Payment Method? Evidence from Turkish Mergers and Acquisitions

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ABSTRACT

Purpose – Due to the increasing competition conditions, companies resort to mergers and acquisitions (M&A) as a method of external growth. When firms engage in M&A, payment method choice becomes a crucial aspect of the transaction. This study investigates the determining factors of M&A payment methods within the Turkish capital markets, i.e. Borsa Istanbul. This study examines M&A transactions involving Turkish companies between 2011 and 2020, aiming to identify prevailing trends over a 10-year period. The analysis deliberately excludes the impacts of the post-COVID-19 period to ensure that the findings reflect the dynamics of a relatively stable economic environment, unaffected by the extraordinary circumstances of the pandemic.

Design/methodology/approach – This study employs a backward stepwise binary logistic regression model to analyze the determinants of payment method choices in mergers and acquisitions (M&A) transactions. The analysis is based on a dataset of 58 transactions involving Turkish companies, obtained from the Eikon Refinitiv database. The model examines the influence of key variables, including managerial ownership, financial leverage, cash holdings, and the market-to-book ratio, to identify the factors driving the choice between cash and stock as payment methods in M&A transactions.

Findings – The empirical analysis reveals that listed target companies show a strong preference for stock payments in mergers and acquisitions (M&A) transactions. In contrast, variables such as intra-industry transactions and relative deal size are found to have no statistically significant impact on the choice of payment method. These results highlight the differing roles that target characteristics and transaction-specific factors play in influencing payment method decisions.

Discussion – The findings highlight the role of target firm characteristics, especially the listing status, in determining the choice of payment method in mergers and acquisitions (M&A). The preference for stock payments by listed targets suggests that such firms may leverage their public status to facilitate equity-based transactions, potentially due to advantages such as reduced liquidity constraints or signaling effects to the market. Additionally, the absence of significant influence from intra-industry transactions and relative deal size indicates that other factors, such as ownership structure or financial conditions, may play a more prominent role in shaping payment method decisions. These insights contribute to a deeper understanding of M&A financing strategies in the Turkish market, offering valuable implications for policymakers and practitioners aiming to optimize transaction outcomes.

1. INTRODUCTION

Mergers and acquisitions (M&A) represent a significant aspect of the global financial landscape, reflecting strategies companies use to improve their market position, diversify their operations or achieve economic efficiencies. M&A activity is a prevalent form of corporate restructuring worldwide. After the unprecedented turmoil in 2020 due to the impacts of the post-COVID-19 period, global M&A activity surged to a record high in the first half of 2021, with deals worth around USD 2.8 trillion. This marks a 131% compared to the same period in 2020 and exceeds the pre-pandemic five-year average of USD 1.6 trillion. A significant amount of M&A activity was recorded in North America (USD 1.4 trillion) followed by the Asia-Pacific (USD 446 billion) and Europe (USD 446 billion) regions. The tech sector led with almost 25% of total activity, while the financial and energy sectors each accounted for around 11% (Makrygiannis, 2021; Langton, 2021).

In M&A transactions, the selection of payment method is crucial as it influences the deal closure and the future performance of merged entities. Given the large-scale investments required, the payment method is an

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important decision in financing the deal. Payment methods can be grouped into three categories: (1) cash payments, (2) stock payments and (3) hybrid payments. Each method has its merits. Cash payments are preferred by bidders concerned with retaining control or reaping all benefits (Faccio and Masulis, 2005). They offer simplicity and immediate liquidity to the seller without diluting the buyer's equity but require substantial cash reserves, straining the buyer's finances. Stock payments are often used in cross-border M&A transactions (Dutta et al., 2013). They preserve the buyer's cash reserves and align interests but can dilute the equity of existing shareholders and are subject to market volatility. Hybrid payments, which combine the advantages of cash and stock payments, are becoming increasingly important due to their flexibility (Boone et al., 2014). However, they are complex to structure and may elicit mixed reactions from shareholders and market participants (DePamphilis, 2019).

Despite extensive studies on the M&A payment determinants in developed markets such as the US, UK and Europe, there is a notable gap in the literature focusing on emerging markets. Specifically, the Turkish stock market remains underexplored. In 2020, Turkish M&A activity demonstrated significant resilience and growth, achieving over 300 transactions with a total deal value of approximately USD 9.0 billion, marking a 70% increase from the previous year (Deloitte, 2021). This underscores the importance of Turkey as a relevant and dynamic market for M&A activity, providing unique insights into the trends and factors influencing M&A deals in an emerging market context. This study addresses this gap by identifying the determinants of M&A deals in the Turkish market and analyzing payment approaches and their influencing factors.

The main objective of this study is, therefore, to deepen the understanding of factors influencing payment mechanism preferences in M&A transactions in the Turkish stock market. The study focuses on M&A transactions announced and completed between 2011 and 2020, capturing a decade of activity. This timeframe provides a robust dataset for analyzing recent trends and drivers in M&A deals, excluding the impacts of the post-COVID-19 period, which significantly disrupted global markets from 2020 onwards. This analysis is critical for stakeholders, such as corporate managers, investors and policymakers as it provides insights into the strategic considerations behind M&A transactions in emerging markets.

The study employs a backward stepwise binary logistic regression model to identify the determining factors that affect the preference of paying methods in M&A transactions. The dataset comprises 3,699 M&A deals from the Eikon Refinitiv database, which were narrowed down to 58 transactions based on certain criteria such as the acquirer being a listed firm in Turkey and the deal value exceeding USD 1.0 million. The findings indicate a strong preference for cash payments. Notably, listed targets significantly favor stock payments, highlighting a strategic use of equity in acquisitions of publicly traded companies.

The rest of the study is organized as follows: Section 2 inspects the literature on M&A financing decisions and explores the main theories and determinants while emphasizing the differences between developed and emerging markets. Section 3 postulates the research hypotheses. Section 4 explains the data and methodology. Section 5 presents and discusses the empirical findings, shedding light on factors influencing financing decisions and emphasizing the dynamics of the market. Finally, Section 6 concludes.

