

DETERMINANTS OF PAYMENT METHODS IN MERGERS AND ACQUISITIONS: A COMPREHENSIVE ANALYSIS

Abstract

Mergers and Acquisitions (M&A) are a common strategy for corporate restructuring, aimed at increasing the scale and scope of businesses. Recently, this form of restructuring has gained considerable momentum, transforming industries and redefining market dynamics. While M&A became a dominant trend in developed capitalist economies during the late 20th century, its presence in developing countries has only recently become significant. Between 1990 and 2001, global M&A transactions nearly quadrupled.

This shift marks a departure from the past, when M&A was often associated with covert and controversial corporate practices. Today, the process has gained an international outlook, spurred by global economic integration and the easing of trade and investment restrictions.

In the Indian context, M&A is not a novel concept. Although Indian companies have engaged in such restructuring before, the focus has shifted to strengthening core competencies, capturing market share, and enhancing global competitiveness. This shift has been driven by the increasing presence of foreign players in the market, compelling Indian corporations to concentrate on their key areas of expertise. As a result, M&A has emerged as an effective tool for corporate restructuring and has become a cornerstone of long-term business strategies. This chapter explores the trends, historical development, motivations, forms, and various dimensions of M&A.

Keywords: Abnormal returns, bidding firm, M&As, method of payment,

Authors

Dr. Rashmi Turamari

Associate Professor
Department of Commerce,
Government First Grade College for
Women
Dharwad, Karnataka, India
rturashmi@gmail.com

Dr. Namrata M

Associate Professor
Department of Home Science,
Maharani's Science College for
Women (Autonomous)
Mysuru, Karnataka, India

Dr. Vadiraj B Tangod

Professor
Department of Physics
Government First Grade
College for Women
Dharwad, Karnataka, India

I. INTRODUCTION

The amount of business merger activity has been rising quickly in recent years. In M&A, the payment method—cash, shares, or a combination of these—can significantly affect whether the deal is completed successfully. The target firm's shareholders typically believe that cash offers are superior to share offers because they provide cash instead of target company shares (Ismail 2010). The factors that influence payment in M&A deals have been the subject of numerous researches in the past. Numerous factors, including information asymmetry, taxation, M&A regulations, accounting treatment, firm size, cash availability, ownership structure, business cycles, corporate control, credit rating, stock market performance, growth, and investment opportunities, among others, affect the choice of payment method in mergers. According to empirical data, bidder and target returns are significantly impacted by the payment method employed in mergers. Only when its stock is overpriced would a company issue it; if its stock is undervalued, it will choose to pay cash (Myer and Majluf 1984). Cash offers yield larger abnormal returns to target owners than stock offers do. Although abnormal returns are zero, bidders' returns are also larger in cash offers, indicating a competitive takeover market (J.F. Weston).

Several theories seek to clarify how the payment method impacts M&A outcomes. In stock-for-stock exchanges, target shareholders can defer taxable gains indefinitely, while gains from cash transactions are taxed immediately. As a result, cash offers often need to be higher to account for benefits like asset write-ups for future depreciation and tax shelters, which may also explain why bidders experience higher returns with cash offers. With this background, we will go over each of the elements that affect the payment method selection in mergers one at a time. The models pertaining to the payment method in M&A transactions are as follows.

1. Information Asymmetry.
2. Taxation Policy.
3. Relative size.
4. Managerial ownership and ownership structure.
5. Cash availability or free cash flows.
6. Debt financing or debt capacity.
7. Stock performance.
8. Investment opportunities.
9. Public target status.
10. Intra-Industry and cross border deals.



Figure 1

1. Information Asymmetry and Method of Payment

Myers and Majluf (1984) were the first to construct and create asymmetry information models. After Myers and Majluf's work, numerous other models on information asymmetry were created, including Fishman's preemptive bidding model (1989), Berkovitch and Narayanan's model of informational asymmetry with competition (1990), and Hansen's model (1987) of bargaining under asymmetric information and its extension developed by Eckbo, Giammarino, and Henkel (1990). They are founded on the idea that managers' information is asymmetrical compared to that of other market agents, as their names suggest. To put it another way, managers are privy to confidential information about the company's stock price and investment prospects, while outside investors are not. Positive or negative information is available from other agents. Because he is unaware of whether the other agent has positive or negative information, a non-informed agent must cope with severe adverse selection issues if he makes a contract with someone who knows more than he does.

- **Myers and Majluf Model:** Businesses that raise outside funding to fund their new initiatives must deal with adverse selection issues in an environment where management and investors have unequal access to information. Stocks issued by companies with low investment prospects may resemble those issued by companies with strong investment opportunities. Stocks from companies with limited investment opportunities will therefore be overpriced, while stocks from companies with high investment opportunities will be underpriced.

Myers and Majluf (1984) demonstrate how the bidding firms' choice of payment mechanism during acquisitions might provide insight into the bidder in an

environment of asymmetric knowledge. If stocks are overpriced, managers who possess information and wish to act in the best interests of their real owners will use them. If the market undervalues the stocks that would be used to finance the operation, they will set away some positive net present value investments. Therefore, the market will read the choice to fund an investment with stocks as bad news, causing the firm's stock price to drop upon the acquisition's announcement. Additionally, investors are encouraged to lower their offer price out of concern that they would purchase overpriced equities. On the other hand, when a cash offer is made, the bidder's assets will be viewed as being undervalued, which is encouraging for investors.

