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METHOD OF PAYMENT AND ACQUIRER SHAREHOLDER WEALTH MAXIMIZATION IN MERGERS AND ACQUISITIONS: A REVIEW OF LITERATURE

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ABSTRACT

This paper aims to review existing literature to study the relationship between the method of payment and the acquirer firm's shareholder wealth in mergers and acquisitions (M&A). The literature review is carried out in two areas: (1) payment methods offered to the target firm based on the acquirer firm's internal factors, and (2) the impact of different payment methods on shareholder wealth during the announcement period. The paper is focused on providing suggestions for future studies on the payment methods, specifically on the mixed payment method. This paper is the first attempt to critique extant literature, beginning with selecting the payment method and ending with how it would affect the acquirer firm's shareholder wealth. Since this is a review paper and not subject to empirical study, it could be directed for future research to investigate the impact of the cash-to-stock ratio in the mixed method of payment offer on the wealth of the shareholders of the acquirer firm.

Keywords: Mergers and acquisitions, mixed method of payment, cash-to-stock ratio, internal factor.

INTRODUCTION

Maximising shareholder wealth is a fundamental idea in corporate finance serving as the guiding principle that defines a firm's position in the global marketplace. As a result, mergers and acquisitions (M&A) have emerged as a strategy for companies aiming to optimise shareholder value (Welch et al., 2020; Xie et al., 2017; Caiazza & Pozzolo, 2016; DePamphilis, 2015; Damodaran, 2001). Mergers &

Acquisition are considered one of the most prevalent kinds of business transformation in modern history, having emerged in the 1980s as an expansion strategy. M&A are often cited as a strategy to survive in a more competitive corporate landscape (Tarba et al., 2019; Li, 2016; Aytac & Kaya, 2016). Global M&A shows an upward trend reaching a zenith in 2021 (Bloomberg, 2022; Lu, 2021; McKinsey & Company, 2020). In 2021, the global number of announced transactions surpassed 62,000, reflecting a remarkable 24% increase from 2020, with publicly disclosed deal values reaching a historic peak of USD 5.1 trillion (Bloomberg, 2022). This total included 130 transactions valued over USD 5 billion, marking a 57% rise from 2020 and exceeding the previous record of USD 4.2 trillion established in 2007 (PricewaterhouseCoopers [PwC], 2022; Institute of Mergers, Acquisitions and Alliances [IMAA], 2020). While the reported values indicate an ever-increasing trend of M&A, there are various reasons for a firm to make M&A. The primary objective is to elevate stock prices and so optimise shareholder value (Alsharif, 2023; Caiazza & Pozzolo, 2016; Li, 2016; Rompotis, 2015).

A firm's engagement in M&A and its impact on the performance of the firm's stock price has garnered academic attention. As a result, there are academic publications addressing M&A and the maximisation of shareholder value. Academics investigate the correlation between mergers and acquisitions and shareholder wealth. Shareholders are apprehensive over the effect of the M&A decision on the stock price (Alsharif, 2023; Li, 2016; Juma et al., 2012). This leads to a dispute among academics over the impact of mergers and acquisitions on shareholder wealth, including both acquiring and target businesses in the deals (Ahmed et al., 2022; Dessaint et al., 2019; Rompotis, 2015; Rahim & Pok, 2013; Oladipupo & Okafur, 2011).

The ability of M&A to enhance shareholder wealth has been studied in terms of short-term and long-term impacts on stock price fluctuations. In the long run, however, stock price movements are fluctuated by confounding effects, i.e., events in the firm other than the M&A itself. This would lead to noise mixing, where the movement of the firm's stock price after the M&A events cannot be solely attributed to the M&A transaction alone but may also be effected by other additional factors (Alsharif, 2023; Boateng & Gregory, 2011; Ross et al., 2010; Caves, 1989). Consequently, researchers concentrate primarily on the immediate consequences of M&A on stock price performance. The short-term stock price performance of M&A firms is more reliable in terms of the impact of M&A on shareholders' wealth (Gigante et al., 2023; Brealy et al., 2014; Ross et al., 2010; Healy et al., 1992).

A plausible rationale for the emphasis on mergers and acquisitions and their immediate effect on stock price fluctuations is that each M&A news provokes a response from shareholders. The information disseminated in the stock market provides signals to shareholders, which may be interpreted as either favourable or unfavourable at the moment the news is released (Gigante et al., 2023; Mehrotra & Sahay, 2018; Andriosopoulos et al., 2016; Pevzner et al., 2015; Rompotis, 2015). Consequently, shareholders will respond to the signal, with a favourable signal eliciting a positive reply. This favourable response results in a rise in the stock price, so providing shareholders with enhanced profits. If shareholders see the news as unfavourable and respond negatively, the stock price will decline, leading to negative returns (Tseng & Chen, 2023; Giannopoulos et al., 2017; Caiazza & Pozzolo, 2016; Boone et al., 2014). The payment mechanism proposed during M&A announcements is a vital detail for shareholders, as shown in the information provided to the stock market (Tseng & Chen, 2023; Teti et al., 2022; Gigante et al., 2023; Rompotis, 2015; Megginson & Smart, 2009). The communicated information regarding the payment method for the M&A is a crucial factor in maximising shareholder wealth, as the stock market perceives the payment method as either a favourable or unfavourable signal, responding accordingly to the conveyed message (Gigante et al., 2023; Eckbo et al., 2018; Ibrahim & Raji, 2018; Caiazza & Pozzolo, 2016).