2. LITERATURE REVIEW

2.1. Theoretical background

The payment method as a feature of a deal remains an important topic in M&A research. Some of the literature attributes the selection of payment method to the theory of adverse selection. According to this view, adverse selection is due to information asymmetry, and asymmetric information can be interpreted in two ways. On the one hand, bidders are motivated to exploit insider information about the overvaluation (undervaluation) of their "own" assets by entering an equity-financed (cash-financed) M&A transaction (Myers and Majluf, 1984; Krasker, 1986; Shleifer and Vishny, 2003). On the other hand, it is also well documented that the greater the information asymmetry about the assets of the "target", the more likely the bidder is to finance the M&A transaction with shares (Hansen, 1987; Fishman, 1989). The first interpretation focuses on a one-sided information asymmetry, i.e. on the existing assets of the bidder, while the second interpretation has a two-sided character in which the bidder (the target) is also affected by the mispricing of the target (the bidder).

The role of corporate control offers an alternative explanation for the selection of payment method. Concerns about corporate control may manifest themselves when the bidder's corporate governance and controlling

shareholder status are threatened. This is because share payments can have a dilutive effect on the bidder's ownership structure. Stulz (1988) is one of the first to argue that management's incentives to retain or increase control influence financing decisions in M&A. Amihud et al. (1990) report that stock ownership by the bidder's officers and directors reduces the likelihood of stock payments. Similarly, Martin (1996) shows that a medium level of share ownership by managers of the bidder has a negative relationship with equity financing. Faccio and Masulis (2005) also show that bidders prefer cash payments to avoid the risk of losing control of the firm by their dominant shareholders, especially when the target's ownership structure is highly-concentrated.

Another strand of literature assumes that cash and stock payments have different tax implications (Ayers et al., 2003). The intuition is that the tax burden of the target shareholders plays a role in the selection of payment method, as cash offers require immediate taxation, while the tax consequences are deferred for equity offers.

The payment method may also be determined by the correlation of share returns between the bidder and the target company. If these are highly correlated, there is a high likelihood that the medium of exchange will be shares to avoid renegotiation costs that would arise if deal terms became unfair due to fluctuations in value prior to the closing date (Officer, 2004).

Other commonly cited determinants of payment terms include the characteristics of the deal as well as the bidder and the target (Faccio and Masulis, 2005). We hereby agree with Betton et al. (2008) that these determinants are not necessarily mutually exclusive and the conceptual foundations on which they are based can help shape a particular payment decision.

2.2. Past studies

Building on the theoretical foundations of M&A payment methods, previous research has empirically investigated the various factors that influence the choice of payment method across diverse market environments.

Klitzka et al. (2021) analyze M&A financing types in large transactions involving public US acquirers (2009-2016). They explore whether acquirers exploit overvaluation through payment options, finding that while overvaluation does not significantly impact payment types, measures of misevaluation and information asymmetry positively relate to cash payment percentages. de Bodt et al. (2021) provide updated insights on US M&A transactions (1990-2018), finding a shift post-2001 where acquirer valuation no longer significantly influences payment types. Financial constraints of the acquirer become more critical, and target shareholders are more inclined to accept stock as medium of the transaction when they expect substantial positions in the merged entity.

Ismail and Krause (2010) examine US M&A transactions (1985-2004), analyzing growth rate, return volatility, and synergies. They find that return correlation significantly influences payment form choices, while asymmetric information and tax considerations are less impactful. Swieringa and Schauten (2007) study Dutch M&A (1996-2005), finding that bidder characteristics like block ownership and market-to-book ratio influence payment preferences, with larger bidders favoring cash and stock financing for larger targets and intra-industry deals.

The studies collectively reveal that factors such as ownership structure, financial leverage, target characteristics, and market conditions play a critical role in M&A financing decisions. This document aims to identify these factors within the Turkish Stock Market (BIST), offering insights into an emerging but under-researched market.

3. HYPOTHESIS DEVELOPMENT

Drawing from the insights gained through past empirical studies, we now turn to the development of specific hypotheses to further investigate the determining factors of financing types in M&A transactions.

3.1. Ownership Structure

The ownership structure of both bidder and target firms significantly influences the selection of financing methods in M&A transactions. We examine two key aspects of ownership: managerial (inside) ownership and block-holders (outside) ownership.

3.1.1. Managerial Ownership

Managerial ownership denotes the equity stake held by executives and directors within the acquirer and target firms. Empirical studies suggest that higher managerial ownership tends to favor cash financing over stock financing (Amihud et al. 1990; Stulz, 1988). This preference for cash can be attributed to the desire of managers and dominant shareholders to maintain control and mitigate the dilution of their voting rights associated with stock payments. Moreover, the potential loss of control is seen as a significant risk, prompting risk-averse acquirers to opt for cash payments to retain corporate control (Faccio and Masulis, 2005).

Conversely, from the target's perspective, greater managerial ownership often correlates with a preference for stock-based transactions (Grullon et al., 1997). This preference allows target management to retain influence and positions within the combined entity post-merger. Although the managerial ownership-preference of financing method relationship has been widely investigated, the results across different studies are often inconsistent and sometimes conflicting (Zhang et al., 2003).

Therefore, we hypothesize the following:

H*$_{1a}$: Managerial ownership has a significant influence on the choice of M&A payment method.*

3.1.2. Outside Monitoring

In addition to managerial ownership, the presence of block-holders and institutional shareholders in bidder and target firms plays a crucial role in influencing the selection of financing methods in M&A transactions. Listed firms often face challenges due to the split of ownership and management, making it impractical for all shareholders to actively manage the company collectively. However, block-holders and institutional investors, with their higher ownership stakes, possess the capability to actively monitor the firm. According to Black (1992), institutional investors act as intermediaries, bridging the gap between internal management and external shareholders, thereby promoting harmonious relationships and mitigating conflicts of interest.

Furthermore, dominant shareholders can engage directly with management to safeguard investor rights and influence strategic decisions, particularly during M&A. Their oversight can significantly impact management's choices regarding financing methods. Therefore, the presence of block-holders and institutional investors in the ownership structure emerges as a critical factor influencing financing decisions.

Empirical evidence indicates that greater institutional block-holdings generally decrease the probability of stock financing, supporting the view that institutions act as effective monitors of managerial behavior (Jensen, 1991). However, Martin (1996) provides contrasting findings, indicating that higher institutional and block-holdings can increase the propensity for stock financing. Notably, holdings by individual shareholders not affiliated with management do not show a significant relationship with the chosen method of payment.

Therefore, we hypothesize the following:

H*$_{1b}$*: The presence of block-holders and institutional investors has a significant influence on the choice of M&A payment method.

3.2. Investment Opportunities (Efficient Markets Hypothesis)

Companies aim to enhance their market value through effective management and financial performance. Strong financial results are crucial for firms seeking external growth strategies such as M&A), which are pivotal for expansion. Conversely, poorly managed companies with weak financial performance may become acquisition targets.