- **Hansen Model:** Hansen envisions a scenario where a bidding firm has exclusive access to information about the true value of a merger. In such a situation, the bidder's best approach is to make a single offer. However, in cash offers, issues arise when the target possesses private information about the condition of its assets. The target will agree to sell its shares only if their actual value is lower than the bidder's offer. To mitigate the risk of adverse selection, the bidder must calculate the optimal offer based on the "expected value," assuming the offer is accepted. Consequently, the target—relying on its own information—may not accept the offer every time, which means the deal might not always proceed.

To address this, the bidder can opt to use its own stock as payment instead of cash. Stocks have a contingent pricing characteristic, which encourages the target to accept all offers it would otherwise accept in cash, without increasing the bidder's cost.

Noronha and Sen (1995), who demonstrate that the likelihood of a stock offer has a negative correlation with the debt-to-asset ratio and a positive one with the bidding firm's leverage, and Houston and Ryngaert (1997), who demonstrate that high elasticity is more likely when the target is large and when there is a high correlation between the target's returns and the bidding firm's returns, both support Hansen's (1987) predictions.

- **Fishman Model (1989):** Fishman (1989) highlights the importance of the payment method in preemptive bidding when multiple rivals vie for control of the same firm. When a bidder makes an offer, other competitors might analyze it, assess its profitability, and potentially join the bidding process. A preemptive bid can help avoid such competition, as prolonged bidding tends to reduce the target firm's returns (as shown by Berkovitch and Narayanan (1990), Bradley, Desai & Kim (1988), and De Fedenia & Triantis (1996)). If a competitor must challenge a bidder who proposes a high initial valuation for the target, it faces lower chances of success and reduced expected returns if it prevails. Thus, a strong initial offer signals high valuation, discouraging competitors—a concept validated by Fishman (1988), particularly in cash-only offers. Unlike Hansen's model (1987), this scenario assumes that both the target and the bidders possess private information regarding the profitability of the acquisition. In such cases, stock offers emerge as a viable alternative to cash. If the bidder offers a significant sum when the target's information indicates profitability, and a lower amount otherwise, the target is positioned to make an informed and efficient decision based on its knowledge.

- **Eckbo, Giammarino and Heinkel's Model:** Eckbo, Giammarino, and Heinkel's model builds on Hansen's (1987) work, suggesting that informational asymmetries between the bidder and the target can lead to an optimal blend of cash and stock payments. Their findings demonstrate a separating equilibrium, where the composition of a mixed offer reveals the true post-acquisition value of the bidding firm. This revealed value grows increasingly convex as the cash component rises. The authors identify two factors contributing to the abnormal returns of the bidding firm: the revaluation of synergy and the signaling effect. For cash offers, abnormal returns are linked to synergy revaluation, whereas for stock offers, they result from signaling. Mixed offers uniquely capture both effects, incorporating synergy revaluation and signaling. They also propose that the target's stock price consistently increases upon the acquisition announcement, regardless of the payment method. This is because the bidder is required to present an acceptable offer for all types of targets, eliminating distinctions between them.

Eckbo, Giammarino, and Heinkel (1990) tested this theory on a sample of 112 Canadian deals, 56 of which involved mixed offers. They observed positive and significantly higher abnormal returns for mixed offers compared to cash-only or stock-only ones. However, their empirical results did not fully validate the model's predictions.

- **Berkovitch and Narayanan's Model:** Berkovitch and Narayanan's model (1990) studies the role of the payment method in the competition between bidders and its effects on the returns of the target's and the bidder's shareholders. Their theory is consistent with the previous works. In this model, there are two types of bidders: high-type bidders and low-type bidders. The merged firm's value is higher for high-type bidders than for the low-type bidders. A potential bidder makes an offer with a given payment method, and this offer can be rejected or accepted by the target. If the offer is rejected, there is a time period during which no new offers can be realised. During this period, other potential bidders can enter into the competition. If it is actually the case, there is a competition between the two potential bidders, and the highest offer can be rejected or accepted by the target. If the offer is rejected, the process is repeated after a new time period. Thus, this model comes within an informational asymmetry's framework, where the target earns a higher sum if it is acquired by a high-type bidder but earns a higher proportion of synergies if it is acquired by a low-type bidder. This result is due to the fact that the low-type bidder will have to face a higher competition than a high-type bidder, and it will be ready to offer the target a higher proportion of the created synergies. If the bidder is conscious of the kind of bidder he belongs to, then there is a unique separating sequential equilibrium in which the high-type bidder uses a higher amount of cash and the low-type bidder uses a higher proportion of stocks. The value of the offer is the same as in the case of symmetric information. Since the fraction of synergy offered by low-type bidders is higher than the one offered by high-type bidders, the latter have no incentive to imitate the former by offering stocks. Similarly, since the value of the offer made by low-type bidders is lower than the one realised by high-type bidders, the former have no incentive to imitate the latter by offering cash. As in the models of informational asymmetry, the offers are accepted without delay.

2. Taxation Policy and Method of Payment

Several studies have demonstrated that taxes have an impact on the choice of payment method. For tax purposes, it is commonly recognized that any capital gains must be realized right away. For the target's shareholders, cash bids are regarded as immediately taxable. Therefore, in order to offset the tax rise, a cash offer necessitates paying a larger premium. Conversely, until the stocks are sold, stock offers are not subject to taxes. The offer must contain at least 50% stocks in order to qualify for the bonus. Therefore, from the bidder's perspective, cash-financed transactions are better than stock-financed transactions, but they also come with a greater premium. The bidder's earnings will be artificially reduced by the amortization of this goodwill. If the premiums provided to the target's shareholder are not greater than the tax benefits of the acquisition, the bidder's shareholder, who is unaware of the signal impact, will prefer a cash offer. In order to prevent the artificially reduced returns associated with the depreciation of the goodwill, the managers will be in favor of a stock offer (Blackburn, Dark, and Hanson, 1997). If a target has accumulated tax losses and tax credits, it becomes more appealing.