Considering the significance of the payment mechanism on the stock price performance of acquiring and target enterprises, a study of relevant literature has been emphasised. Previous empirical research reveals three primary conclusions. Primarily, the majority of research indicate that the returns to shareholders of target firms are both favourable and statistically significant, irrespective of the payment mechanism used by the acquirer (Klitzka et al., 2022; Boone et al., 2014; Weitzel & Kling, 2013; Rahim & Pok, 2013; Bi & Gregory, 2011). The impact of the payment mechanism on the acquirer's shareholder returns seems to vary based on the specific form of payment provided to the target business. The primary findings indicate that shareholders of the acquiring business get a superior return when the acquisition is conducted via an all-cash payment to the target firm. The all-cash approach served as a favourable indicator to the stock market, prompting shareholders to react favourably to the announcement and achieve a positive abnormal return (AR) throughout the announcement period (Gigante et al., 2023; Giannopoulos et al., 2017; Chen et al., 2011; Sudarsanam & Sorwar, 2010; Sudarsanam, 2010). The all-stock approach sent a detrimental message and elicited a negative response from shareholders. Consequently, the shareholders of the acquirer experienced a negative abnormal return (Gigante et al., 2023; Ang et al., 2019; Golubov et al., 2015; Fu et al., 2013; Chen et al., 2011). Third, academics have examined studies on blended payment methods, namely a mixture of cash and stock offers. Their examination of the mixed payment technique centres on comparing it to all-cash and all-stock systems, since their primary emphasis is on determining which approach yields superior returns to shareholders. The findings demonstrate that the all-cash payment technique yields the greatest acquisition return for the shareholders of the acquirer. This is followed by the mixed technique and the all-stock method (Harford & Uysal, 2014; Boone et al., 2014; Uysal, 2011; Savour & Lu, 2009; Faccio et al., 2006).

However, one element of the mixed method of payment offer is that the acquirer firm comes with a combination package that specifies the cash-to-stock ratio that will be provided to the target (Teti et al., 2022; DePamphilis, 2015; Ben-Amar & Andre, 2009). In contrast to all-cash and all-stock offers, the hybrid payment technique provides considerable flexibility in establishing the cash-to-stock ratio presented to the target company. The cash-to-stock ratio constitutes a distinct payment category, differing from both all-cash and all-stock payment methods (Boone et al., 2014; Bruslerie, 2013). This study synthesises existing research and is structured as follows: Section 2 examines previous studies concerning payment methods, internal variables of the acquiring business, and the wealth of acquirer shareholders. Section 3 addresses the research gap, whereas Section 4 encapsulates the study.

LITERATURE REVIEW

M&A are considered successful investments if they result in an increase in wealth for both the acquirer firm's and the target firm's shareholders. Consequently, the method of payment chosen by the acquirer firm has a significant impact on the success of the M&A. Therefore, the payment mechanism used by the acquiring business substantially influences the success of the merger and acquisition. The payment mechanism is seen as a transaction feature that may influence announced returns and shareholders' wealth either favourably or adversely (Tseng & Chen, 2023; Teti et al., 2022; Caiazza & Pozzolo, 2016; Rompotis, 2015; Karampatsas et al., 2014). Despite the substantial growth in M&A activity in recent decades, several research on payment methods rely on limited samples, rendering them less helpful and inconclusive when the payment method is specified. Furthermore, research on payment methods often contrasts all-cash versus all-stock deals in mergers and acquisitions (Boone et al., 2014; Harford & Uysal, 2014; Uysal, 2011; Savour & Lu, 2009). A substantial corpus of literature indicates that research mostly focus on comparing various payment methods in mergers and acquisitions (M&A).

Cash as a Method of Payment

Cash payment is regarded as the standard technique for acquiring the target business, since it ensures clarity on the transaction value when the acquiring firm chooses this payment method. Cash transactions are usually applied for acquisition and not a merger, unless the merger transaction uses a mixed method of payment that includes a portion of the cash component. It is the acquisition of all or part of the target's stock when the acquirer firm makes a cash offer for M&A (Brahma et al., 2023; Gitman & Zutter, 2015; Dutta et al., 2013; Gaughan, 2011; Sudarsanam & Sorwar, 2010). In a cash transaction, the acquiring company compensates the target company with a predetermined sum of cash for each share. The shareholders of the target business get cash and relinquish their ownership stake in the merged entity, while the acquiring firm assumes complete management of the new organisation (Ahmed et al., 2022; Noryati Ahmad et al., 2018; Caiazza & Pozzolo, 2016; Gitman & Zutter, 2015; Breal et al., 2014).

Stock as a Method of Payment

This payment technique involves a stock-swap in which the acquirer firm issues new stocks and exchanges them with the target firm at an agreed-upon ratio in proportion to the value of the target firm (Eckbo et al., 2018; Andriosopolous et al., 2016; Rompotis, 2015). Prior to issuing new shares, acquiring corporations evaluate the true worth of the target company to ascertain the exchange ratio. Additionally, the acquiring business establishes the highest price it is prepared to offer, whilst the target firm affirms the minimum price it is ready to accept (Klitzka et al., 2022; Elrazaz et al., 2021; Berk & DeMarzo, 2014; Gaughan, 2011; DePamphilis, 2010). In this case, the target firm's shareholders retain proportional control over the new firm. Thus, the target firm's shareholders share the risk and rewards associated with the newly merged firm, as the acquirer's shareholders are obligated to share future profits with the target firm's shareholders (de Bodt et al., 2022; Cho & Ahn, 2017; Rompotis, 2015; Gitman & Zutter, 2015; Berk & DeMarzo, 2014; Bruslerie, 2013).

Combination of Cash and Stock as a Method of Payment

Due to information asymmetries, the attitudes of both acquirer and target firms towards risk sharing or risk distribution are explained. As a result, the method of payment is diversified by combining cash and stock offers, which is called a mixed method of payment. In the mixed method of payment, both cash and stock (usually through a stock swap) are combined (Teti et al., 2022; Scheuering, 2015; Betton et al., 2008; Shleifer & Vishny, 2003). Indeed, the number of mixed method of payment offerings tripled between the late 1990s and 2015 (Scheuering, 2015; and Boone et al., 2014). Furthermore, Boone et al. (2014) observe that several substantial M&A deals are often funded using a combination of payment methods. This approach is more appealing to the target firm's shareholders, who prioritise liquidity and want to benefit from the acquiring firm's stock price appreciation. This contrasts with the all-cash approach, which attracts shareholders prioritising cash liquidity, and the all-stock approach, which appeals to target shareholders who wish to defer tax obligations and consider the acquirer's stock more appealing (Todtenhaupt et al., 2020; Boone et al., 2014; DePamphilis, 2010; Saviour & Lu, 2009; Megginson & Smart, 2009).

