

Choice of Payment Method and Acquisition Performance: Evidence from India

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Abstract

This study explores the impact of the choice of payment method on the acquisition performance of Indian acquirers. Using a sample of 338 completed Indian acquisitions, we study how consideration structure relates to post-deal operating performance, execution speed, and international scope. We find that stock payment as a choice of method is systematically associated with strong positive sales growth, while all-cash deals are followed by weaker revenue dynamics. The return on assets supports the claim being directionally consistent but not statistically significant in all cases. The execution timelines differ sharply by consideration; cash materially accelerates completion, while stock prolongs it. Furthermore, cash is strongly positively related to cross-border acquisitions, whereas stock is negatively associated with international scope. These findings are robust across models, highlighting stock payment as a strategic tool for growth-focused but integration-heavy deals, whereas cash plays a mechanism for swift and efficiency-oriented consolidations.

Keywords

Merger and Acquisition, Acquirer performance, Cash acquisition, Stock acquisition, India

1. Introduction

Mergers and acquisitions (M&As) represent a pivotal strategy for corporate growth, enabling firms to achieve economies of scale, expand market presence, and enhance competitive advantages. The choice of payment method in acquisitions, whether cash, stock, or a combination has significant implications for both the acquirer and target firms, influencing post-acquisition performance, shareholder value, and market perceptions. Classic theories suggest that managers' choice of consideration is not innocuous: it reflects asymmetric information, market-timing incentives, and internal governance pressures that ultimately affect value creation (Jensen 1986; Travlos 1987; Amihud, Lev, & Travlos 1990).

The empirical literature offers nuanced predictions for announcement-period and long-run outcomes. Announcement effects reflect both the information revelation in the bid and the market's assessment of overpayment risk and synergy potential. Extensive evidence indicates that cash offers elicit more favorable bidder-abnormal returns than stock offers, consistent with lower adverse selection and stronger commitment (Travlos 1987; Faccio & Masulis 2005). Long-run

operating and stock performance, however, depends on integration quality, realized synergies, and deal governance. Some studies find that cash acquirers outperform, particularly when free cash flow is not excessive or is constrained by debt and monitoring (Linn & Switzer 2001; Gregory 2005; Oler 2008; Gregory & Wang 2013), while others highlight that stock deals can succeed when equity is strategically used to share risk and discipline post-deal performance (Savor & Lu 2009; Malmendier et al. 2016). The heterogeneity across target types also matters: acquisitions of private targets can exhibit different dynamics from public-target deals in both method choice and performance (Chang 1998).

Despite rich evidence from the U.S. and Europe (Betton et al. 2008; Faccio & Masulis 2005; Martynova & Renneboog 2008), far less is known about how these mechanisms operate in large emerging markets such as India; an economy with concentrated ownership, the prominent role of business groups, evolving creditor rights, deepening capital markets, and episodic merger waves (Harford 2005; Moeller et al. 2004). Institutional features in India like family control, pyramidal structures, and promoter pledging; can amplify agency frictions and affect financing choices and post-deal integration outcomes in ways that differ from dispersed-ownership environments.

This study contributes to the literature by focusing on the Indian market, which offers a unique setting to examine the relationship between payment methods and acquisition performance. The objectives of this study are threefold: first, to analyse the impact of payment method choice on the performance of Indian acquirer firms; second, to evaluate the impact of payment methods on the duration of time taken to complete the deal; and third, to further explore the role of payment choice on the likelihood of cross-border acquisition transactions. By addressing these objectives, the study aims to provide actionable insights for managers, investors, and policymakers in the Indian context, while contributing to the global discourse on M&As.

The remainder of the paper is structured as follows: Section 2 reviews the theoretical and empirical literature on payment methods and acquisition performance, with a focus on the Indian context. Section 3 outlines the data and methodology, including the sample selection, variables. Section 4 presents the econometric models and empirical results. Section 6 concludes with implications, limitations, and directions for future research.

1.1 Objectives of the study

This study investigates how an acquirer's choice of payment method- cash, stock, or mixed relates to key deal outcomes in Indian M&A. First, we examine whether payment method is systematically associated with post-acquisition performance, measured using operating and market-based metrics. Second, we analyse the link between payment method and execution speed by modelling time-to-completion from announcement to closing. Third, we test whether the payment method predicts the likelihood that a deal is cross-border, thereby illuminating how consideration structure correlates with international deal scope.