Legally speaking, two requirements are required. The investor's continuity comes first. The bidder's stock must be purchased in exchange for the majority of the target's stocks. As a result, the target's shareholders will own a portion of the combined company. Additionally, it is necessary to guarantee the target's operations continue. The acquisition must have a valid purpose, which will be demonstrated if the target's operations continue. If these requirements are met, the merger is tax-exempt; the target's tax characteristics may be inherited, and the target's shareholder gains or losses may be deferred. The taxation of businesses is likewise subject to the concept of continuity of interest. Since the shareholders have retained a significant amount of ownership in a nontaxable transaction, the tax credits and carryovers that the target has not utilized can be subtracted from the future merged company's taxable earnings. The bidder has the authority to establish the depreciation basis of the acquired assets in a taxable offer, and the ownership rights are deemed sold. Indian tax regulations permit losses to be carried forward for up to eight years, while American tax laws let net operating losses to be carried back for three years and forward for fifteen years. Unless the company was profitable both before and after the losses, the carryover's current value is low. However, when the losses are passed to a bidding corporation that has significant pre-tax earnings, the value of these tax characteristics rises.

Wansley, Lane, and Yang (1983) relate their research to the connection between payment methods and tax status. They investigate how payment options affect the target firm's cumulative average abnormal returns (CAARs) using the market model. They determine that the targets are 33.4%, 17.47%, and 11.77% for financing with cash, shares, and a mix of the two, respectively, for the 41 working days that followed the acquisition announcement. The taxation implication theory is then provided as a potential explanation for this outcome, particularly for the significant discrepancy between the cash offer and the share exchange. They come to the conclusion that acquirers must bear the greater tax burden for the targets in such a situation since the returns to target shareholders are significantly larger when financed by a cash offer. Regarding this, a share exchange financing will postpone the tax implications until the share is ultimately sold.

According to Harris, Franks, and Mayer (1987), who looked at a sizable sample of 2500 acquisitions in the US and the UK between 1955 and 1985, cash bids also result in higher abnormal returns for targets. Additional proof of their research is given as follows:

- a. The most popular payment mechanisms for M&A transactions in both nations have been all cash offers and all share exchange financing. This phenomena can be explained by the fact that some shareholders will accept a share exchange offer if they are concerned about the responsibility of paying capital gains taxes, while others who are not interested in combining their portfolio with the bidder's paper will be happy to receive cash. Efficiency of Franks, Mayer, and Harris. Regarding the cash-share combination form, it is more frequently utilized in the UK than in the US.
- b. When cash is utilized for purchase finance, there doesn't appear to be any conclusive evidence that capital gains taxes are the primary worry. Owing to the study's extensive duration 30 years, some modifications have been made to both countries' tax and accounting regulations over this time.

Harris, Franks, and Mayer demonstrate that, in comparison to the 1960–1964 period (with a percentage of 29.2%), cash financing did decrease from 1965 to 1969 (at a rate of 18.6%). From 1975 to 1979, however, this pattern was reversed, and the percentage of cash financing increased to 33.6%. Therefore, there is no clear empirical connection between capital gains taxes and the use of cash as a medium of trade.

- c. In line with the overvaluation proposition's prediction in an asymmetric market, their empirical results also demonstrate that cash offers provide superior post-acquisition performance for acquirers than all-share exchange offers.

Regarding the target firm's performance after the acquisition, Huang and Walking (1987) arrive to the same conclusions as earlier research. The CAARs for cash offers, share exchanges, and the combination of cash and shares are 29.3%, 14.4%, and 23.3%, respectively, according to a study of 204 pairs of mergers that took place between 1977 and 1982. As was previously mentioned, the taxation implication theory is also responsible for the noticeably higher CAARs for cash financing.

According to Brown and Ryngaert's model (1991), taxation significantly influences the selection of payment methods in mergers and acquisitions. The bidding firm considers both the target's valuation of the bidder's stocks and the tax implications associated with the chosen payment method. This model aligns with observed bidder returns while offering predictions beyond those based solely on the informational aspect of payment methods. For example, since stock usage is driven by tax advantages, stocks are unlikely to be used in taxable transactions. Furthermore, the model suggests that nontaxable transactions, such as stock and mixed offers, convey negative signals about the bidder. Bidders valuing their firms highly often use at least 50% stock to avoid taxation, while those with lower valuations use stocks to prevent their issued shares from being undervalued. Empirical data supports the idea that stocks are utilized for tax benefits: out of 342 taxable deals, only 7 involved stocks, and 12 used securities convertible to stocks. Meanwhile, in 131 nontaxable deals, 86 were stock offers and 45 were mixed offers, 34 of which used more than 50% stocks. Mixed offers frequently incorporate the maximum allowable cash while maintaining tax-free status,

highlighting the role of taxation in payment choice in the U.S. Consistent with the model's predictions, the results show negative abnormal returns for mixed and stock offers, while cash offers yield zero abnormal returns, which are significantly higher than those of mixed offers. However, these findings contradict the idea that bidders signal greater asset value by using more cash in nontaxable deals. The abnormal returns for mixed offers are similar to those for cash-only offers. Supporting the taxation hypothesis, Noronha and Sen (1995) also observed that the likelihood of stock offers increases with the target's accumulated tax credits.