According to the Efficient Markets Hypothesis (Fama, 1970), all relevant information about a firm is reflected in its stock market price. Firms perceived to have high growth potential are believed to possess investment opportunities that can generate returns exceeding market averages, making their stocks attractive to investors. When a bidding firm identifies profitable investment opportunities, it tends to allocate its cash flow towards these projects. Consequently, in such scenarios, bidders often prefer using stock as a financing type in M&A transactions. This perspective is supported by Martin (1996), who argues that firms with valuable investment opportunities typically issue equity. In contrast, firms with limited investment prospects tend to rely on debt financing, particularly when management is closely monitored by capital providers.

Therefore, we hypothesize the following:

H2: *Investment opportunities have a significant influence on the choice of M&A payment method.*

3.3. Cash Availability and Tax Consideration

Management decisions in listed firms regarding the allocation of free cash flows can significantly impact tax considerations. Opting for cash dividends results in immediate and higher tax implications compared to capital gains. Alternatively, firms may choose to retain cash for internal investments or utilize it to offer a premium to target shareholders, offsetting tax burdens in M&A.

Cash financing, while imposing a higher premium to cover tax liabilities, offers a quicker transaction compared to stock financing, which involves dilution issues (as discussed in ownership structure). The availability of cash within the acquirer directly influences the preference of payment option. Jensen (1986) contends that companies with significant free cash flows tend to finance acquisitions with cash. Therefore, firms with ample cash reserves, strong cash flows, or adequate debt capacity are likely to finance their investments with cash (Martin, 1996).

Therefore, we hypothesize the following:

H3: *Cash availability and tax considerations have a significant influence on the choice of M&A payment method.*

3.4. Debt Capacity (The Pecking Order Theory)

The pecking order theory of finance (Myers, 1984) posits that firms prioritize internal financing, followed by debt issuance, and finally external equity financing. In the context of M&A, firms with substantial free cash flows often turn to internal funds to finance their activities. Additionally, acquirers with ample debt issuance capacity may prefer cash financing structure.

Debt capacity estimation focuses initially on the portion of collateral assets relative to total assets. Collateral assets, such as property, plant, and equipment (PPE), provide lenders with security against default risk in case of bankruptcy. Firms with higher collateral assets typically enjoy lower borrowing costs and easier access to debt markets, indicating greater debt capacity.

Furthermore, the scale of the acquiring firm significantly influences M&A financing decisions. Larger firms, characterized by extensive asset bases, possess greater cash reserves and debt-raising capabilities compared to smaller entities. Larger acquirers are also better positioned to manage regulatory costs associated with stock offerings, often preferring cash financing for smaller deals.

Lastly, the acquirer's current financial leverage influences the preference of financing type. Firms with lower leverage have greater unused debt capacity, enabling them to access additional cash through debt issuance for M&A transactions. Conversely, high financial leverage constrains debt creation and often leads to stock financing.

Therefore, we hypothesize the following:

H4: *Debt capacity has a significant influence on the choice of M&A payment method.*

3.5. Stock Performance (The Market Timing Theory)

In circumstances where internally-generated funds are insufficient for operational needs or investment projects, companies, particularly acquirers, must decide between financing M&A activities through debt or external equity issuance. The Market Timing Theory (Baker and Wurgler, 2002) posits that this decision hinges on prevailing market conditions and the financial performance of acquirers.

When acquirers perceive their stock as overvalued by the market, they tend to prefer stock financing method to capitalize on this perceived overvaluation. Shleifer and Vishny (2003) and Savor and Lu (2009) discuss that firms with overvalued equity have a stronger incentive to use stock financing. Conversely, Myers and Majluf (1984) and Hansen (1987) suggest that acquirers opt for cash financing when their stock is undervalued. This strategic decision-making aligns with maximizing shareholder value and minimizing dilution concerns. If an acquirer's stock has recently experienced a significant price run-up, shareholders face less dilution because the deal is financed by the exchange of fewer shares (Faccio and Masulis, 2005).

Therefore, we hypothesize the following:

H_5: *Stock performance has a significant influence on the choice of M&A payment method.*

3.6. Relative Deal Size

The preference of financing mechanism in M&A deals often hinges on the proportional size of the bidder compared to the acquirer, a factor extensively studied in M&A literature. Theoretical perspectives propose that using shares as payment is more likely than opting for cash in case the target company is relatively larger than the bidder. This preference arises because larger targets may exceed the acquirer's available cash reserves and debt capacity required for cash financing (Zhang et al., 2003).

Moreover, larger targets wield greater bargaining power in negotiating the financing method due to their size advantage. Managers with significant share ownership in the target firm tend to favor stock exchange to maintain their influence and positions within the combined entity post-merger (Ghosh and Ruland, 1998). In contrast, acquirer managers who prioritize maintaining control are less inclined to offer shares when dealing with larger targets, as stock issuance increases equity dilution and risks control loss.

Consequently, in stock payment scenarios, the risk of significant block-holders emerging in the combined firm is heightened with larger relative deal sizes. Acquirers may therefore hesitate to use stock as a payment mechanism to mitigate this risk, contingent upon the target firm's ownership structure (Swieringa and Schauten, 2007).

Therefore, we hypothesize the following:

H_6: *Relative deal size has a significant influence on the choice of M&A payment method.*

3.7. Unlisted and Subsidiary Targets

The preference of financing type in M&A transactions can vary significantly depending on whether the target firm is unlisted or a subsidiary. Non-listed firms and subsidiaries differ in ownership structure, liquidity needs, and motivations for sale, all of which influence the preferred payment mechanism.

Non-listed firms typically have concentrated ownership structures, increasing the risk of losing corporate control through stock financing due to the potential creation of significant block-holders in the combined firm. Therefore, acquirers tend to prefer cash payment option when acquiring non-listed targets to avoid diluting their control.

In the case of subsidiaries, the decision to sell often stems from strategic reasons such as avoiding financial distress or refocusing on core competencies. Sellers of subsidiaries are more likely to prefer cash settlement approach, as stock offerings would still tie them to the subsidiary's performance through stock price fluctuations, which may not align with their strategic goals.

Moreover, executives of privately held firms, including subsidiaries, may prefer cash payments if their primary motivation for sale is personal financial needs, such as retirement planning, where cash is necessary. This preference underscores the practicality of cash payments in such transactions.