2. Literature Review and hypothesis development

2.1 Theoretical Foundations

The method of payment; cash, stock, or mixed consideration embeds key economic forces that shape value creation in mergers and acquisitions (M&A). Three canonical mechanisms dominate the merger and acquisition literature in this context. The agency theory, pioneered by Jensen (1986), provides a foundational framework for understanding payment method choices in M&As. Jensen argues that managers with access to free cash flow may pursue acquisitions to maximize their own interests, often leading to value-destroying investments. Cash-financed acquisitions, while signalling financial strength, can exacerbate agency problems if managers overpay or pursue suboptimal targets (Harford, 1999). Conversely, stock-financed deals may mitigate agency issues by aligning managerial and shareholder interests but introduce adverse selection risks, as acquirers may use overvalued stock to finance deals (Gao, 2011). Signalling theory further explains the choice of payment method. Yook (2003) suggests that cash acquisitions signal managerial confidence in the deal's value, as they involve immediate cash outflows, leading to higher abnormal returns compared to stock deals. Travlos (1987) and Amihud et al. (1990) find that stock-financed acquisitions often result in negative bidder returns due to information asymmetry, as markets interpret stock issuance as a signal of overvaluation. In contrast, cash payments reduce uncertainty and signal robust financial health (Linn & Switzer, 2001). Market timing also plays a role in payment method decisions. Vermaelen and Xu (2014) argue that firms time acquisitions to capitalize on favorable market conditions, with stock deals more prevalent when share prices are high. Martynova and Renneboog (2009) highlight that the choice between cash and stock is influenced by cost of capital and ownership dilution concerns, with cash preferred when acquirers aim to maintain control.

2.2 Payment method and Acquisition performance

The impact of payment method on acquisition performance is a central theme in the literature. Cash acquisitions are generally associated with better performance due to lower information asymmetry and signaling effects. Linn and Switzer (2001) find that cash-financed acquisitions result in superior post-combination operating performance compared to stock deals. Similarly, Yook (2003) documents larger returns to cash acquisitions, attributing this to the signaling and leverage effects. However, Oler (2008) cautions that high cash reserves may lead to overpayment, negatively affecting post-acquisition returns. Stock-financed acquisitions, on the other hand, often underperform. Savor and Lu (2009) find that stock mergers create less value for acquirers due to adverse selection and overvaluation concerns. Malmendier et al. (2016) show that target firms in failed stock-financed takeover attempts experience revaluation, suggesting that stock deals may reflect overoptimism or mispricing. Chang (1998) notes that stock-financed takeovers of private targets yield higher returns than public targets, as private firms face less market scrutiny. In India, empirical evidence suggests that cash acquisitions outperform stock deals.

In Indian context, Ladkani and Banerjee (2018) find that Indian acquirers using cash experience higher abnormal returns, driven by reduced uncertainty and signaling effects. Ramakrishnan (2008) documents better long-term operational performance for cash-financed deals, attributing this to synergies and efficient resource allocation. However, Mehrotra and Sahay (2018) highlight that Indian M&As face unique challenges, such as regulatory hurdles and governance issues, which may moderate performance outcomes. Arora (2019) highlights that cash holdings are influenced by precautionary motives and agency issues, complicating the relationship between payment method and performance. Barai and Mohanty (2012) note that Indian acquirers often use cash to signal financial strength in a market with high information asymmetry.

Stock consideration typically triggers additional approvals (shareholder votes), registration/prospectus requirements, valuation scrutiny, and potentially multi-jurisdictional disclosures, elongating execution (Officer 2007; Eckbo 2009). Cash deals rely on committed financing and face fewer securities-law steps; they are less exposed to market-window risk and investor dissent, compressing completion durations (Hansen 1987; Faccio & Masulis 2005). In the context of internationalisation of scope, payment method affects the cross-border intensity of the acquisition transaction. Cross-border equity offers home bias among target shareholders, accounting and listing incompatibilities, disclosure and legal-system distance, making cash a cleaner medium of exchange across regimes (Rossi & Volpin 2004; Erel et al. 2012; Ahern et al. 2015). Foreign target shareholders often discount bidder equity due to information, governance, and accounting distance; stock-for-stock structures also invite more complex regulatory reviews across jurisdictions (Erel et al. 2012; Ahern et al. 2015).

While the global literature provides robust insights, the Indian context remains underexplored. To further light on the role of payment mechanism on Indian M&A deal, we propose the following hypothesis.

H1: The acquisition payment method significantly affects post-deal operating performance

H2: The payment method of acquisition significantly influences deal completion time

H3: The acquisition payment method affects the likelihood of cross-border acquisitions

3. Data and methodology

3.1. Sample construction

Our sample comprises Indian mergers and acquisitions from 2000-2020 drawn from Thomson Financials' SDC Platinum. We begin with the full universe of announced deals and eliminate transactions with disclosed values under \$1 million. To isolate control acquisitions, we retain only cases in which the acquirer held less than 50% of the target's equity before the announcement and the deal was completed. We further confine the sample to acquirers that are publicly traded and listed in either BSE or NSE public stock exchange. The accounting specific data of the Indian companies are collected from CMIE Prowess database. After imposing the required restrictions, we find a total sample of 338 Indian acquirer firms.