Gilson, Scholes, and Wolfson (1988) demonstrate that the consequences of wealth transfer are not directly related to tax profits. According to Auerbach and Reishus (1988), the tax savings resulting from the utilization of target losses and credits are not big enough to explain the payment method, and Niden (1986) finds no connection between the target's shareholders' tax status and the payment method.

A stock offer may have a negative effect on the firm's stock price if we take into account the tax benefits associated with using debt (Modigliani & Miller 1983; De Angelo & Masulis 1980, b). As per Nayar and Switzer's (1988) perspective. Since the bidder's interest on the debt issued to shareholders is deductible, using debt securities may have tax benefits. To prevent the stock price from dropping in the event of a stock offer, the bidder may choose to give cash or debt; however, if the bidder requires a significant tax cut, an offer with debt will be preferable. Therefore, a debt issue is important to the market because the company expects to export the tax deduction associated with paying off the new loan and interest, according to Nayar & Switzer (1980). Their claim is supported by an empirical investigation that demonstrates that the more favorable the market response is for the enterprises that use debt in their offer, the higher the tax rate.

Franks, Harris, and Mayer (1988) and Suk and Sung (1977) demonstrate that the targets' anomalous returns in tender offers are larger than those in mergers, which runs counter to the informational and tax assumptions. even after the payment method's effects have been managed. This latter also demonstrates that, even after controlling for institutional ownership and other tax-related factors, there is no correlation between the offer premium and the target's institutional ownership in cash offers, nor is there a premium difference between cash and stock offers. Additionally, these findings contradict the tax and informational hypothesis.

Conversely, Eckbo and Langhor (1989) demonstrate that the informative hypothesis appears to predominate over the tax hypothesis using a French sample of transactions completed between 1972 and 1982. In fact, they demonstrate that the post-expiration premium is essentially the same whether the acquisition was funded with cash (22.5%) or stocks (23.7%), while the average premium in cash offers is 17.2%. If the enterprises are utilizing cash offers to pay a greater premium to offset the negative impact of taxes, then the post-expiration premium should be higher. This finding is incompatible with the tax hypothesis.

3. Relative Size and Method of Payment

Numerous research have linked the relative size and the payment option. It is anticipated that when the target (deal size) is larger than the bidder's size, bidders will be more inclined to use equity financing. In other words, the likelihood that a deal will be financed using shares increases with the proportional deal size (Faccio and Masulis 2005). The first reason for these

forecasts is that bidding corporations are more likely to have insufficient unused loan capacity and liquid assets to finance the deal with cash when the target firm is relatively large. Second, compared to relatively small targets, relatively large targets have more negotiating leverage over the mode of payment. According to Martin (1996), Grullon, Michaely, and Swary (1997), and Ghos & Ruland (1998), the size of the objective relative to the bidder influences the payment methods chosen.

Although this international logistic model does not produce the same outcome as his descriptive statistic analysis, Martin's (1996) research demonstrates that relative size has a significant role in selecting payment methods. Finally, based on the logistic model's results, Martin (1996) comes to the conclusion that the choice of payment methods in M&As is not clearly and conclusively related to relative size. One of the most significant factors in determining the choice of payment methods, according to Grullon, Michaely, and Swary (1997), is the size of the target banks in relation to the acquiring banks. According to their findings, the likelihood that a merger will be funded by a share exchange rather than a cash offer increases with the target's size in relation to the acquirer.

The identical conclusion as Grullon, Michaely, and Swary (1997) is reported by Ping-Shun Zhang (2003). This study uses univariate descriptive analysis, decreminant analysis, and multinomial logistic regression to analyze a data sample of UK M&A activity in the 1990s in order to investigate the factors that influence payment methods in M&As. According to the empirical findings, share exchanges are more likely to be used in M&A transactions when the relative size is bigger. This outcome is comparable across the three approaches employed, supports their theory, and aligns with earlier research.

According to Ghosh & Rolland (1998), there is no discernible difference between the three payment methods in terms of the relative size variable between the results of descriptive statistics and multinomial logistic models. As a result, they draw the conclusion that the magnitude of the target in relation to the bidder has no bearing on the payment methods selected.

4. Managerial Ownership and Payment Methods

The choice of payment methods in M&As is influenced by managerial ownership in both the acquiring and target firms. Managerial ownership refers to the proportion of equity held by management and insiders within these companies. Generally, the greater the managerial ownership in either firm, the higher the likelihood of cash financing being used.

Stulz (1988) found that the higher the ownership stake of target management, the more likely the transaction is financed with cash. Amihud, Lev, and Travlos (1990) observed that acquirers with larger managerial ownership stakes prefer cash offers over stock exchanges. Similarly, Grullon, Michaely, and Swary (1997) demonstrated that cash offers are positively linked to target managerial ownership. These researchers also showed that cash is more commonly used when a significant portion of the target's assets is under management's control, although they did not identify a direct connection between acquirer ownership and payment methods. In contrast, some findings suggest that higher target managerial ownership increases the likelihood of share exchanges, while cash offers align with higher managerial ownership in the acquiring firm.

Martin (1996) identified a non-linear relationship between acquirer managerial ownership and cash financing. When managerial ownership ranges between 5% and 25%, cash financing becomes more probable. Outside this range, concerns about corporate control dilution tend to diminish. Managers with high ownership stakes are less worried about losing control, as they are likely to retain their positions post-acquisition. Conversely, those with low ownership stakes are less concerned about control issues, given their existing vulnerability within the firm.

Ghosh and Ruland (1998) studied U.S. acquisitions from 1981–1988 and found a positive link between target managerial ownership and stock financing. Managers at target firms often prefer stock payments to maintain corporate control after the deal. They also noted that payment method decisions are influenced more by target managerial ownership than by acquirer ownership.