The mixed method of payment is distinctive relative compared to other methods of payment because of the cash-to-stock ratio offered. Therefore, this method provides the target firm's shareholders with multiple options in the ratio of cash-to-stock. The multiple-option offer method increases ambiguity in ascertaining the total cash the acquiring business would finally disburse to the target firm's shareholders. Consequently, acquiring corporations mitigate this concern by including a proration provision in the

merger agreements, enabling them to ascertain in advance the total financial disbursement required. This provision permits the acquiring business to disburse a certain proportion of the acquisition price in cash, with the balance allocated in shares to all shareholders of the target firm who submit their shares (de Bodt et al., 2022; Cho & Ahn, 2017; DePamphilis, 2015; Boone et al., 2011; Ben-Amar & Andre, 2009).

Furthermore, the combination of cash-to-stock ratios in a mixed method of payment system is significant. The cash-to-stock ratio offer is necessary for acquirer firms because it provides an inside look into how they evaluate their stocks and also their ability to unlock value through M&A. A study from Scheuering (2015) and Bruslerie (2013) supports that an extremely high cash-to-stock ratio leads to an inefficient mixed method of payment, and shareholders may question why acquirer firms choose to offer a small percentage of cash or stock instead of an all-cash or all-stock offer. This underscores the importance of the effective ratio of cash-to-stock in the mixed method of payment offers.

This article subsequently compiled prior research on payment method offerings and their impact on the profits of acquirer shareholders. Table 1 below summarises results and findings of empirical evidence from the existing literatures on method of payment.

Table 1

The Summary of Empirical Studies on Method of Payment Offer and Shareholders' Returns in M&A

Author (s)	Country	Sample Size	Method of Payment Offer and Shareholders' Returns (%)			Findings
			All-Cash	Mixed*	All-Stock	
Wansley et al. (1987)	US	64 all-cash 118 all-stock	+6.17**	na	-1.51	Studies in 1980s shows an evidence that all-cash method offers generated a higher returns than all-stock method.
Franks et al. (1987)	US	392 all-cash 127 all-stock	+3.60*	na	1.80**	
Travlos (1987)	US	60 all-cash 100 all-stock	+0.13*	na	1.60	
Franks et al. (1988)	US & UK	US				However, these studies did not tested on mixed method offers.
		127 all-cash 392 all-stock	-1.60	na	-1.8**	
		UK 221 all-cash 207 all-stock	+1.75**	na	-9.40*	

(continued)

Author (s)	Country	Sample Size	Method of Payment Offer and Shareholders' Returns (%)			Findings
			All-Cash	Mixed*	All-Stock	
Harris et al. (1991)	US	156 all-cash 128 all-stock 114 mixed	+0.83	-1.18	-3.15***	Studies in 1990s shows the presence of a sample of the mixed method of payment in their comparative analysis. It suggests that the acquirer firm's stock price performs better than the all-stock offer for a mixed method of payment. However, the results for mixed method are statistically insignificant.
Bellamy & Lewin (1992)	Australia	210 acquirers 120 targets	+0.84	na	+0.45	
Loughran & Vijh (1997)	US	405 all-cash 314 all-stock 228 mixed	+18.50	-9.60	-24.2***	
Gregory (1997)	US	333 all-cash 84 all-stock 35 mixed	-9.18**	-4.17	-19.23***	
Chang (1998)	US	Public target 154 all-cash 101 all-stock Private target 150 all-cash 131 all-stock	-0.02	na	-2.46***	
			+0.09	na	+2.46***	
Datta et al. (2001)	US	337 all-cash 1382 mixed	+0.52***	-0.10	na	Empirical evidence on studies during 2000s shows a consistent results. The mixed method of payment offers had a positive impact on acquirer firms' shareholders returns. However, analysis are still conducted on comparing all three methods of payment.
Linn & Switzer (2001)	US	152 all-cash 211 all-stock 50 mixed	+3.14***	+2.03	+0.77	
Moeller et al. (2004)	US	2958 all-cash 4862 all-stock 4203 mixed	+1.38***	+1.45***	+0.15***	
Goergen & Renneboog (2004)	Europe	33 all-cash 86 all-stock 23 mixed	+0.90*	+0.22	+2.57***	
Conn et al. (2005)	UK	2273 all-cash 1958 mixed	+0.53***	+0.63***	Na	
Dong et al. (2006)	US	34 all-cash 92 all-stock 56 mixed	+0.87	+2.10***	+3.86**	

(continued)

Author (s)	Country	Sample Size	Method of Payment Offer and Shareholders' Returns (%)			Findings
			All-Cash	Mixed*	All-Stock	
Faccio et al. (2006)	Europe	Public targets: 189 all-cash 436 all-stock 110 mixed Private targets: 201 all-cash 2876 all-stock 617 mixed	+0.30	-0.66	-1.81**	
Uysal (2011)	US	3735 all-cash 3516 all-stock 563 mixed	+0.017***	+0.014***	+0.008**	Empirical studies from 2010 includes the mixed method of payment as their sample for analysis. The results are statistically significant. Nevertheless, the pattern of analyses are still based on comparing all three methods and the findings are more to which method produce a better return for acquirer firms' shareholders. However, Boone et al. (2014) in their study highlighted a key finding that the mixed method is unique and should be considered as a separate
Boone et al. (2014)	US	904 all-cash 1185 all-stock 501 mixed	+0.330***	+0.223***	+0.183***	
Harford & Uysal (2014)	US	29206 all-cash 36123 all-stock 3833 mixed	+0.015***	+0.013***	+0.007***	
Ben-David et al. (2014)	US	2886 all-cash 4535 all-stock 825 mixed	-3.49	na	-4.86	
Miroslav Mateev (2017)	UK & Europe	UK 399 all-cash 107 all-stock 256 mixed Europe 510 all-cash 257 all-stock 193 mixed	+0.89**	+1.94***	-0.03	
Song et al. (2017)	China	168 all-cash 45-all stock	+1.09***	+0.87***	1.46	
			+0.012***	na	+0.02	

(continued)

Author (s)	Country	Sample Size	Method of Payment Offer and Shareholders' Returns (%)			Findings
			All-Cash	Mixed*	All-Stock	
Giannopoulos et al. (2017)	US	214 all-cash 138 all stock	+0.55***	na	-2.47***	payment category. This method comes with variety of cash-to-stock ratio.
Yang et al. (2019)	China	3285 all-cash 508 all-stock 203 mixed	+0.86**	0.88*	+11.67***	

Note. *Mixed represents the mixed method of payment.