3.2. Variables Measurement

3.2.1 Dependent Variable

Our primary performance outcomes for acquiring Indian firms are accounting-based measures of profitability are Return on Assets (ROA) and Return on Sales (ROS) consistent with prior M&A research (Li et al. 2018; Suk & Wang 2021). For each acquirer, we construct change measures around the transaction to capture post-deal operating improvement (or deterioration). ROA1 is computed as the difference in the acquirer's ROA between one year prior to

the deal and one year following the transaction. Similarly, ROA3, Sales1, and Sales3 are calculated to capture changes in performance around the deal. These “difference” specifications mitigate level heterogeneity and focus on within-firm performance shifts attributable to the acquisition.

Our second dependent variable captures deal completion time. Completion days is the number of calendar days between the public announcement date and the effective (completion) date of the transaction as reported by SDC. This duration proxies for execution frictions in the regulatory, financing, and integration planning processes surrounding the deal.

Our third outcome variable is a cross-border indicator. **Cross-border** equals 1 if the target firm is incorporated outside India (i.e., the target’s country of domicile differs from India) and 0 otherwise.

3.2.2 Independent Variable

Our key explanatory variables capture the deal’s financing structure. **All_Cash** is an indicator equal to 1 if the consideration is reported as entirely cash (i.e., 100% cash-financed) and 0 otherwise. **All_Stock** is an indicator equal to 1 if the consideration is reported as entirely equity (i.e., 100% stock-for-stock) and 0 otherwise. These binaries are mutually exclusive by construction; transactions with mixed or hybrid consideration (e.g., cash-plus-stock or inclusion of other securities) are coded as 0 on both indicators and serve as the omitted financing category in regressions. Results are robust to excluding observations with undisclosed consideration splits.

3.2.3 Control Variables

To address potential confounding influences on the performance of mergers and acquisitions, we incorporate a robust set of control variables capturing both deal-specific and acquirer-specific attributes, grounded in established scholarly literature (Harford 1999, Masulis et al. 2007 Savor & Lu 2009). The primary firm-specific control variables include firm size, leverage, return on assets (ROA), market-to-book ratio (MTB), cash-to-total assets ratio, and firm age. The deal-specific control variable is the relative deal size, calculated as the total transaction value divided by the acquirer’s market value as of the last day of the preceding financial year. Detailed definitions of these control variables are provided in Table-1.

Table-1: Variable Description

Variable	Definition / Construction
ROA1	Return on assets of the acquirer in one year before the deal and one year after the deal completed
ROA3	Average Return on assets of the acquirer in three year before the deal and three year after the deal completed
Sales1	Sales growth of the acquirer in one year before the deal and one year after the deal completed
Sales3	Average sales growth of the acquirer in three year before the deal and three year after the deal completed
Deal completion time	Calendar days from announcement date to effective (completion) date.
Cross-border dummy	1 if target is incorporated outside India; 0 otherwise.
AllCash	1 if consideration is 100% cash; 0 otherwise.
AllStock	1 if consideration is 100% equity (stock-for-stock); 0 otherwise.
Firm size	Natural log of total assets (INR).
Leverage	Total debt / Total assets.
ROA	Operating Income / Total Assets.
MTB	Market-to-book = Market capitalization / Book equity.
Cash-TA	Cash & cash equivalents / Total assets.
Firm Age	ln(1 + years since incorporation or listing).
Relative Size	Deal value / acquirer market value at prior fiscal year-end (The dollar deal values are converted to rupees as per the RBI conversion rate in the announcement)

3.3. Summary statistics

Table 1 presents the summary statistics for the key variables employed in this study, based on a sample of Indian merger and acquisition transactions from 2000 to 2020. The dataset comprises firm-specific and deal-specific

variables, with observations of 338 sample Indian acquirer firms. One-year sales and Return on Assets growth average 0.49 and 0.34, respectively, but are right-skewed with extreme tails, suggesting on average the post deal performance is positive overall in terms of both ROA and Sales. The three-year counterparts are larger on average yet markedly more volatile, indicating a minority of outsized post-integration gains. The execution speed of the deal is heterogeneous among samples, with a mean time to completion of 122 days indicating occasional protracted regulatory/financing timelines.