Zhang (2003), however, found no support for the managerial ownership hypothesis, likely because the sample firms had low management ownership. As per Faccio and Masulis (2005), managers with low ownership stakes are less concerned about corporate control dilution. Their study showed that bidders with intermediate levels of ownership prefer cash payments, a finding supported by Swieringa and Schauten (2007).

The target firm's ownership structure also affects payment choice. When a firm is closely held by management or dominated by a major shareholder, acquirers are less inclined to offer stock, as it could create a new large blockholder in the combined firm, increasing the risk of losing control. This risk is heightened when the target's ownership is highly concentrated or when the deal is relatively large. However, creating a large blockholder may benefit shareholders by improving management oversight and reducing agency costs. The interplay between the target's closely held shares and deal size is critical in evaluating the impact of ownership structures on payment method preferences.

5. Free Cash Flows and Method of Payment

Firms with abundant free cash flows are more likely to rely on internal funds for acquisitions, avoiding the need for additional borrowing (Zhang, 2003). Jensen (1986) defines free cash flow as the surplus cash available after funding all projects with positive net present values when discounted at the relevant cost of capital. Inefficient managers, however, may misuse free cash flows by investing in projects with negative net present values, prioritizing their own interests. To mitigate agency conflicts between managers and shareholders, excess cash should be distributed to shareholders through dividends or share repurchases (Jensen, 1986).

Jensen (1987) highlights that managers often prefer to use surplus free cash flows for acquisitions, especially since cash offers generally have a favorable impact on the stock market. Cash offers are perceived by outsiders as positive signals, revealing intrinsic value and suggesting the acquirer's assets may be undervalued. Myers and Majluf (1984) argued that cash offers are typically interpreted by investors as a good indicator of the bidding firm's asset and share value, while stock exchanges are often viewed negatively, implying overvaluation of the acquirer. Consequently, bidders with higher free cash flows are more inclined to opt for cash financing.

Zhang (2003) used the dividend payout ratio as a proxy for free cash flows, as a higher ratio indicates that excess cash is being returned to shareholders via dividends or share repurchases. The dividend payout ratio is calculated by dividing cash dividends by net income after preferred dividends. This measure effectively reflects a firm's level of free cash flows.

6. Debt-financing and Method of Payment

The ability to borrow significantly influences bidders' choices to finance acquisitions with cash, especially when internal funds are insufficient. Additional borrowing becomes necessary in such cases. Faccio and Masulis (2005) use the fraction of collateral assets—tangible assets securing debt obligations—as a measure of borrowing capacity. Collateral assets reduce the risk for debt holders, ensuring they can recover funds by liquidating these assets in case of default. Myers (1977) argues that firms with fewer tangible assets and greater growth opportunities face increased moral hazard risk, raising debt costs and making stock financing more appealing. Hovakimian, Opler, and Titman (2001) found that a higher percentage of tangible assets positively correlates with greater debt levels, as collateral reduces borrowing costs. Consequently, firms with more collateral assets have better access to debt markets, increasing their ability to issue debt and pay in cash. Another measure of borrowing capacity is financial leverage, defined as the debt-to-assets ratio in book value terms (Faccio & Masulis, 2005). According to the static trade-off theory, firms with low leverage, i.e., those below their target debt levels, should issue debt to finance acquisitions, benefiting from debt advantages. Similarly, the pecking order theory suggests firms with low leverage and unused debt capacity should issue debt to finance acquisitions if internal funds are insufficient. Thus, bidders with low leverage are more likely to opt for cash financing, while those with high leverage, restricted in borrowing, tend to use stock financing.

The size of the bidder's assets also impacts financing decisions. Larger firms, being more diversified than smaller ones, face lower bankruptcy risks, reduced debt costs, and minimal transaction expenses. As a result, larger firms have better access to debt markets, making cash financing a more viable option. Additionally, large firms often prefer cash financing for smaller deals due to its simplicity, provided they have adequate debt capacity or liquid assets. Cash use also helps avoid substantial costs, such as obtaining shareholder approval for preemptive rights exemptions, stock authorizations, and the regulatory expenses tied to stock offers (Faccio and Masulis, 2005). In their study, asset size is measured by the natural logarithm of the book value of total assets at the year-end preceding the bid.

7. Stock Market Performance and Method of Payment

Stock market performance plays a significant role in determining the payment method in corporate M&As. Studies by Brealey et al. (1976), Teggart (1977), Marsh (1982), and Choe et al. (1993) suggest that as economic activity increases and share prices rise, target shareholders tend to favor share exchanges over cash payments. Moore (1980) found that during the expansionary phases of business cycles, share exchanges are chosen more often than cash offers for corporate investments.

Martin (1996) explored the link between stock market performance and payment methods in M&As, using the S&P 500 index as a performance measure. His research found that only stock market performance, measured through the S&P 500, was significantly and positively

linked to the choice of share exchanges. Similarly, Vasconcellos and Kish (1998) observed that firms with higher share prices are more likely to acquire foreign companies with relatively lower share prices. In a booming stock market, potential acquirers' shares appear more attractive than cash, further associating share exchange with strong stock market performance. To assess acquirer share performance, researchers often use the market value per share ratio. A higher ratio reflects good stock market performance, making share exchanges more appealing than cash.