***/**/* represent the level of significance at 1%/5%/10%.

Acquirer's Firm Internal Factor and Method of Payment

In the previous literature, special attention has been paid to the choice of method of payment in M&A (Tseng & Chen, 2023; Ahmed & Elshandidy, 2021; Almeida et al., 2011; Faccio & Masulis, 2005; Ghosh & Ruland, 1998). Acquirer firms benefit from asymmetric information because they can offer their preferred method of payment to target firms (Wnuczak & Osiichuk, 2024; Ang et al., 2019; Rhodes-Kropf & Viswanathan, 2004; Shleifer & Vishny, 2003; Linn & Switzer, 2001). In deciding which method of payment to offer, some factors internal to the acquirer's firm were highlighted. These internal firm factors are related to (1) the acquirer's stock value, (2) free cash flow, and (3) the gearing level (debt-to-equity ratio) (Klitzka et al., 2022; Yang et al., 2019; Rompotis, 2015; Kostic, 2013; Bi & Gregory, 2011).

i. Acquirer's Stock Value

The primary element is the acquirer's equity valuation. In a stock market boom, acquiring corporations safeguard the interests of their shareholders. Consequently, they exploit their inflated stock valuations by using stocks as a payment mechanism in mergers and acquisitions (Meglio et al., 2023; Klitzka et al., 2022; Shiller, 2015; Doukas & Zhang, 2015; Polemis & Paleologos, 2014). Consequently, a stock offer is more probable to be used as a payment technique rather than a cash offer when the acquiring firm's stock is overvalued. This phenomena may be elucidated further via the lens of overvaluation theory (Yang et al., 2019; Fuad & Gaur, 2019; Amel-Zadeh et al., 2016; Gao, 2011; Shibata & Tian, 2010).

Overvaluation Theory

Overvaluation theory states that merger activity increases in response to spikes in stock markets that cause acquirer firms to offer their overvalued stock as a method of payment. The managers of acquirer firms are aware of the inefficiencies of the stock market and exploit them to some extent through merger decisions. They are also motivated by a desire to protect the interests of their shareholders and a healthy dose of market optimism. Therefore, stock offerings are attractive due to the high valuation of the acquirer firm's stocks as a result of the stock market boom (Yang et al., 2019; Botsari & Meeks, 2018; Andriosopoulos et al., 2016; Doukas & Zhang 2015; Shiller, 2015). This scenario is also referred to as market timing, which states that the acquirer firm issues stocks to take advantage of current high stock values (Klitzka et al., 2022; Polemis & Paleologos, 2014; Ross et al., 2010; Pike & Neale, 2006; Ang & Cheng, 2006).

Furthermore, the M&A surge is propelled by mispricing or misvaluation in equity markets, hence enhancing the motivation for acquiring corporations to pursue mergers and acquisitions. Market mispricing arises when there exists an information gap between management and shareholders over the intrinsic worth of a business. Studies indicate a favourable association between mergers and acquisitions (M&A) waves and stock price changes that align with periods of elevated valuations (Fuad & Gaur, 2019; Amel-Zadeh et al., 2016; Vermaelen & Xu, 2014; Giuli, 2013; Shibata & Tian, 2010). If the management of the acquiring business perceives its stocks as cheap, they are less inclined to propose a stock offer, preferring a cash offer instead (Eckbo et al., 2018; Rompotis, 2015; Breal et al., 2014; Boone et al., 2014).

ii. Acquirer's Free Cash Flow

The second factor is the acquirer's free cash flow. Free cash flow is cash flow in excess of that required to finance a firm's projects with a positive net present value when discounted at the applicable cost of capital. Acquirer firms could use available free cash flow to grow the firm beyond its current size and maximise shareholder wealth (Murdock et al., 2022; Yang et al., 2019; Rompotis, 2015; Changqi & Ningling, 2010; Martynova et al., 2007). Moreover, free cash flow attempt to explain M&A activity, all of which are relevant in a way to the many forces that motivate M&A activity (Erel et al., 2021; Oler, 2008; Harford, 1999). When the acquiring firm's own resources are inadequate for investment, its free cash flow might serve as a significant source of capital. The availability of free cash flow dictates the payment mechanism presented to shareholders of the target organisation. ent offered to target firm shareholders.

In selecting a payment mechanism for mergers and acquisitions, acquiring organisations will evaluate the financial ramifications for their enterprises. Utilising cash for M&A financing may impact the acquirer's liquidity ratio, with repercussions intensifying as cash reserves deplete. Consequently, free cash flow provides managers with more latitude in resource allocation, which often does not align with shareholder interests (Wang et al., 2021; Hwang et al., 2020; Rompotis, 2015; Changqi & Ningling, 2010; Sudarsanam, 2003). Consequently, the utilisation of free cash flow by management may result in a confrontation with shareholders about its allocation. Shareholders like managers that increase dividends or repurchase shares instead of allocating funds to low-return ventures. Jensen (1986) notes that management of acquiring corporations allocate capital to mergers and acquisitions instead of dispersing it to shareholders. Jensen's free cash flow theory forecasts managerial tendencies to allocate surplus capital towards suboptimal projects. Low-return investments are prevalent in sectors characterised by substantial cash flows necessitating departures. This prediction applies when managers want to broaden the range of assets they oversee.

Myers and Majluf (1988) provide a counterargument to Jensen (1986). They underscore the significance of utilising free cash flow to enhance cash and debt capacity instead of squandering it on initiatives that diminish value. These two recognised theories concentrate on cash distribution and may be used to rationalise the utilisation of cash offers as a payment technique for certain acquiring organisations.

Free Cash Flow Theory

Free cash flow theory posits that business managers are prone to squander resources on inefficient initiatives in exchange for more autonomy in cash flow management. The theory posits that firms led by wealth-oriented managers, yet constrained by investment opportunities, will opt to allocate surplus cash flow towards investments instead of distributing it to shareholders via elevated dividends or stock

buybacks (Wang et al., 2021; Hwang et al., 2020; Changqi & Ningling, 2010). Research indicates that companies with surplus cash flow are more prone to engage in detrimental acquisitions (Yang et al., 2019; Schlingemann, 2004; Brealy et al., 2004; Weaver, 2001; Harford, 1999).