Therefore, we hypothesize the following:

H_7: *The status of the target firm as unlisted or a subsidiary has a significant influence on the choice of M&A payment method.*

3.8. Intra-Industry and Cross-Border Deals

The preference of financing approach in M&A transactions can be influenced by whether the bidder and target firms perform within the same sector or across different countries. These factors affect the level of information asymmetry in parties, which in turn impacts their preferences for cash or stock financing methods.

In intra-industry deals, where the parts of deal running business within the same industry, there is typically a higher level of mutual understanding and transparency regarding business risks and outcomes. In such situations, targets may be more inclined to accept stock financing since they can more accurately evaluate the acquirer's value and potential within the same industry context. Conversely, in cross-border deals where the parts of deal conduct a business in different countries, there tends to be greater information asymmetry.

Targets in these situations may perceive higher risks associated with the acquirer's operations and future earnings potential due to unfamiliarity with the market of bidders and regulatory environment. As a result, targets are more likely to select cash financing to mitigate these perceived risks (Hansen, 1987).

Therefore, we hypothesize the following:

H8: *The nature of the deal as intra-industry or cross-border has a significant influence on the choice of M&A payment method.*

4. DATA AND METHODOLOGY

4.1. Data

We retrieve all the data from the Eikon Refinitiv (formerly Thomson Reuters) database. The original dataset consists of 3,699 M&A deals that took place between 1987 and 2022. We refine our final data sample by applying the following screening criteria:

1. The M&A transactions analyzed in this study were announced and completed between 2011 and 2020, covering a 10-year period. This timeframe was selected to capture the most recent decade of transactions.
2. The acquirer is a publicly traded firm based in Turkey and listed on BIST.
3. The target firm in the analyzed M&A transactions could be a public, private, or subsidiary company, with no country limitations. Consequently, the final dataset comprises domestic and international transactions.
4. Data on stock ownership and voting control are available for acquirer and target companies. Furthermore, the acquirer's stock and financial data for the observation period are also accessible.
5. The acquirer will acquire at least 50% of the target firm shares as a result of the transaction.
6. All transactions included in the study have a disclosed deal value of USD 1.0 million or greater.
7. The analyzed transactions are all friendly mergers and acquisitions, and do not involve any hostile takeovers.
8. All M&A examined in this study are required to be funded through cash, stock, or a mix of both.

Following the application of the screening criteria, the resulting data sample comprises 75 mergers and acquisitions.

To analyze the payment method, we classify the payment into three categories based on the literature: (1) Cash Payment, (2) Stock Payment, and (3) Hybrid Payment. The definitions of the payment methods are as follows:

(1) Cash Payment: Cash, Earnout, Nonconvertible Debt, and Assumption of Liabilities.
(2) Stock Payment: Common Shares, Ordinary Shares, Preferred Shares, and Warrants.
(3) Hybrid Payment: Combination of Cash Payment and Stock Payment.

The required data items are sourced from various data sources. Refinitive EIKON's Mergers and Acquisitions database offers a comprehensive set of data points, including the consideration offered (cash, stock, or hybrid), deal value, announcement and effective date of the deal, nationality of the acquirer and target firms that identifies whether the deal domestic or cross-border, percentage of shares acquired, public status (public, private, and subsidiary), the condition where bidder and target firms are classified in the same industry and listing status. In addition, the database provides critical financial values such as market capitalization, total assets, cash and cash equivalents, marketable securities, plant, property and equipment (PPE) net, total liabilities, and shares and stock market performances.

However, in cases where Refinitiv EIKON does not provide the necessary financial data for the research, we source missing information from BIST company annual reports, the Public Disclosure Platform (KAP), annual reports available on companies' investor relations web pages, audited financial reports, and balance sheet footnote information. Furthermore, we obtain the data on the ownership structure of shareholding by board members and the existence of individual and institutional investors holding more than 5% of the shares from the KAP website. We exclude variables related to ownership structure for target firms due to the predominantly non-public nature of these companies, making it unfeasible to collect relevant data. We exclude financial institutions to ensure consistency and relevance in the study, given their different primary activities and financial statements. After excluding firms with missing data and aggregating relevant variables, the final

dataset comprises 58 M&A transactions completed in Turkey over the ten-year span from January 2011 to December 2020.

The proportions of cash payment, stock payment and hybrid payment in the data sample of are 93,10%, 6,90% and 0% respectively. Table-1 displays the frequency distributions of the variables considered in the analysis. The variables are classified based on public status, country, and sector of the target company.

Table 1. Frequency Distribution of Payment Methods Categorized by Targets' Status

Payment Method	Total	Targets' Public Status			Targets' Nation		Targets' Sector Status	
		Public	Private	Subsidiary	Domestic	Cross-Border	Intra-Industry	Inter-Industry
Cash	54	2	28	24	48	6	16	38
Stock	4	3	0	1	3	1	3	1
Hybrid	0	0	0	0	0	0	0	0
Total	58	5	28	25	51	7	19	39

The distribution reveals that the cash financing method is the predominant choice in Turkish M&A. On the other hand, hybrid financing option is not included in the data sample. Despite the study's criteria, the presence of only one instance of the hybrid transaction method among all 3,699 acquisitions in Turkey from the initial dataset indicates that this method is not a popular choice in the country. The literature review in our study reveals that the stock financing method is the least favored option in the Netherlands, the US and Ireland, with corresponding percentages of 8.4%, 8.31%, 11.3% and 19.5% respectively (Klitzka et al., 2021; Swieringa and Schauten, 2007; Faccio and Masulis, 2005). Our study reveals that the use of the stock financing method in Turkish M&A is 6.90%, which is consistent with the existing literature.

Based on the results of the study's sample set, M&A demonstrate a distribution of 8.62%, 48.28%, and 43.10% for listed, private, and subsidiary companies respectively, based on the target public status. When the target company is publicly traded, the stock financing model is more preferred than the cash financing option. It is observed that in the case of target firms that are private or subsidiary companies, the cash method of payment is dominant over the share payment option. The allocation of deals, both domestic and international in the sample set of the study is 87.93% and 12.07%, respectively, based on the nation of the target company. Although the cash financing method appears to be dominant based on the nationality of the target company, the sample set includes transactions involving the stock payment method for both domestic and cross-border deals. The distribution of transactions within and outside the industry sector in the sample set of the study is 32.76% and 67.24%, respectively, based on the SIC Codes of the target company. According to this distribution, it can be stated that listed companies in Turkey mainly prefer non-sector target companies and follow a diagonal growth strategy in M&A.