Zang analyzed M&A transactions in the UK during the 1990s, providing empirical support for the hypothesis that better acquirer stock performance increases the likelihood of share exchanges. The study found significant differences in cash offers compared to other payment methods based on the market-to-book ratio, with higher ratios indicating stronger acquirer share performance. This made shares more attractive to target shareholders as a payment medium. Logistic regression results further revealed that higher acquirer market-to-book ratios increased the probability of mixed or share exchanges over cash offers. Overall, the findings strongly support the hypothesis that robust acquirer stock performance makes share exchange the preferred payment method in M&As.

8. Investment Opportunities and Payment Methods

It is proposed that bidders with greater investment opportunities are more likely to opt for stock financing. The foundation of the investment opportunity theory lies in Myers' (1977) study, which highlights an inverse relationship between a firm's borrowing and its investment opportunities. When firms take on risky debt, future investment gains often benefit existing creditors. As a result, high-growth bidders avoid borrowing to reduce debt holders' influence and monitoring. Myers' (1977) findings are applicable in the context of mergers, where a merger represents a large, uncertain investment. The financing method affects managers' flexibility to pursue future investment opportunities, leading firms with strong investment prospects to favor stock payments. These firms also tend to invest more post-merger compared to those that use cash.

Martin (1996) tested the theory by using Tobin's Q, a ratio of market value to book value of assets, as a measure of investment opportunities. A higher Tobin's Q reflects strong business prospects and a well-managed firm. Martin's study confirmed that firms with high Tobin's Q prefer stock as their payment method in mergers.

Lamont (2000) found a strong correlation between planned and actual investments, emphasizing that investment plans reflect managers' beliefs about a firm's opportunities. Post-merger investments, therefore, serve as a proxy for these plans. Using this insight, Giulli examined the influence of investment opportunities on payment methods in mergers. An empirical analysis of 1,462 U.S. mergers from 1984 to 2000 revealed that merged firms using cash financing had significantly lower post-merger investments compared to those using stock financing. This finding aligns with the investment opportunity theory, suggesting that acquirers with robust internal opportunities prefer stock payments over cash.

Further analysis involving Tobin's Q revealed that its investment opportunities component is not captured in capital expenditures, reinforcing the theory. Multivariate regression results confirmed that investment opportunities, as represented by post-merger investment proxies, significantly impact the choice of payment in mergers. These findings validate the investment

opportunity theory, showing that firms with greater investment prospects tend to favor stock over cash financing in mergers.

9. Public-target Status and Method of Payment

The prediction is that bidders acquiring private and subsidiary targets are more likely to use cash financing. There are some private and subsidiary targets that are highly concentrated. It is described that the risk of losing control increases when the ownership structure of the target is highly concentrated. Thus, bidders acquiring private and subsidiary targets should be reluctant to offer stock because a stock-financed acquisition can create a large blockholder in the combined firm. Secondly, selling a private firm is often motivated by the impending retirement of the manager with the highest ownership stake. These managers are more likely to prefer cash because they need cash for future consumption (Faccio and Masulis, 2005). Thirdly, important motives for firms to sell their subsidiary are financial distress risk and a desire to restructure towards their core competency (Faccio and Masulis, 2005). In a stock offer, the seller remains affected by the subsidiary through the fluctuation in the stock price. Therefore, firms selling subsidiaries are more likely to prefer cash. Following Faccio and Masulis (2005), two dummy variables are used to determine the relationship between the target's public status and the payment method. The first dummy variable equals '1' if the target is a private firm or a subsidiary (private target). The second dummy variable equals '1' if the target is a subsidiary and equals '0' if the target is a private or a public firm (subsidiary target).

10. Intra-Industry and Cross-border Deals and Method of Payment

Hansen (1987) highlights that targets may hesitate to accept stock offers when they have less information about the bidder's equity value and future earnings than the bidder does, due to the contingent pricing nature of stocks. This issue of asymmetric information becomes more pronounced when the bidder and target operate in different industries. In such cases, targets are more likely to accept stock as payment when they are familiar with the risks and opportunities of the bidder's industry, which is typical in intra-industry deals (Faccio and Masulis, 2005).

The problem is further exacerbated in cross-border deals where the bidder and target are from different countries. Targets in such deals are more inclined toward cash payments due to limited knowledge of the bidder's country's risks and prospects. Additional factors such as exchange rate fluctuations, higher liquidity risk, elevated transaction costs, and restricted access to information further deter foreign shareholders (Faccio and Masulis, 2005).

To analyze these dynamics, Faccio and Masulis (2005) introduced two dummy variables. The first, labeled INTRA_INDUSTRY, equals '1' if the bidder and target are in the same industry (sharing the same 3-digit SIC code) and '0' otherwise. The second, labeled cross-border, equals '1' if the bidder and target are in different countries and '0' if they are from the same country.

Swieringa and Schauten (2007) examined a sample of 227 M&A deals involving public bidders from the Netherlands between 1996 and 2005. Their findings revealed that equity financing is more prevalent in intra-industry deals than in cross-industry deals, supporting the predictions of earlier studies.

Recent M & A's in reference to Indian Market

The following recent mergers and acquisitions (M&A) highlights in India fit the patterns mentioned in the theories above:

1. The National Company Law Appellate Tribunal (NCLAT) authorized the merger of Shriram LI Holdings with Shriram Life Insurance and Shriram GI Holdings with Shriram General Insurance. The tendency of business restructuring to increase market competitiveness is in line with this action.
2. **Axis Bank and Citibank:** For ₹11,603 crores, Axis Bank successfully acquired Citibank's consumer division in India. The emphasis on growing market share and key strengths is reflected in this deal.
3. **Reliance Retail and Ed-a-Mamma:** Reliance Retail purchased a 51 percent share in the children's and maternity clothing company Ed-a-Mamma. The increasing tendency of strategic alliances and diversification is exemplified by this transaction.
4. **Adani Enterprises and IANS:** To strengthen its position in the media industry, Adani Enterprises purchased the majority of IANS India Pvt Ltd.
5. These instances show how Indian businesses are using M&A to improve their market standing and adjust to the integration of the world economy.