Both Jensen's free cash flow and the Myers-Majluf theories attempt to explain the acquirer's decision to make a cash offer as a method of payment for the target firm. According to Jensen's theory (1986, 1988), firms with excess cash flow tend to waste it on perquisites (ancillary income) or unprofitable investments. These firms are assumed to place a higher value on premiums and firm size than on the benefits derived from paying excess cash flow to shareholders. Furthermore, Jensen contends that diminishing these discretionary income flows might mitigate this extravagant expenditure. Furthermore, he endorses the agency cost associated with free cash flow (Yang et al., 2019; Schlingemann, 2004; Harford, 1999; Lang et al., 1991), reinforcing the thesis by demonstrating that a significant portion of a firm's free cash flow is allocated to value-eroding mergers and acquisitions. Consequently, cash purchases deplete surplus capital, redirect resources from internal investments, or result in indebtedness for the acquiring organisation. This results in two consequences: (1) the effect of the purchase, which may be either beneficial or detrimental, and (2) the effect of distributing cash to shareholders instead of reallocating them for reinvestment.

Myers and Majluf (1988) provide an alternative perspective on the free cash flow hypothesis. They assert that some companies with surplus cash use it to augment their cash and loan capacity, a phenomenon termed "financial slack" (Gao & Mohamed, 2018; McCabe & Yook, 1997). Myers-Majluf (1984) asserted that a financially constrained corporation might gain advantages by selling shares directly to investors. The Myers-Majluf model is predicated on the elevated costs of stock issuance resulting from the knowledge asymmetry between management and investors that validates a new stock offering. Consequently, acquiring corporations often finance acquisitions via free cash flow instead of procuring fresh money or issuing more stock, which incurs greater expenses (Yang et al., 2019; Schlingemann, 2004; Brealy et al., 2004; Damodaran, 2001).

iii. Acquirer's Gearing Level

The third factor is the acquirer's gearing level. The acquirer firm's decision on the method of payment could well be influenced by its capital structure. This is because the method of payment could be determined by considering the capital structure in line with the acquirer firm's financial debt (Harmono et al., 2023; Eckbo et al., 2018; Li, 2016; Bruslerie, 2013; Uysal, 2011). Consequently, the ratio of debt to equity in the capital structure determines the appropriate debt-to-equity ratio, known as the gearing ratio. Thus, acquiring businesses will assess their financial position within their capital structure when determining the payment mechanism to propose to their target firms in mergers and acquisitions (Eckbo et al., 2018; Li, 2016; Vermaelen & Xu, 2014; Uysal, 2011; Eckbo, 2010).

The target capital structure is determined by weighing the costs and benefits of debt financing. Consequently, the inclination to recalibrate capital structures is more pronounced for overleveraged companies when selecting a payment mechanism for their target enterprises. Overleveraged acquirers often mitigate their leverage shortfall by using stock offerings as a payment option to approach their ideal capital structure. Consequently, acquirer businesses exhibiting leverage beyond the ideal level are more inclined to use stock financing, thus opting for a stock offer as a payment mechanism (Daher & Ismail, 2018; Vermaelen & Xu, 2014; Karampatsas et al., 2014; Uysal, 2011; Faccio & Masulis, 2005).

Besides that, acquirers with higher gearing may experience more complications in obtaining funds to pay the M&A via cash. When the acquirer firm has a high gearing ratio, the issue of a loan for a cash offer in M&A is less attractive than a stock offer. Moreover, the issue of a loan or drawing on the firm's credit lines may cause the acquirer to breach loan covenants stipulating a maximum gearing level (Harmono et al., 2023; Eckbo et al., 2018; Caiazza & Pozzolo, 2016; Rompotis, 2015). Conversely, acquirers with a low leverage ratio choose cash offers as a payment mechanism via debt financing. Their findings indicate that debt financing sends a favourable signal to the stock market, suggesting that the firm's equities are unlikely to be overpriced and that the M&A seems to be lucrative.

Capital Structure Theory

Capital structure theory refers to the decision to finance a firm with a combination of equity and debt. The theory posits that a firm's market value may be optimised by establishing the ideal capital structure, namely the appropriate combination of debt and equity. The amalgamation of debt and equity enhances the firm's worth. It indicates that acquiring corporations are prepared to leverage their overpriced equities if their financing choice can be rationalised as attaining an optimum capital structure. The cost of capital is determined by the capital structure. Consequently, fluctuations in the cost of capital will dictate a firm's financial capacity in mergers and acquisitions. The capital structure is deemed optimum, indicating that at a certain gearing ratio, the cost of capital is minimised and the firm's value is maximised (Harmono et al., 2023; Adeoye & Islam, 2020; Kyissima et al., 2020; Ibrahim & Raji, 2018; Vermaelen & Xu, 2014; Uddin & Baoteng, 2011).

The proposition of Myers-Majluf (1984) and Jensen (1987) shows that for the cash offer, the acquirer firm may use the cash on hand or the unused debt capacity. Hence, if the firm utilises its unexploited debt capacity, it will exhibit a larger gearing ratio for the acquiring firm when it lacks sufficient cash and must get loans from a financial institution. Furthermore, this may adversely affect leverage and the cost of financing owing to heightened financial risks. Furthermore, research conducted by DeAngelo et al. (2017) revealed that companies deleverage to enhance financial flexibility and regain the capacity to borrow in the future. Consequently, the acquiring corporation tends to use shares as a payment option for the merger and acquisition. Acquirer businesses, by selecting their payment mechanism, may reorganise the firm's capital structure (Daher & Ismail, 2018; Rompotis, 2015; Polemis & Paleologos, 2014; Uysal, 2011; Harford et al., 2009).

Method of Payment and Acquirer Shareholder Wealth in M&A

This research presented empirical evidence on method of payment announcement and the impact on acquirer firms' stock prices during the announcement period. Empirical data were gathered from the 1980s to the conclusion of 2022 to analyse the effects of payment method offerings on stock price performance. The findings were juxtaposed with those of cash, shares, and a hybrid payment system. This section analysed the literature results, including one publication that compared and contrasted all three methodologies. In their prior study, they only examined the payment method comparably.