4.2. The descriptive statistics

The descriptive statistics of the determining factors which are used as explanatory variables in the study classified by payment types, are presented in Table 2. Table 2 indicates that minimum, maximum, mean and standard deviation of the determining factors differ significantly depending on the financing types used, implying that the preference of financing type in Turkish M&A is influenced by the characteristics of the acquirer, the target and the deal. The definitions of the determining factors can be found in Appendix-A.

Based on the descriptive statistics, the average ownership structure of the board of directors *(MANOWN.A)* is 17.54% and 4.4%, respectively, according to cash and stock financing methods. Consistent with the prevailing trend in the current literature, our sample suggests that firms tend to prefer cash funding type over stock funding type if the management's ownership ratio is high. This indicates that the average ownership of individual and institutional investors *(INDHOLD.A and INSHOLD.A)* is similar for both cash and stock financing methods. Based on the average values, we observe that the cash positions of the acquiring companies are 40.59% and 15.64% for the share and cash method of payment, respectively, which contradicts the prevailing trend in the literature.

On the other hand, the descriptive statistics suggest that there is no significant variation in the means of the market book value *(M2B.A)* of the acquiring companies, the the collateral assets' net book value *(PPE2B.A)*, the total assets' book value *(ASSETS.A)*, and the financial leverage ratio regarding the payment method *(FINLEV.A)*.

Based on the descriptive statistics, the performance of acquiring companies that select the cash method of payment exceeds that of those that choose the share financing option in terms of 1-year share performance *(SRUNUP.A)* and the market (BIST-100 for Turkey) performance *(MRUNUP.A)* prior to the M&A announcement. This finding is inconsistent with the prevailing trend reported in the literature.

Based on the descriptive statistics, the average of the relative deal rate *(RSIZE.D)* is 38.62% in the share financing approach and 18.36% in the cash option. These observations align with the literature and suggest that as the relative agreement rate increases in the sample, acquiring companies are more likely to choose the share financing alternative.

The descriptive statistics indicate significant differences between cash and stock paying method in Turkish M&A, influenced by characteristics of the acquirer, target, and deal. Key observations include:

- Firms with higher managerial ownership prefer cash payments.
- Stock payments are more common with higher market valuation, larger total assets, and lower financial leverage.
- Cross-border and listed target deals are mostly using stock payments.
- Cash payments dominate when targets are private or subsidiaries.

Table 2. Descriptive Statistics

VARIABLES	CASH METHOD				STOCK METHOD				ALL SAMPLE			
	Min.	Max.	Mean	S.D.	Min.	Max.	Mean	S.D.	Min.	Max.	Mean	S.D.
Panel A: Acquirer Characteristics												
MANOWN.A(%)	0,0000	91,480	17,549	25,906	0,0000	17,600	4,4000	8,8000	0,0000	91,480	16,642	25,286
INDHOLD.A(%)	0,0000	28,600	2,2417	6,1439	0,0000	0,0000	0,0000	0,0000	0,0000	28,600	2,0871	5,9521
INSHOLD.A(%)	0,0000	46,180	10,241	13,557	0,0000	25,380	8,4025	11,964	0,0000	46,180	10,114	13,366
M2B.A	0,0535	2,7236	0,8206	0,6161	0,1308	2,3297	0,9697	1,0063	0,0535	2,7236	0,8309	0,6385
CASH.A	0,0001	0,9632	0,1564	0,2115	0,1464	0,9583	0,4059	0,3730	0,0001	0,9632	0,1736	0,2302
PPE2B.A	0,0002	0,9350	0,2316	0,2467	0,0000	0,3933	0,2802	0,1880	0,0000	0,9350	0,2350	0,2421
ASSETS.A	1,7749	10,233	6,2024	2,3655	5,4169	10,564	7,5944	2,5036	1,7749	10,564	6,2984	2,3789
FINLEV.A	0,0009	1,0665	0,4903	0,2769	0,0067	0,6226	0,3339	0,2831	0,0009	1,0665	0,4795	0,2777
SRUNUP.A(%)	-81,38	348,98	38,26	87,79	-24,10	100,63	19,39	55,45	-81,38	348,98	36,96	85,74
MRUNUP.A(%)	-22,33	56,06	8,76%	19,88	-16,58	25,37	2,90%	19,28	-22,33	56,06	8,36%	19,73
Panel B: Target & Deal Characteristics												
CROSSBOR.T	0	1	0,110	0,317	0	1	0,25	0,50	0	1	0,120	0,329
LISTED.T	0	1	0,040	0,191	0	1	0,75	0,50	0	1	0,090	0,283
SUBSIDIARY.T	0	1	0,440	0,502	0	1	0,25	0,50	0	1	0,430	0,500
INTRAIND.T	0	1	0,300	0,461	0	1	0,75	0,50	0	1	0,330	0,473
RSIZE.D	0,000	0,9353	0,1836	0,2258	0,0019	0,7778	0,3862	0,325	0,0001	0,9352	0,1976	0,2359

This table presents summary statistics for the variables of interest, categorized by payment method. All variables are defined in Appendix-A.

4.3. Methodology

In this study, we employ a backward stepwise logistic regression model to identify the explanatory variables that influence the financing model of Turkish M&A transactions. The dependent variable, Payment Method, is a binary variable categorizing data into two groups: cash or stock. When the dependent variable is dichotomous, binary logistic (logit) models are used to estimate the conditional probability structure of the dependent variable (Hosmer et al., 2013).

The logit model focuses on the probability (P) that the dependent variable will assume the value of 1, with values ranging between 0 and 1. In our model, cash payment option takes the value of 0, while stock payment option takes the value of 1. Unlike classical regression models, the logit model uses maximum likelihood estimation to identify coefficients, rather than ordinary least squares.

Logistic regression analysis offers greater flexibility compared to discriminant and multiple regression analyses. It does not necessitate specific assumptions about the distribution of independent variables, such as normality, linearity, and equality of variance-covariance matrices (Tabachnick and Fidell, 1996). This makes logistic regression particularly suitable for this study.

Given the exploratory nature of this research and the absence of a pre-existing model in the literature regarding the determining factors of M&A financing methods, we opt for the stepwise model technique over the standard (enter) model. Specifically, we choose backward selection methods over forward selection methods to avoid the exclusion of suppressor variables, which could lead to Type II errors (Field, 2005).

The criterion for including or excluding explanatory variables in the model is based on likelihood ratio statistics rather than Wald statistics, especially considering the small sample size. Thus, logistic regression analysis in this study is conducted using the Backward Likelihood Ratio method (Backward LR). All econometric analyses are performed using IBM SPSS 28.0.