II. CONCLUSION

This chapter aims to analyze the factors influencing the choice of payment methods in mergers and acquisitions (M&As) and to provide empirical insights on these choices. It identifies several variables that impact payment methods, such as taxation policy, relative size, managerial ownership, ownership structure, cash availability, information asymmetry, and signaling effects. Empirical studies on these variables encourage further research using econometric models, like the multinomial logistic model, to investigate the intricate relationship between financial variables and payment methods. This approach can help determine the most suitable payment method under specific conditions in M&A transactions. The chapter also emphasizes the importance of studying post-acquisition performance in relation to payment methods to assess whether the chosen payment method is rational and justifiable over the long term. With this foundation, the research focuses on evaluating the performance of mergers in India in both short-term and long-term contexts, taking into account the method of financing.

ACKNOWLEDGEMENTS

The Commissioner of the Department of Collegiate and Technical Education, Government of Karnataka, Bengaluru, and the Principal of GFGCW, Dharwad, are both deeply appreciated by the author for their invaluable assistance and for guaranteeing the availability of necessary resources that enabled this work.

REFERENCES

- [1] Ahmad Ismail. Determinants of the method of payment in mergers and acquisitions. *The Quarterly Review of Economics and Finance* 50 (2010) 471–484.
- [2] Auerbach A. and Reihus (1988): *The impact of taxation on mergers and acquisitions*, (University of Chicago Press, Chicago, IL).
- [3] Berkovitch E. and Narayanan M. P. (1990): “Competition and the medium of exchange in takeovers”, *Review of Financial Studies*, 3, p 153-174.
- [4] Blackburn V., Dark F. and Hanson R.(1997): “Mergers, method of payment and returns to manager- and owner controlled firms”, *Financial Review*, 32, p 569-589.
- [5] Bradley M., Desai A, and Kim H. E. (1988): “Synergistic gains from corporate acquisitions and their division between the stockholders of target and acquiring firms”, *Journal of Financial Economics*, 21, p 3-40.
- [6] Brealey R., Hodges S. and Capron D. (1976): “The return on alternative sources of finance”, *Review of Economics and Statistics*, n°58, p. 469-477.
- [7] Brown D. and Ryngaert M. (1991): “The mode of acquisition in takeovers: taxes and asymmetric information”, *Journal of Finance*, 46, p 653-659.
- [8] Choe H., Masulis R. and Nanda V. (1993): “Common stock offerings across the business cycle”, *Journal of Empirical Finance*, n°1, p. 3-31.
- [9] De S., Fedenia, M. and Triantis A. (1996): “Effects of competition on bidder returns”, *Journal of Corporate Finance*, 2, p 261-282.
- [10] DeAngelo H. and Masulis R. (1980): “Optimal capital structure under corporate and personal taxation”, *Journal of Financial Economics*, 8, p 3-29.
- [11] Eckbo E., Giammarino R. and Heinkel R. (1990): “Asymmetric Information and the Medium of Exchange in Takeovers: Theory and Tests”, *Review of Financial Studies*, 3, p 651-675.
- [12] Faccio M., McConnell J. and Stolin D. (2003): “Wealth creation for acquirers of listed and unlisted Targets”, Working Paper.
- [13] Fishman, M.J., 1989. Pre-emptive Bidding and the Role of the Medium of Exchange in Acquisitions, *Journal of Finance* 44, 41-57.
- [14] Fishman, Michael J., 1989, Preemptive bidding and the role of the medium of exchange in acquisitions, *Journal of Finance* 44, 41-57.
- [15] Franks, J., Harris, R., and Mayer, C., 1988. Means of Payment in Takeovers: Results for the United Kingdom and the United States, in Alan J. Auerbach (ed.), *Corporate Takeovers: Causes and Consequences*, University of Chicago Press, 221-258.
- [16] Ghosh, A., and Ruland, W., 1998. Managerial Ownership, the Method of Payment for Acquisitions, and Executive Job Retention, *Journal of Finance* 53, 785-798.
- [17] Gilson, Ronald J., 1986, *The Law and Finance of Corporate Acquisitions* (The Foundation Press, Inc., Mineola, NY).
- [18] Grullon, G., Michaely, R. and Swary, I., 1997. Capital Adequacy, Bank Mergers and the Medium of Payment, *Journal of Business Finance & Accounting* 24, 97-124.
- [19] Hansen, R., 1987. A theory for the choice of exchange medium in M&As. *Journal of Business* 60, 75-95
- [20] Hansen, R.G., 1987. A Theory for the Choice of Exchange Medium in M&As, *Journal of Business* 60, 75-95.
- [21] Houston, J., James, C., & Ryngaert, M. (2001). Where do merger gains come from? Bank mergers from the perspective of insiders and outsiders. *Journal of Financial Economics*, 60, 285–331.
- [22] Hovakimian, Armen, Tim Opler, and Sheridan Titman, 2001, The debt-equity choice, *Journal of Financial and Quantitative Analysis* 36, 1-25.
- [23] Huang, Y.S., and Walkling, R.A., 1987. Target Abnormal Returns Associated With Acquisition Announcements – Payment, Acquisition Form, and Managerial Resistance, *Journal of Financial Economics* 19, 329-349.
- [24] Jensen, M.C., 1987. Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers, *American Economic Review* 76, 323-349.
- [25] Lamont, Owen A., 2000, Investment plans and stock returns, *Journal of Finance* 55 (6), 2719-2745.
- [26] M. Chauhan^{1*}, R. Prajapati² and S. Rao³ (2022) A study of merger & acquisition on the performance of a firm: An evidence of Indian companies across diversified industries, *PRAYUKTI Journal of Management Applications*, ISSN 2583-1909 (Online) Volume 2, Issue 2, July 2022
- [27] Marsh, P., 1982. "The Choice Between Equity and Debt: An Empirical Study," *Journal of Finance*, 37, March, 121-144.