In the 1980s, an earlier study found a significant relationship between the signalling hypothesis and the market reaction to the transmission of news from the acquirer firm to the stock market. Since Travlos (1987) found that different methods of payment have different signalling effects, he claims that the U.S. stock market interprets cash offers as positive news and responds positively to stock prices. During this decade, the U.S. stock market showed that cash offers performed better as a method of payment in M&A than stock offers by the acquirer firms. Wansley et al. (1987), Travlos (1987), Franks et al. (1987),

and Franks et al. (1988) all found that cash offers resulted in positive AR and CAAR for shareholders of acquirer firms. However, their analyses ignored mixed payment offers, except for Travlos (1987), who examined five transactions and found an insignificant negative AR of 1.02% for acquirer firm shareholders.

Empirical studies from the 1990s, however, have shown that mixed method of payment as well as cash and stock offers to the target firms have been included in the comparison in M&A. The findings of cash and stock offers align with previous research indicating that cash offers provide superior performance compared to stock offers when evaluating the acquirer shareholders' abnormal returns (AR) and cumulative abnormal returns (CAR). The inclusion of a sample using a mixed payment mechanism in their comparison study indicates that the stock price of the acquiring business outperforms that of the stock offer in a mixed payment scenario. The cash offer is much esteemed by shareholders, resulting in increased stock price returns. Harris et al. (1991) conducted an event research using a brief event window (-5, +5) in the U.S. stock market over the sample period of 1975–1984. A mixed payment mechanism was used in 114 out of 398 transactions in the sample. Cash offers yielded a positive cumulative abnormal return (CAR) of 0.83%, whereas mixed offers produced a negative value of 1.18%, and stock offers resulted in a negative value of 3.15%, all at the 1% level of significance. Additionally, Laughran and Vijh (1997) examined the U.S. stock market from 1970 to 1989, using a five-year analysis via a Buy-and-Hold Return (BHAR) event study. Cash offers shown superior performance compared to other techniques throughout time, yielding a favourable BHAR of 18.5%. Concurrently, mixed offers result in a negative BHAR of 9.6%, while stock offers provide a negative BHAR of 24.2% at the 1% significance level.

In reviewing the available literature from the 1980s and 1990s, it was found that mixed method of payment spell bad news for the stock market. The negative returns to acquirer firms suggest that shareholders reacted negatively to the announcement of the mixed method of payment as a payment option in M&A. However, this study found that there is a lack of in-depth analysis of the cash-to-stock ratio in the mixed method of payment offered to the target firm based on a review of the literature from the 1980s to the late 1990s. As a result, the literature review in this section began in 2000. Nevertheless, this study discovered a pattern of analyses conducted by authors beginning in the early 2000s. The review emphasised the tendency of writers to analyse the effects of various payment systems on shareholder wealth. The study mostly corroborates the conclusions drawn from a literature evaluation conducted in the 1980s and 1990s. In comparison to stock or mixed payment options, cash offers are a reliable indicator of yielding favourable results for acquiring firms.

A study by Datta et al. (2001) was discovered, in which they conducted an analysis using 95 cash offers and 59 mixed offers based on U.S. firms. Their results based on a short event window of (-1, 0) show a positive CAR of 0.52% at a significant level of 1% for the cash offer and a negative 0.10% for the mixed method. Linn and Switzer (2001), on the other hand, focus on the long-run effect by testing a sample of U.S. firms from 1967 to 1987 using a larger time window of (+1 year, +5 years). Their findings show that cash offers have a positive effect of 3.14% CAR, while mixed-method offers have a positive effect of 2.03% CAR. Furthermore, Moeller et al. (2004) also conducted a study of the U.S. stock market from 1980 to 2004. They used a large sample of 2,958 cash bid transactions, 4,862 stock bid transactions, and 420 mixed payment bid transactions. They discovered some interesting results that were statistically significant at the 1% level when they used a short event window of (-1, +1). While a stock offer results in a positive CAR of 0.15%, a mixed offer results in a positive CAR of 1.45%, followed by a cash offer with a positive CAR of 1.38%. However, these results are based on a relatively short period before and after the day of the announcement.

An assessment of the research contrasting different payment methods with acquirers' stock price performance from 2000 to 2010 reveals that the findings are notably consistent. A recent discovery from the research indicates that a mixed payment approach positively influences acquirers' shareholder returns. This review will concentrate on the most recent decade of literature, commencing in 2010 and including the latest available publications, due to the brevity of the study period. A study from Uysal (2011), using a sample of 7,814 transactions that took place in the U.S. between 1990 and 2007, found that mixed method of payment offers led to a positive CAR of 0.014% for shareholders of acquirer firms. Besides, Harford and Uysal (2014) analyzed the U.S. from 1990 to 2011, with a total of 69,162 transactions. They found that using the short event window (-2, +2), the mixed method of payment has a positive CAR of 0.013% at the 1% significance level.

Analysis of prior research reveals that shareholders of the acquiring business have a favourable return when the firm employs a mixed payment technique. The inquiry pertains to whether the introduction of a hybrid payment mechanism constitutes favourable or unfavourable news for the stock market and how shareholders would respond, either favourably or adversely. This literature analysis underscores the significance of the mixed offer percentage, specifically the ratio of cash to shares in the payment mechanism used by acquirers for their target enterprises. Previous study on mixed payment methods saw them as a singular choice, such as a cash and stock offer; nevertheless, the authors may have seen them as a composite of cash and stock presented as one payment methods.

However, this paper discovered a result from Boone et al. (2014), who examined 2,590 transactions that occurred between 1985 and 2013. The authors' methodology included market-to-book ratios and historical stock returns. They conclude that mixed method of payment offerings differs from cash-payment and stock-payment offerings in terms of destination and characteristics. As a result, they emphasise the importance of treating mixed method of payment offers separately from cash and stock offers rather than as a mixture of the two. This paper therefore examines additional results beyond 2014 and found that most of the papers continue their analyses with a similar methodology, i.e. a comparative analysis of the method of payment used to calculate shareholder returns during the announcement period. The studies by Ben-David et al. (2014), Miroslav Mateev (2017), Song et al. (2017), Giannopoulos et al. (2017), and Yang et al. (2019) show that their analyses are limited to determining which method yields the best AR for shareholders. As a result, this paper provides new insights into the in-depth analysis of mixed method of payment, with greater emphasis on the cash-to-stock ratio and its impact on acquirer shareholders' wealth.