5. FINDINGS

In the analysis, the primary objective is to test whether the interrelation between the dependent variable, defined as the payment method choice (cash or stock), and 15 independent variables derived from the literature is statistically significant. In other words, to investigate which determining factors should be included in the main analysis, each possible variable's coefficients are tested using univariate logistic regression analysis. The results of the univariate logistic regression analysis for all potential independent variables that could be related to the dependent variable, i.e., payment method, are presented in Table 3.

Table 3. Results of the Univariate Logistic Regression Analysis for Potential Variables

Variables	β	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
							Lower	Upper
MANOWN.A	-.039	.044	.782	1	.376	.962	.882	1.049
INDHOLD.A	-2.955	1197.899	.000	1	.998	.052	.000	.
INSHOLD.A	-.011	.042	.071	1	.790	.989	.910	1.074
M2B.A	.339	.750	.204	1	.651	1.403	.323	6.098
CASH.A	2.950	1.588	3.454	1	.063*	19.115	.851	429.328
PPE2B.A	.780	2.004	.151	1	.697	2.181	.043	110.850
ASSETS.A	.280	.255	1.211	1	.271	1.323	.803	2.180
FINLEV.A	-2.069	1.938	1.140	1	.286	.126	.003	5.638
SRUNUP.A	-.003	.007	.181	1	.671	.997	.983	1.011
MRUNUP.A	-.016	.028	.330	1	.566	.984	.930	1.040
CROSSBOR.T	.981	1.233	.633	1	.426	2.667	.238	29.901
LISTED.T	4.357	1.361	10.246	1	.001***	78.000	5.414	1123.714

SUBSIDIARY.T	-.875	1.187	.544	1	.461	.417	.041	4.265
INTRAIND.T	1.964	1.193	2.711	1	.100	7.125	.688	73.769
RSIZE.D	2.649	1.713	2.391	1	.122	14.140	.492	406.178

(***): significant (p < 0.01); (*): significant (p < 0.10)

Table 3 displays the outcomes of the univariate logistic regression model testing for relationships between payment method choice and its potential determinants. The significance of the explanatory variables is assessed using the Wald test statistic. Variables with a Wald test p-value less than 0.10, i.e. CASH.A and LISTED.T, are considered significant and are candidates for inclusion in the multiple logistic regression model. However, due to their marginal significance, we also consider INTRAIND.T and RSIZE.D. Consequently, the variables CASH.A, LISTED.T, INTRAIND.T, and RSIZE.D are identified as candidate variables for the next step, which is the multiple logistic regression model. We exclude variables with non-significant Wald test statistics from the analysis.

To mitigate the risk of multicollinearity among the independent variables identified for inclusion in the multivariate model, variance inflation factor (VIF) values are calculated and are presented in Table 4. The VIF values assess how much the variance of a regression coefficient is inflated due to multicollinearity with other independent variables. In the logit model, VIF values should ideally be below 5 to avoid multicollinearity. Since all calculated VIF values are below this threshold, it can be concluded that there is no problematic multicollinearity among the identified independent variables. This assures the reliability of including these variables in the subsequent multivariate logistic regression model without the risk of undue influence from multicollinearity.

Table 4. Testing for Multicollinearity

Variables	Tolerance	VIF
CASH.A	.779	1.284
LISTED.T	.783	1.277
INTRAIND.T	.957	1.045
RSIZE.D	.934	1.070

Based on the application of the backward LR elimination method using likelihood ratio test statistics in the multivariate logistic regression model, the study initially includes variables CASH.A, LISTED.T, INTRAIND.T, and RSIZE.D as shown Table 5. Through iterative steps of removing non-significant variables based on likelihood ratio tests, the process concludes after several steps. Ultimately, variables CASH.A, INTRAIND.T, and RSIZE.D are removed from the model due to their lack of significant contribution. In the fourth and final step, only LISTED.T remains statistically significant, indicating its meaningful relationship with payment method while considering other variables in the model. This methodological approach ensures that only the most relevant variables are retained, focusing the analysis on those factors most likely to affect the preference of payment structures in M&A.

In the analysis, a significant relationship is observed (p = .001) based on whether the target firm is publicly traded on the stock exchange (LISTED.T(1)). The baseline or reference category for the dependent variable is defined as the cash payment option (0: CASH). According to the results, the likelihood of choosing stock as the way of payment is 78 times higher when the target company is listed on the stock exchange compared to when it is not (95% confidence interval = 5.414 - 1123.714). This finding indicates that being a listed firm significantly increases the likelihood of selecting stock as the financing mechanism in M&A transactions compared to privately held companies. This result supports our hypothesis, H7, which posits that the listing status of a target firm plays a crucial role in determining the preferred payment method, favoring stock payments for publicly traded targets.

Table 5. Results of the Backward Logistic Regression Analysis

Steps		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1a	**CASH.A**	-4.128	4.885	.714	1	.398	.016	.000	232.025
	LISTED.T(1)	5.973	3.088	3.741	1	.053*	392.850	.923	167152.053
	INTRAIND.T(1)	2.869	2.598	1.219	1	.270	17.619	.108	2869.402
	RSIZE.D	1.636	3.886	.177	1	.674	5.136	.003	10425.216
	Constant	-5.497	2.154	6.514	1	.011**	.004		
Step 2a	**CASH.A**	-3.574	4.321	.684	1	.408	.028	.000	133.726
	LISTED.T(1)	5.967	2.963	4.056	1	.044**	390.390	1.173	129877.794
	INTRAIND.T(1)	3.087	2.613	1.396	1	.237	21.916	.131	3672.061
	Constant	-5.459	2.210	6.104	1	.013**	.004		
Step 3a	**LISTED.T(1)**	4.242	1.446	8.601	1	.003***	69.537	4.084	1184.113
	INTRAIND.T(1)	1.770	1.490	1.410	1	.235	5.868	.316	108.877
	Constant	-4.840	1.459	11.003	1	<.001***	.008		
Step 4a	**LISTED.T(1)**	4.357	1.361	10.246	1	.001***	78.000	5.414	1123.714
	Constant	-3.951	1.010	15.318	1	<.001***	.019		

a Variable(s) entered on step 1: CASH.A, LISTED.T, INTRAIND.T, RSIZE.D.
(***): significant (p < 0.01); (**): significant (p < 0.05); (*): significant (p < 0.10)

From the coefficients presented in the table, we can formulate the following equation for the logistic regression model:

$$log\frac{P(x)}{1-P(x)} = -3.951 + 4.357 \times LISTED.T(1)$$

In this equation:

- $\log\frac{P(x)}{1-P(x)}$ is the log-odds of choosing stock as the financing mechanism.
- P(x) is the probability of choosing stock as the transaction method
- LISTED.T(1) is a binary variable indicating whether the target company is publicly listed (1 if listed, 0 if not listed).