Variables	Obs	Mean	Std. Dev.	Min	Max	p1	p99
Sales1	332	.492	.962	-.874	6.733	-.874	6.733
Sales3	328	5.452	28.307	-.836	254.292	-.836	254.292
ROA1	335	.339	1.048	-4.12	4.685	-4.12	4.685
ROA3	331	1.748	7.337	-30.308	52.793	-30.308	52.793
Deal completion time	338	122.272	191.989	0	1609	0	1115
Firm size	338	9.943	1.904	4.032	13.99	5.582	13.755
Leverage	338	.414	.214	.015	.955	.027	.949
ROA	338	.183	.092	-.096	.44	-.008	.44
MTB	335	4.327	3.788	.25	20.71	.28	19.88
Cash-TA	338	.079	.107	0	.553	0	.541
Firm Age	338	3.354	.664	1.1	4.74	1.95	4.7
Relative deal size	338	.229	.41	.001	1.812	.001	1.812
Allstock	338	.222	.416	0	1	0	1
Allcash	338	.751	.433	0	1	0	1
crossborder	338	.388	.488	0	1	0	1

Notes: This table reports the summary statistics of the data used in our analysis. Our sample period comprises 338 sample Indian acquisition deals announced between 2000-2020 and completed. All variables are explained in Table-1.

Among the firm-specific control variables, Acquirers are sizeable, profitable, and moderately levered: $\ln(\text{assets})$ is 9.94, Return on assets is 0.18, and leverage is 0.41 (all in proportions). The table shows elevated dispersion in market valuation (MTB mean 4.33 and standard deviation is 3.79) and cash buffers that are small but right-tailed where the mean cash/TA is 0.08. On average, Firms are mature ($\ln(\text{age})$ is 3.35), and transactions are economically meaningful where relative deal size mean is 0.23. Binary variables include the all-stock dummy (allstock), with a mean of 0.222, which implies 22.2% of deals are fully stock-financed, and the all-cash dummy (allcash), with a mean of 0.751, indicating 75.1% of deals are fully cash-financed. The cross-border dummy (crossborder dummy) has a mean of 0.388, suggesting 38.8% of transactions involve an overseas target.

4. Empirical model specification and Results

4.1 Empirical model setting

This study uses OLS regression model to explore the role of choice of payment methods on acquisition performance of Indian Mergers and acquisition deals. The empirical model is constructed as follows:

$$ROA_i / \text{Sale}_i = \alpha + \beta_1 \text{AllCash}_i [\text{or } \beta_1 \text{AllStock}_i] + \gamma_1 \ln(\text{TotalAssets})_i + \gamma_2 \text{Leverage}_i + \gamma_3 \text{ROA}_i + \gamma_4 \text{MTB}_i + \gamma_5 \text{Cash/TA}_i + \gamma_6 \ln(\text{FirmAge})_i + \gamma_7 \text{RelativeDealSize}_i + \epsilon_i \quad \dots \dots \dots (1)$$

Here α is the intercept, the dependent variables are the various performance measures using ROA and Sales changes after the deal. The main independent variables are All Stock and All Cash, which are both indicator variables. The study uses a battery of control variables includes Size, Leverage, ROA, MTB, Cash-TA, Firm Age, Relative deal size and ϵ_i is the idiosyncratic error term.

To further explore the completion timing of each deal, we run the following OLS cross-sectional model in the same setting. The only change is the dependent variable, which is the completion time taken by each individual acquisition deal.

$$\text{Completion_Time}_i = \alpha + \beta_1 \text{AllCash}_i [\text{or } \beta_1 \text{AllStock}_i] + \gamma_1 \ln(\text{TotalAssets})_i + \gamma_2 \text{Leverage}_i + \gamma_3 \text{ROA}_i + \gamma_4 \text{MTB}_i + \gamma_5 \text{Cash/TA}_i + \gamma_6 \ln(\text{FirmAge})_i + \gamma_7 \text{RelativeDealSize}_i + \epsilon_i \quad \dots \dots \dots (2)$$

To study the possible link between the choice of payment method and the cross-border deal, we run a logistic regression where the main dependent variable is Cross-border dummy; an indicator variable suggesting the target is from an Indian overseas country. The key independent variables and control variables remain the same as in previous econometric models. The specification of the model is as follows:

$$\text{Cross-Border_Dummy}_i = \alpha + \beta_1 \text{AllCash}_i [\text{or } \beta_1 \text{AllStock}_i] + \gamma_1 \ln(\text{TotalAssets})_i + \gamma_2 \text{Leverage}_i + \gamma_3 \text{ROA}_i + \gamma_4 \text{MTB}_i + \gamma_5 \text{Cash/TA}_i + \gamma_6 \ln(\text{FirmAge})_i + \gamma_7 \text{RelativeDealSize}_i + \epsilon_i \dots\dots\dots(3)$$

4.2 Main Results

4.2.1 Choice of Payment method and acquisition performance

Table 3 presents the OLS estimates examining the impact of payment mode on post-deal operating performance at both short-term and long-term horizons, respectively. Columns 1 to 4 use the all-cash indicator, and Columns 5 to 8 replace it with all-stock, leaving mixed consideration as the omitted category. The dependent variables capture changes in profitability (ROA₁, ROA₃) and revenue (Sales₁, Sales₃).