RESEARCH GAPS

Most extensive study has regarded the mixed mode of payment in mergers and acquisitions as a mixture of cash and shares. This prompted current empirical research to concentrate on all-cash versus all-stock payment methods and their potential impact on stock price fluctuations, hence influencing the wealth of the acquirer's shareholders. Nonetheless, the study included samples of mixed payment methods; nonetheless, the analysis primarily focusses on comparisons between all-cash and all-stock transactions, with conclusions aimed at determining which approach yielded superior returns for shareholders. This may be justified by the payment method's structure, which incorporates a cash and stock component in a percentage ratio established by the acquiring corporation. Consequently, the current research may see the mixed payment strategy as a mixture of cash and shares offered by acquiring corporations.

Conversely, a research by Boone et al. (2014) contends that the mixed payment technique is distinctive and warrants classification as a separate payment category because of its inherent diversity in cash-to-stock ratio offerings to the target business. This assertion requires more clarification to meet the research gap over whether the mixed payment technique is a non-hybrid form of cash and stock or just represents a cash and stock offering in mergers and acquisitions. Furthermore, shareholders' responses to the announcement of a

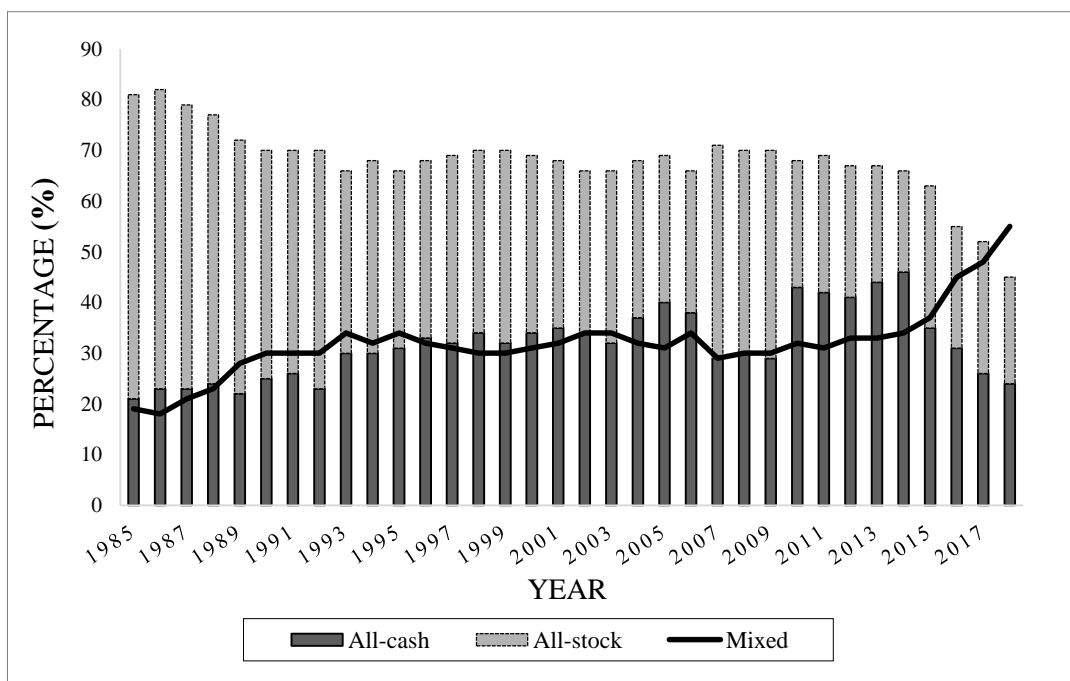
mixed payment mechanism may be contingent upon the cash-to-stock ratio of the offer. This prompts an inquiry about their response to acquiring corporations with diverse cash-to-stock ratios. It is essential to analyse how various combinations of cash-to-stock ratios might differentially impact shareholder value. Thus, both the cash and stock elements of the hybrid payment method are essential in two scenarios. The critical aspect of the mixed payment approach is how the internal circumstances of the acquiring business influence the cash-to-stock ratio presented to the target firm. Secondly, what effect does the announcement of different cash-to-stock ratios have on the acquirer's stock price fluctuations?

This research could not identify any studies that undertook an in-depth investigation of mixed payment methods, particularly focussing on the cash-to-stock ratio and its effect on the wealth of acquirer shareholders. The existing research includes conjecture but lacks empirical validation, hence the expectation for the mixed payment mechanism remains unverified in the present body of work. This report serves as a catalyst for a research examining the influence of the cash-to-stock ratio in mixed payment offers on the wealth of shareholders in the acquiring corporation. Firstly, to examine the internal factors of the acquirer firm that determine the cash-to-stock ratio in the mixed method of payment to the target firm. The variables that could be examined are the acquirer's stock value, free cash flow, and gearing level. Secondly, to examine how the mixed method of payment, particularly those with different cash-to-stock ratios, would affect the wealth of the acquirer's shareholders surrounding the announcement period. The variables that could be examined were a range of different cash-to-stock ratios in the acquirer firm's mixed method of payment offers.

The mixed method of payment has gained much popularity in recent decades, suggesting widespread acceptance in M&A circles. Figure 1 shows a steady increase in mixed method of payment. From 1985 to 2006, they accounted for 25% of all methods of payment used worldwide. From 2007 to 2014, the share increased to 30%, and since 2015, it has been at 55%.

Figure 1

The Percentage of the Method of Payment in M&A Worldwide from 1985 to 2018



Source. Thomson and Reuters Eikon Datastream.

i. The Decision on the Method of Payment in M&A

Determining the payment method to provide is mostly a negotiation process that the acquiring business must consent to and the target firm must find acceptable (Huang et al., 2023; de Bodt et al., 2022; Eaton et al., 2022; Fuad & Gaur, 2019; DePamphilis, 2015). However, researchers have found that different theories attempt to explain how the acquirer firm decides on the best method of payment in M&A, such as the Overvaluation Theory (Myers & Majluf, 1984), the Free Cash Flow Theory (Jensen, 1986, 1988; Myers & Majluf, 1984), and the Capital Structure Theory (Durand, 1952).