This equation shows that being publicly traded increases the log-odds of choosing stock as the method of payment by 4.357 units, holding all else constant.

Based on these results, it can be argued that the preference of payment method in Turkish companies listed on the stock exchange is influenced by easier access to their financial data and more straightforward calculation of their market values. Additionally, the liquidity of stock for publicly traded firms provides greater flexibility in financing options. The enhanced credibility and visibility of listed companies may also contribute to the preference for stock payments, as these companies are subject to regulatory oversight and stringent reporting requirements, thereby reducing the perceived risk for acquirers. Furthermore, the ability to use stock as a currency for acquisitions can preserve cash reserves for other strategic initiatives or operational needs.

The literature on the influence of a target company's listing status regarding the payment method choice in M&A shows a consistent trend. Faccio and Masulis (2005) and Swieringa and Schauten (2007) indicate that bidders for unlisted (private) targets are more inclined to utilize cash for payment, while those targeting listed (public) companies are more likely to opt for stock financing. For example, Faccio and Masulis (2005) discover that the proportion of cash transactions is notably inferior for public targets (60.0%) than for private targets (79.6%), indicating a clear preference for stock payments when dealing with public targets. Swieringa and Schauten (2007) report a similar pattern in Dutch companies, with 76.9% of cash deals involving public targets and 83.3% involving private targets.

However, these studies also suggest that while cash payments are less common for public targets, there is no conclusive evidence that publicly held targets are always preferred for stock payments. Instead, publicly held target deals often include more acquirer stock as part of the payment mechanism, as highlighted by de Bodt et al. (2021). This trend underscores the significant economic and statistical impact of a target's listing status on the financing mechanism chosen in mergers and acquisitions.

Comparing these findings with our study, we observe a similar pattern. Our analysis shows a strong statistical relationship between the listing status of the target firm and the preference of payment type. Specifically, our results indicate that the likelihood of choosing stock as the payment method is 78 times higher when the target company is publicly traded compared to when it is not. This aligns with the literature, reinforcing the notion that public targets are more inclined to participate in stock-backed transactions due to the greater transparency and ease of valuation of their market values. Thus, the listing status of a target company plays a vital role in determining the preference of financing in M&A deals, consistent with the broader empirical evidence.

In the binary logit model, referring to the classification table presented in Table 6 where only the intercept term is included, the correct classification rate is observed to be 93.1%. Upon implementing the backward elimination method in 4 steps, the correct classification rate of the logit model increased to 94.8% as shown in Table 7. This indicates that the backward elimination method, which systematically removes non-significant variables, enhances the model's accuracy by refining the set of explanatory variables.

Table 6. Classification Table-1

		Predicted METHOD		
	Observed METHOD	CASH	STOCK	Percentage Correct
Step 0	CASH	54	0	100.0
	STOCK	4	0	.0
	Overall Percentage			**93.1**

Table 7. Classification Table-2

		Predicted METHOD		
	Observed METHOD	CASH	STOCK	Percentage Correct
Step 4	CASH	52	2	96.3
	STOCK	1	3	75.0
	Overall Percentage			**94.8**

In this study, the explanatory power of the binary logit model is assessed using Cox & Snell and Nagelkerke R-squared values. These statistics, which typically tend to be very small in logit models, range between 0.193 and 0.490 as shown in Table 8, indicating that the multivariate model moderately explains the dependent variable (payment method). This range suggests that while the model captures a significant portion of the variability in payment method choice, there remains some unexplained variance, highlighting the complexity of factors influencing this decision in mergers and acquisitions.

Table 8. Explanatory Power of the Model

	Cox & Snell R Square	**Nagelkerke R Square**
Step 4	.193	.490

Table 9. The Hosmer-Lemeshow Test

	Chi-square	**df**	**Sig.**
Step 4	3.129	8	.926

The representation of the dataset by the model is evaluated using the Hosmer-Lemeshow test, which compares observed and expected values of the dependent variable. The obtained p-value (0.926) from this test indicates a good model fit ($p > 0.05$). This suggests that the binary logistic regression model is appropriate for explaining the relationship between the method of payment choice and the selected independent variables in the context of mergers and acquisitions.

6. CONCLUSION

This study investigates the determinants of payment method choices in M&A transactions involving listed firms on the Turkish stock market. Utilizing data from 58 M&A transactions sourced from the Eikon Refinitiv database for the period 2011–2020, the study adheres to strict selection criteria. The analysis focuses on two primary financing methods—cash and stock—excluding hybrid payments from the sample. Descriptive statistics reveal notable patterns across acquirer, target, and deal characteristics based on the payment method chosen. Cash payments dominate the sample, comprising 93.10% of transactions, with stock payments representing only 6.90%. This pronounced preference for cash highlights the conservative approach to M&A financing in the Turkish market.

The binary logistic regression analysis reveals key insights into the determinants of payment method selection in M&A transactions. The listing status of target firms plays a crucial role in determining the payment method in mergers and acquisitions. Listed targets often favor stock financing due to the transparency and ease of valuation, while private targets are more likely to be acquired through cash payments (Faccio & Masulis, 2005; Swieringa & Schauten, 2007). Although stock payments are common for public targets, they are often part of mixed financing strategies rather than the sole method of payment (de Bodt et al., 2021). These patterns underscore the significant impact of a target's listing status on M&A financing choices. Conversely, intra-industry transactions and deal size relative to acquirer size do not show significant associations with payment method choice after controlling for other variables.

This study contributes to the existing literature by providing insights specific to the Turkish M&A market, shedding light on the complex decision-making processes underpinning financing strategies. The findings emphasize the critical influence of target firm characteristics, particularly listing status, on payment method preferences. The widespread use of cash payments reflects a cautious approach to risk management and a focus on maintaining financial stability among Turkish acquirers. Conversely, the strategic deployment of equity payments in transactions involving listed targets underscores the potential of equity markets to drive growth and create value, offering valuable implications for M&A practitioners and policymakers.