Overall, the results reveal a clear performance asymmetry between cash- and stock-financed acquisitions. In Columns 1 to 4, all-cash deals exhibit significantly negative effects on both short-term and long-term sales growth, as well as a weakly negative association with ROA₁. This pattern implies that liquidity-rich acquirers may overinvest or engage in empire building, consistent with the agency/free-cash-flow view (Jensen 1986; Harford 1999; Faleye 2004). Excess internal cash, when poorly monitored, can lower post-integration efficiency (Pinkowitz et al. 2013; Lie & Liu 2018). Conversely, all-stock transactions display positive and significant coefficients for both short-term and long-term sales, while the ROA coefficients are positive in both cases but statistically weaker. These findings align with asymmetric-information and market-timing arguments (Travlos 1987; Savor & Lu 2009; Vermaelen & Xu 2014), where acquirers issue equity when valuations are high and share risk with target shareholders.

Taken together, the results suggest that payment structure systematically influences post-acquisition dynamics. Cash-financed mergers underperform in sales and show muted profitability gains, whereas stock-financed mergers record robust sales growth and modest long-run operating improvement. These findings are consistent with both international (Faccio & Masulis 2005; Linn & Switzer 2001; Lie & Liu 2018) and Indian evidence (Barai & Mohanty 2012; Ladkani & Banerjee 2018; Jindal & Seth 2019) that the means of payment captures underlying information asymmetry, financing constraints, and governance quality. The observed patterns thus highlight that in emerging markets, where monitoring intensity and liquidity governance differ from developed economies where stock consideration may serve as a credible signal of value creation, while cash financing may reflect managerial overconfidence or agency-driven overinvestment.

Table-3: Payment method and acquisition performance

VARIABLES	(1) ROA1	(2) Sales1	(3) ROA3	(4) Sales3	(5) ROA1	(6) Sales1	(7) ROA3	(8) Sales3
allcash	-0.273*	-	-1.276	-				
	(0.151)	0.524*** (0.173)	(1.018)	8.771** (4.040)				
allstock					0.167 (0.160)	0.529*** (0.195)	0.864 (1.094)	9.564** (4.379)
Firm size	-0.076* (0.040)	-0.048 (0.043)	-0.354 (0.319)	0.586 (0.951)	-0.079* (0.041)	-0.052 (0.043)	-0.368 (0.322)	0.519 (0.937)
Leverage	0.679** (0.309)	-0.110 (0.453)	6.128** (2.634)	8.763 (11.852)	0.660** (0.311)	-0.149 (0.453)	6.042** (2.600)	8.140 (11.629)
ROA	0.183 (0.950)	-1.099 (0.894)	25.143*** (8.072)	16.995 (34.704)	0.114 (0.954)	-1.199 (0.896)	24.826*** (8.031)	15.428 (34.516)
MTB	-0.002 (0.020)	0.022 (0.018)	0.251 (0.269)	2.080* (1.253)	-0.001 (0.020)	0.021 (0.018)	0.254 (0.268)	2.066 (1.250)
Cash-TA	0.023 (0.701)	-0.010 (0.400)	-0.254 (3.282)	-18.872 (15.164)	0.035 (0.702)	0.036 (0.381)	-0.179 (3.251)	-18.021 (14.902)

Firm Age	-0.102 (0.097)	-0.230** (0.106)	-0.687 (0.980)	-7.231 (5.085)	-0.105 (0.098)	-0.235** (0.107)	-0.704 (0.984)	-7.329 (5.119)
Relative deal	0.089 (0.271)	0.562** (0.230)	0.211 (1.697)	12.692* (7.650)	0.115 (0.269)	0.564** (0.229)	0.308 (1.674)	12.480* (7.512)
Constant	1.320*** (0.494)	2.181*** (0.542)	0.289 (3.038)	13.532* (8.098)	1.131** (0.475)	1.764*** (0.490)	-0.605 (2.779)	6.411 (7.927)
Observations	333	330	330	327	333	330	330	327
R-squared	0.068	0.214	0.145	0.143	0.060	0.212	0.142	0.145

Notes: Table 3 reports the impact of choice of payment method on the deal performance of Indian acquirer firms. In column 1 and 3, the dependent variables are average changes in return assets over one year and three years respectively whereas in column 2 and 4 are average sales growth difference over one year and three years respectively. Key independent variables are All Cash and All stock which both are dummy variables that takes the value of 1 if the total consideration is paid through cash and stock respectively. A battery of control variables includes both firm specific as well as deal specific variables are Firm size, Leverage, ROA, MTB, Cash-Ta, Firm Age, Relative deal. The OLS estimates using robust standard errors (reported in parentheses) and significance denoted by *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

4.2.2 Choice of payment method and deal completion time

Table 4 investigates whether the acquirer's mode of payment affects the speed of deal execution, measured as the number of calendar days between announcement and completion. Columns 1 and 2 present cross-sectional OLS estimates using all-cash and all-stock indicators separately, with mixed consideration as the reference category.