According to the Overvaluation Theory, during a stock market boom, the stocks of an acquirer firm are overvalued, so stock offers are preferred as a method of payment (Klitzka et al., 2022; Yang et al., 2019; Botsari & Meeks, 2018; Shiller, 2015). Conversely, the Free Cash Flow Theory suggests that a cash offer is strongly preferred when the acquirer firm has excess cash flow for investment (de Bodt et al., 2022; Yang et al., 2019; Gao & Mohamed, 2018; Ismail & Krause, 2010). Furthermore, the Capital Structure Theory states that the acquirer firm seeks an optimal capital structure, and therefore a stock offering is preferred when the acquirer firm has a higher debt-to-equity ratio (Harmono et al., 2023; Kyissima et al., 2020; Daher & Ismail, 2018; Uysal, 2011; Martynova & Renneboog, 2009).

A substantial corpus of scholarly literature examines how the internal characteristics of the acquiring firm may affect the choice of payment method in mergers and acquisitions (Klitzka et al., 2022; Yang et al., 2019; Eckbo et al., 2018; Andriosopoulos et al., 2016; Brealy et al., 2014). Although these studies try to examine internal determinants, they mostly concentrate on acquirer corporations using either the all-cash or all-stock payment methods, neglecting the mixed payment approach. The impact of the acquiring firm's internal variables on the provision of a mixed payment mechanism, namely the cash-to-stock ratio, remains uncertain. This study encourages further exploration of how the internal elements of the acquiring business (namely, the acquirer's stock valuation, free cash flow, and gearing ratio) affect the determination of the cash-to-stock ratio in a mixed payment method presented to the target firm.

ii. The Announcement of the Method of Payment and Shareholder Wealth Maximisation

During the announcement period, research mostly focusses on the effects of the declared mergers and acquisitions and the nature of the payment method. Researchers examined data from the announcement date, pre-announcement period, and post-announcement period to demonstrate the impact on shareholder wealth (Alsharif, 2023; Caiazza & Pozzolo, 2016; Rahim & Pok, 2013; Juma et al., 2012). In addition, shareholder wealth during M&A announcements has been identified by examining AR during the announcement period. A large body of research suggests that shareholders of the target firm benefit from a positive AR regardless of the method of payment announced by the acquirer firm (Klitzka et al., 2022; Boone et al., 2014; Savor & Lu, 2009; Moeller et al., 2004). Meanwhile, AR for the shareholders of the acquirer firm depends on the method of payment announced in the stock market (Isa & Lee, 2011; and Faccio & Masulis, 2005).

Concerning the aforementioned conclusions, academic study has posed two enquiries. Initially, the impact of the announcement on shareholders' wealth must be assessed, followed by an examination of the shareholders' reactions to the disclosed information, which may result in stock price volatility. The enquiries prompted an examination of the data sent by the acquiring corporation to the stock market, revealing that the acquiring firm provides an informational signal to the market (Wnuczak & Osiichuk, 2024; Li, 2016; Rompotis, 2015; Gaughan, 2011). The Signalling Theory (Myers & Majluf, 1984) posits

that an all-cash offer conveys a favourable signal to shareholders, prompting a favourable response to the information. Consequently, stock prices rose, and owners of the acquiring business profited from a favourable abnormal return. If shareholders see the all-stock offer unfavourably, it will lead to a decline in stock price and a negative abnormal return for shareholders of the acquiring business (Gigante et al., 2023; Ang et al., 2019; Li, 2016; Gaughan, 2011; Isa & Lee, 2011).

The announcement of a mixed method of payment offer entails different cash-to-stock ratios. Therefore, it is necessary to look closely at how the announcement of the mixed method of payment might affect the wealth of the acquirer firm's shareholders when it comes to various cash-to-stock ratios. Signalling theory therefore requires further investigation in terms of the various cash-to-stock ratios of the mixed method of payment. As long as this theoretical gap remains unresolved, the signalling theory will continue to be unable to explain the nature of the signal and the reaction of shareholders to the different cash-to-stock ratios when a mixed payment offer is announced in the stock market. Consequently, a deficiency exists in the existing academic literature that requires additional investigation. Exploring this subject may provide significant findings that definitively enhance the current understanding of the mixed payment approach and the wealth of shareholders in acquiring firms.

CONCLUSION

The research problem addressed by the literature reviewed led to a research gap that inspired the fulfilment of the identified literature gap. It can be described by the phrases "to some extent" and "to a very small extent". Given the significance of the payment method in mergers and acquisitions, researchers have examined its influence on shareholder wealth. "To some extent," numerous observations regarding all-cash and all-stock payment methods are available. The prevalence of acquirer businesses providing any payment method to their target firms makes the emphasis on both ways plausible. The persistent increase in worldwide mergers and acquisitions, using a mixed payment mechanism, has prompted more investigation by academics into this payment approach. The existing research minimally addresses the results on all-cash, all-stock, and mixed payment systems, with conclusions mostly emphasising whether payment type optimises shareholder returns.

However, the literature collected in this paper contains some speculation but no empirical testing, so the expectation for the mixed method of payment has not been confirmed in the current literature. It is argued that the mixed method of payment is a separate payment category from all-cash and all-stock. Nevertheless, this payment structure incorporates both cash and stock components, with the proportions determined by the acquiring firm for the target firm. This prompts an inquiry into whether the mixed method of payment is genuinely a non-hybrid form of cash and stock or merely a combination of cash and stock in mergers and acquisitions. Additionally, the cash-to-stock ratio in the mixed method of payment is varied and encompasses numerous options.

Nonetheless, this paper did not identify any recent scholarly research examining the mixed method of payment to ascertain whether it constitutes a genuine non-hybrid form of cash and stock or merely a combination of the two in M&A. The analysis of the mixed method of payment is definitive when it initiates with an exploration of the correlation between the acquirer firm's internal factors and the cash-to-stock ratio decision in a mixed payment method. Subsequent research should concentrate on assessing the influence of the cash-to-stock ratio in mixed-method payment proposals on the wealth of the acquiring firm's shareholders.

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