For companies, the study highlights the importance of considering the characteristics of the target company, such as its listed status, when determining payment terms. Companies should use the equity markets strategically to finance acquisitions of listed companies and align their financing strategies with the long-term goals of corporate management. For investors, the preference for cash payments indicates a conservative approach to risk management. Investors should assess the impact of payment terms on valuation and future performance and understand the strategic use of equity payments in transactions with listed targets to make informed investment decisions. For policy makers, the study highlights the need for greater transparency and access to comprehensive M&A data. The introduction of regulations requiring detailed disclosure of transaction characteristics and financing methods would increase market efficiency and support empirical research, contributing to a more robust and competitive market in Turkey.

Despite the challenges in obtaining complete data from companies in Turkey, which results in a reduced number of samples, the selected criteria are critical for achieving the research objectives and enabling international comparisons. This limitation highlights the difficulty in accessing comprehensive and detailed information, which may affect the generalizability of the findings. The reduced sample size, while meeting stringent selection criteria, may not fully capture the diversity and complexity of M&A transactions in Turkey. Furthermore, the absence of hybrid payment methods in the sample restricts the scope of analysis to cash and stock payments only. Future studies should aim to overcome these data limitations by expanding the dataset to include a broader range of transactions and incorporating more detailed information on deal characteristics. This would enhance the robustness of the findings and allow for a more comprehensive understanding of M&A financing strategies in emerging markets. Future research could also expand the sample size and include private acquirers to explore broader market dynamics. Additionally, investigating the impact of

macroeconomic factors and regulatory changes on payment method choice would provide further insights into M&A decision-making processes.

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APPENDIX – A: Variable Definition

Variable	Definition	Data Source
Panel A: Acquirer Characteristics		
MANOWN.A	Percentage of managerial ownership of the acquirer is measured by the fraction of shareholding of executive board members reported just prior to the M&A transaction date. These ownership ratios are collected just prior to the announcement of M&A deals, aligning with previous research (Amihud et al. 1990; Martin, 1996; Zhang et al., 2003).	Public Disclosure Platform (KAP), Annual Reports, Financial Statements and Footnotes
INDHOLD.A	Percentage of non-management individual block owners is measured by the proportion of ownership held by individuals, constituting at least 5% of the total ownership reported just prior to the M&A transaction date (Martin, 1996).	Public Disclosure Platform (KAP), Annual Reports, Financial Statements and Footnotes
INSHOLD.A	Percentage of institutional block owners at least 5% of total ownership within the ownership structure of acquirer as reported just prior to the M&A transaction date (Martin, 1996).	Public Disclosure Platform (KAP), Annual Reports, Financial Statements and Footnotes
M2B.A	The market-to-book ratio of the acquirer is calculated by dividing the market capitalization (common shares multiplied by stock price) by total assets at the end of the fiscal year before the M&A effective date (Klitzka et al., 2021; Martin, 1996; Zhang et al., 2003; Faccio and Masulis, 2005; Swieringa and Schauten, 2007; de Bodt et al., 2021).	EIKON Refinitiv
CASH.A	The acquirer's ratio of cash holdings is calculated as the sum of cash and marketable securities divided by total assets at the end of the fiscal year prior to the M&A effective date (de Bodt et al., 2021; Ismail and Krause, 2010; Martin, 1996).	EIKON Refinitiv
PPE2B.A	The collateral ratio of the acquirer is calculated by dividing the net property, plant, and equipment (PPE) by total assets at the end of the fiscal year prior to the M&A effective date (Klitzka et al., 2021; de Bodt, Cousin & Officer, 2021; Ismail & Krause, 2010; Swieringa & Schauten, 2007; Faccio & Masulis, 2005).	EIKON Refinitiv
ASSETS.A	The degree of the acquirer's total assets is measured as the natural logarithm of total assets at the end of the fiscal year prior to the M&A effective date (Klitzka et al., 2021; de Bodt, Cousin & Officer, 2021; Ismail & Krause, 2010; Swieringa & Schauten, 2007; Faccio & Masulis, 2005).	EIKON Refinitiv

FINLEV.A	The ratio of acquirers' indebtedness is measured as the total liabilities divided by total assets at the end of the fiscal year before the effective date of the M&A (Klitzka et al., 2021; Ismail and Krause, 2010; Faccio and Masulis , 2005; Swieringa and Schauten , 2007).	EIKON Refinitiv
SRUNUP.A	The percentage of stock performance is measured using stock price run-up, which is calculated from the cumulative buy-and-hold stock price return of the acquirer during the year before the M&A announcement month (Faccio and Masulis, 2005).	EIKON Refinitiv
MRUNUP.A	The stock market performance percentage is measured by the stock market run-up, which is calculated as the cumulative return of the stock price index in the acquirer's country for the year prior to the M&A announcement month. In the case of Turkey, the main stock price index is the BIST 100 (XU100) index (Faccio and Masulis, 2005; Swieringa and Schauten, 2007).	EIKON Refinitiv
Panel B: Target & Deal Characteristics		
LISTED.T	The dummy variable for listed targets is equal to 1 if the target is listed on any stock exchange, and 0 if the target is not listed (de Bodt et al., 2021; Swieringa and Schauten, 2007; Faccio and Masulis, 2005).	EIKON Refinitiv
SUBSIDARY.T	The dummy variable for subsidiary targets is equal 1 if the target is a subsidiary and 0 otherwise (de Bodt et al., 2021; Swieringa and Schauten, 2007; Faccio and Masulis, 2005).	EIKON Refinitiv
INTRAIND.T	The dummy variable for intra industry deals is equal to 1 if the target operates in the same industry with acquirer. and 0 if they do not operate in the same industry when the primary 3-digits SIC (Standard Industrial Classification) codes coincide (de Bodt et al., 2021; Swieringa and Schauten, 2007; Faccio and Masulis, 2005).	EIKON Refinitiv
CROSSBR.T	The dummy variable for cross border deals is equal to 1 if the target operates in abroad, and 0 if the target operates in Turkey (de Bodt et al., 2021; Swieringa and Schauten, 2007; Faccio and Masulis, 2005).	EIKON Refinitiv
RSIZE.D	The ratio of relative deal size is calculated by dividing the deal value by the sum of the deal value and the market capitalization (common shares multiplied by stock price) of the acquirer at the end of the fiscal year before the effective date of the M&A (Martin, 1996; Ghosh and Ruland, 1998; Swieringa and Schauten, 2007; Faccio and Masulis, 2005).	EIKON Refinitiv