The results demonstrate a strong and economically meaningful link between payment structure and execution speed. Consistent with international evidence (Faccio & Masulis 2005; Martynova & Renneboog 2009), cash-financed acquisitions close substantially faster, by approximately 183 days on average. In contrast, stock-financed deals require about 202 days longer to complete, underscoring the additional procedural and regulatory complexities associated with equity issuance, shareholder approvals, and valuation revisions (Travlos 1987; Savor & Lu 2009). The magnitude of this asymmetry suggests that financing mode captures not only funding constraints but also information frictions and negotiation intensity between acquirer and target. Importantly, the results resonate with emerging-market evidence. In India, where stock-settled acquisitions are subject to SEBI and Companies Act disclosures, Power et al. (2022) and Jindal and Seth (2019) report longer execution windows for equity-based transactions due to mandatory shareholder approvals and valuation audits. Ladkani and Banerjee (2018) also find that information asymmetry and acquirer overvaluation slow down stock-financed deals, whereas cash transactions benefit from lower disclosure and negotiation delays.

These findings align with asymmetric information theory. When acquirers use stock, target shareholders must evaluate acquirer value and expected synergies, often leading to extended due-diligence and renegotiation phases (Gao 2011; Malmendier et al. 2016). Conversely, cash payments signal valuation confidence and reduce contractual uncertainty, expediting board and regulatory approvals (Vermaelen & Xu 2014). The evidence also supports agency-cost arguments where managers with large cash buffers prefer speedier cash transactions to minimize external scrutiny, while equity financing introduces monitoring from markets and investors that lengthens timelines (Jensen 1986; Harford 1999). Overall, the results imply that cash payments enhance transactional efficiency but may reflect managerial opportunism, while stock payments entail longer completion periods but potentially greater transparency and market discipline.

Table-4: Payment method and Deal completion time

VARIABLES	Deal completion Time	Deal completion Time
allcash	-183.102*** (32.918)	
allstock		202.447*** (36.504)
Firm Size	13.456** (6.598)	12.017* (6.383)
Leverage	71.678 (44.618)	60.378 (46.681)
ROA	72.608 (103.563)	45.349 (101.018)
MTB	-4.724** (2.250)	-5.086** (2.199)
Cash-TA	-68.321 (98.856)	-49.392 (101.934)
Firm Age	17.741 (12.300)	16.003 (12.037)
Relative deal	37.541 (27.777)	31.527 (28.816)
Constant	42.329 (79.374)	-108.943 (73.945)
Observations	335	335
R-squared	0.205	0.227

Notes: Table 4 reports the impact of choice of payment method on the completion time of Indian acquirer firms. In column 1 and 2, the dependent variable is the completion duration of the deal which is the days between the announcement and completion of the deal. Key independent variables are All Cash and All stock which both are dummy variables that takes the value of 1 if the total consideration is paid through cash and stock respectively. A battery of control variables includes both firm specific as well as deal specific variables are Firm size, Leverage, ROA, MTB, Cash-Ta, Firm Age, Relative deal. The OLS estimates using robust standard errors (reported in parentheses) and significance denoted by *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

4.2.3 Choice of payment method and likelihood of Cross-border merger acquisition

Table 5 presents the results of logistic regressions examining the impact of choice of payment on the likelihood of cross-border merger activity, with a binary dependent variable equal to one if the transaction involves a foreign target. Columns 1 and 2 include all-cash and all-stock indicators, respectively.

The results reveal a pronounced contrast between financing methods in shaping the international scope of M&A. All-cash transactions are significantly more likely to be cross-border, with a positive coefficient, whereas all-stock transactions exhibit a strong negative association. This asymmetry highlights the fundamental role of financial flexibility and information asymmetry in cross-border deal structuring. Cash-financed deals are often favored in foreign transactions because they reduce valuation uncertainty, signal bidder credibility, and mitigate exchange-rate and agency risks (Faccio & Masulis 2005; Martynova & Renneboog 2009). Conversely, equity payments are constrained by capital market regulations, valuation opacity, and shareholder-approval delays, making them less suitable for complex cross-border deals (Travlos 1987; Vermaelen & Xu 2014).