- [28] Martin, K.J., 1996. The Methods of Payment in Corporate Acquisitions, Investment Opportunities, and Management Ownership, *Journal of Finance* 51, 1227-1246.
- [29] Myers, S.C., 1984. "The Capital Structure Puzzle," *Journal of Finance*, 39, no. 3, July, 575-592.
- [30] Myers, S.C., and Majluf, 1984. "Corporate Financing and Investment Decisions when Firms have Information that Investors Do Not Have," *Journal of Financial Economics*, 13, 187-222.
- [31] Myers, S.C., and Majluf, N.S., 1984. Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have, *Journal of Financial Economics* 13, 187-221.
- [32] Niden, C., 1986. "The Role of Taxes in Corporate Acquisitions: Effects on Premium and Type of Consideration," University of Chicago, minieo.
- [33] Pingh shun Zhang, What Really Determines the Payment Methods in M&A Deals, ISBN Working Paper No: 0103.Social Science Research Network Electronic Paper Collection:<http://papers.ssrn.com/abstract=284770>.
- [34] Prashant Pathak, Dr. Vinod Kumar Vishwakarma, Priyank Srivastava, "An analytical study of impact of Merger & Acquisition on Financial Performance of Telecom industry in India – With reference to Vi Ltd." *International Journal of Novel research and Deveopment* , Volume 9, Issue 5 May 2024
- [35] Ritesh Patel *(2017), Pre & Post-Merger Financial Performance: An Indian Perspective, *Journal of Central Banking Theory and Practice*, 2018, 3, pp. 181-200
- [36] Stulz, R.M., 1988. Managerial Control of Voting Rights: Financing, Policies and the Market for Corporate Control, *Journal of Financial Economics* 20, 25-54.
- [37] Swieringa, J., & Schauten, M. (2008). The payment method choice in Dutch mergers and acquisitions. *ICFAI University Journal of Mergers & Acquisitions*, 5, 26–59.
- [38] Travlos, N., 1987. Corporate takeover bids, methods of payment, and bidding firms' stock returns. *Journal of Finance* 42, 943-963
- [39] Vasconcellos, G.M. and Kish, R.J., 1998. Cross-border Mergers and Acquisitions: the European – US Experience, *Journal of Multinational Financial Management* 8, 431-450.
- [40] Wansley, J., Lane, W. and Yang, H., 1983. Abnormal Returns to Acquiring Firms by Type of Acquisition and Method of Payment, *Financial Management* 12, 16-22.
- [41] Weston J, Juan S and Brian J. (2001) *Takeovers, Restructuring and Corporate Governance.*, 3rd edition, Pearson Publications, New Delhi
- [42] Zhang.P. 2003, What really determines the payment methods in M&A deals, Working paper, Manchester School of Management.
- [43] Prof.Pavithra Gowtham Ns, Dr.NayanaN, Prof.Shamantha Kumar BU,(2023) "A Study on Financial Performance Analysis of Selected Companies Pre & Post-Merger and Acquisition withReferencetoIndia", *TuijinJishu/JournalofPropulsionTechnology* ISSN:1001-4055 Vol.44No.6(2023).

ABOUT THE EDITOR



Dr. Deepika S. Joshi is a seasoned academician and thought leader in the field of Management, with over two decades of multifaceted experience across IT, HR, and strategic education. Currently serving as an Associate Professor at Amrapali University, Haldwani, she is renowned for her holistic teaching approach, combining behavioral science, emotional intelligence, and technology integration to foster impactful learning environments.

Her academic journey is anchored by a Ph.D. in Management and complemented by dual post-graduate degrees: MBA (HR) and MCA. Dr. Joshi has made significant contributions to academic leadership through various roles in top-tier institutions including Jaipuria Business School, Gitarattan International Business School, and Tecnia Institute of Advanced Studies.

An executive editor and research mentor, Dr. Joshi has successfully launched and managed academic journals like OJAS and ACME, and published extensively on emerging topics such as blockchain in business, strategic knowledge management, HR chatbots, and ICT alignment. Her publication record spans SCOPUS-indexed journals, Springer conference proceedings, and numerous peer-reviewed articles.

Dr. Joshi is a certified Six Sigma Green Belt (KPMG), a CBT Practitioner, and has undergone specialized training in Indian Knowledge Systems and entrepreneurship. She has co-authored influential books on Total Quality Management and Mergers and Acquisitions, and her self-published work Lilliputian Management Tales reflects her innovative perspective on micro-level management practices. Her editorial contribution to the upcoming book Business Policy and Strategic Management further solidifies her position as a key voice in the strategic management landscape.

A mentor to doctoral scholars and a proactive contributor to institutional development through various committees and student clubs, Dr. Joshi exemplifies academic excellence fused with strategic foresight. Her research and editorial expertise bring invaluable insights to the evolving domain of business strategy.



Selfypage Developers Pvt Ltd

ISBN: 978-93-7020-055-5



MRP Rs. 425/-