Overall, the evidence suggests that payment method not only reflects financial capacity but also conditions the strategic scope of acquisitions. Cash-rich firms are able to engage in cross-border transactions swiftly and credibly, whereas equity-financed bidders tend to focus on domestic targets where valuation transparency and institutional familiarity reduce adverse selection. In emerging markets such as India, where information asymmetry, foreign-

exchange volatility, and disclosure requirements remain high, the preference for cash in outbound deals signals both financial strength and a deliberate strategy to mitigate institutional and contractual risk.

Table-5: Payment method and Cross-border M&A		
VARIABLES	(1) Cross-Border Dummy	(2) Cross-Border Dummy
allcash	2.872*** (0.456)	
allstock		-3.943*** (0.707)
Firm Size	0.174* (0.098)	0.217** (0.097)
Leverage	-1.988** (0.865)	-1.841** (0.909)
ROA	3.737* (1.957)	4.543** (2.166)
MTB	0.003 (0.041)	0.005 (0.045)
Cash-TA	3.557** (1.387)	3.551** (1.387)
Firm Age	-0.753*** (0.233)	-0.765*** (0.240)
Relative Deal	0.246 (0.427)	0.363 (0.458)
Constant	-2.350* (1.324)	-0.123 (1.135)
Observations	335	335

Notes: Table 5 presents the logit estimates of the impact of the choice of payment method on the likelihood of cross-border acquisitions by Indian acquirer firms. In columns 1 and 2, the dependent variable is the cross-border dummy, which is an indicator variable equal to 1 if the target is from an overseas country other than India. Key independent variables are All Cash and All Stock, which are both dummy variables that take the value of 1 if the total consideration is paid through cash and stock, respectively. A battery of control variables includes both firm-specific and deal-specific variables, such as Firm size, Leverage, ROA, MTB, Cash-to-Assets, Firm Age, and Relative deal size. The Logit estimates using robust standard errors (reported in parentheses) and significance denoted by *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

5. Conclusion

This study provides robust evidence on the role of payment method in Indian M&A, revealing that cash-financed deals underperform in post-merger operating and sales growth, aligning with agency and free-cash-flow theories (Jensen 1986; Harford 1999), while stock-financed deals drive superior revenue performance, supporting asymmetric-information and market-timing views (Travlos 1987; Vermaelen & Xu 2014). Cash deals accelerate completion but dominate cross-border transactions due to reduced asymmetry and enhanced credibility (Faccio & Masulis 2005; Jindal & Seth 2019).

From a managerial perspective, these findings underscore the need to align payment choice with strategic objectives and governance quality. Managers of liquidity-rich firms should exercise restraint and ensure strong monitoring to prevent value-destroying acquisitions, whereas equity financing though slower, can enhance credibility and long-term integration success. For regulators and policymakers, the results suggest that transparent disclosure norms and effective oversight can moderate agency risks associated with cash-rich acquirers and improve acquisition efficiency.

However, this study is subject to certain limitations. The analysis focuses on listed Indian firms and does not capture private or unlisted transactions, nor post-merger integration quality or long-run market reactions and macroeconomic factors. Future research could extend this framework to compare institutional environments across emerging markets, explore the interaction between corporate governance and payment choice, and assess market-based and innovation-related outcomes of mergers over longer horizons. Overall, the findings reaffirm that in emerging economies, the method of payment serves not merely as a financing mechanism but as a strategic and governance signal, influencing both value realization and the pace of international corporate growth.

References

- Ahern, S., Daminelli, D., & Fracassi, C. (2015). Lost in translation? The effect of cultural values on mergers around the world. *Journal of Financial Economics*, 117(1), 165–189.
- Amihud, M., Lev, B., & Travlos, N. G. (1990). Corporate control and the choice of investment financing: The case of corporate acquisitions. *The Journal of Finance*, 45(2), 603–616.
- Arora, R. K. (2019). Corporate cash holdings: An empirical investigation of Indian companies. *Global Business Review*, 20(4), 1088–1106.
- Barai, P., & Mohanty, P. (2012). Predicting acquisitions in India. *Vikalpa*, 37(3), 29–50.
- Betton, S., Eckbo, B. E., & Thorburn, K. S. (2008). Corporate takeovers. *Handbook of Empirical Corporate Finance*, 2, 291–429.
- Chang, S. (1998). Takeovers of privately held targets, methods of payment, and bidder returns. *The Journal of Finance*, 53(2), 773–784.
- de Bodt, E., Cousin, J. G., & Officer, M. S. (2022). Financial constraints, ownership dilution, and the method of payment in M&A transactions. *Journal of Corporate Finance*, 75, 102250.
- Erel, B., Liao, R. C., & Weisbach, M. S. (2012). Determinants of cross-border mergers and acquisitions. *The Journal of Finance*, 67(3), 1045–1082.
- Faccio, M., & Masulis, R. W. (2005). The choice of payment method in European mergers and acquisitions. *The Journal of Finance*, 60(3), 1345–1388.
- Faleye, M. (2004). Cash and corporate control. *The Journal of Finance*, 59(5), 2041–2060.
- Gao, N. (2011). The adverse selection effect of corporate cash reserve: Evidence from acquisitions solely financed by stock. *Journal of Corporate Finance*, 17(4), 789–808.
- Gregory, A. (2005). The long-run abnormal performance of UK acquirers and the free cash flow hypothesis. *Journal of Business Finance & Accounting*, 32(5–6), 777–814.
- Gregory, A., & Wang, Y. H. (2013). Cash acquirers: Can free cash flow, debt and institutional ownership explain long-run performance? *Review of Behavioural Finance*, 5(1), 35–57.
- Hansen, R. G. (1987). A theory for the choice of exchange medium in mergers and acquisitions. *The Journal of Business*, 60(1), 75–95.
- Harford, J. (1999). Corporate cash reserves and acquisitions. *The Journal of Finance*, 54(6), 1969–1997.
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2), 323–329.
- Jensen, M. C., & Ruback, R. S. (1983). The market for corporate control: The scientific evidence. *Journal of Financial Economics*, 11(1–4), 5–50.
- Jindal, V., & Seth, R. (2019). A new order of financing investments: Evidence from acquisitions by India's listed firms. *Journal of Corporate Finance*, 58, 307–328.
- Kalcheva, I., & Lins, K. V. (2007). International evidence on cash holdings and expected managerial agency problems. *The Review of Financial Studies*, 20(4), 1087–1112.
- Ladkani, R. M., & Banerjee, A. (2018). Emerging market bidder returns and the choice of payment method in mergers and acquisitions: Evidence from India. *Journal of Emerging Market Finance*, 17(3), 386–411.
- Lie, E., & Liu, Y. (2018). Corporate cash holdings and acquisitions. *Financial Management*, 47(1), 159–173.
- Linn, S. C., & Switzer, J. A. (2001). Are cash acquisitions associated with better post-combination operating performance than stock acquisitions? *Journal of Banking & Finance*, 25(6), 1113–1138.
- Malmendier, U., Opp, M. M., & Saidi, F. (2016). Target revaluation after failed takeover attempts: Cash versus stock. *Journal of Financial Economics*, 119(1), 92–106.
- Martynova, M., & Renneboog, L. (2009). What determines the financing decision in corporate takeovers: Cost of capital, agency problems, or the means of payment? *Journal of Corporate Finance*, 15(3), 290–315.
- Masulis, R. W., Wang, C., & Xie, F. (2007). Corporate governance and acquirer returns. *The Journal of Finance*, 62(4), 1851–1889.

- Mehrotra, A., & Sahay, A. (2018). Systematic review on financial performance of mergers and acquisitions in India. *Vision*, 22(2), 211–221.
- Moeller, S. B., Schlingemann, F. P., & Stulz, R. M. (2004). Firm size and the gains from acquisitions. *Journal of Financial Economics*, 73(2), 201–228.
- Officer, J. C. (2007). Do acquisition announcement effects reflect anticipated synergy gains? *Review of Accounting Studies*, 12(4), 575–621.
- Oler, D. K. (2008). Does acquirer cash level predict post-acquisition returns? *Review of Accounting Studies*, 13(4), 479–511.
- Pinkowitz, L., Sturgess, J., & Williamson, R. (2013). Do cash stockpiles fuel cash acquisitions? *Journal of Corporate Finance*, 23, 128–149.
- Power, G. J., Rani, N., & Mandal, A. (2022). Corporate control and the choice of investment financing: The case of corporate acquisitions in India. *Review of Quantitative Finance and Accounting*, 58(1), 41–68.
- Ramakrishnan, K. (2008). Long-term post-merger performance of firms in India. *Vikalpa*, 33(2), 47–64.
- Reglero, J., Corzo Santamaría, T., & Saénz-Diez, R. (2024). Long-term effect of the form of payment in Spanish mergers and acquisitions: An event study. *Cogent Business & Management*, 11(1), 2374878.
- Rossi, S., & Volpin, P. F. (2004). Cross-country determinants of mergers and acquisitions. *Journal of Financial Economics*, 74(2), 277–304.
- Savor, P. G., & Lu, Q. (2009). Do stock mergers create value for acquirers? *The Journal of Finance*, 64(3), 1061–1097.
- Travlos, N. G. (1987). Corporate takeover bids, methods of payment, and bidding firms' stock returns. *The Journal of Finance*, 42(4), 943–963.
- Vermaelen, T., & Xu, M. (2014). Acquisition finance and market timing. *Journal of Corporate Finance*, 25, 73–91.
- Yook, K. C. (2003). Larger return to cash acquisitions: Signaling effect or leverage effect? *The Journal of Business*, 76(3), 477–498.

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