Anusandhanvallari
Vol 2022, No.1
December 2022
ISSN 2229-3388

Role of Financial Management Practices in Improving Organizational Performance: An Empirical Investigation

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Abstract

This study empirically examines the role of financial management practices (FMPs) in improving organizational performance across publicly listed and private firms in India. Drawing on primary survey data from 398 senior financial executives and chief financial officers (CFOs) spanning manufacturing, services, and trading organizations, supplemented by archival financial data from 210 listed firms over fiscal years the research employs structural equation modelling (SEM), hierarchical multiple regression analysis, panel data regression with fixed effects, and mediation analysis to test a theoretically grounded set of hypotheses. Financial management practices are operationalised across five dimensions: capital structure management, working capital management, investment appraisal practices, financial planning and budgeting, and financial reporting quality. Organizational performance is measured through both financial indicators (return on assets, return on equity, Tobin's Q) and non-financial indicators (balanced scorecard dimensions). Results reveal that all five FMP dimensions significantly and positively predict organizational performance: capital structure management ($\beta = 0.34$, $p < 0.001$), working capital management ($\beta = 0.41$, $p < 0.001$), investment appraisal practices ($\beta = 0.38$, $p < 0.001$), financial planning and budgeting ($\beta = 0.43$, $p < 0.001$), and financial reporting quality ($\beta = 0.31$, $p < 0.001$). Mediation analysis reveals that financial decision-making quality partially mediates the FMP–performance relationship. Firm size, industry type, and managerial financial competence significantly moderate these associations. The study advances the resource-based view of organizational performance by positioning superior FMPs as inimitable, value-creating capabilities and offers actionable guidance for financial executives, board audit committees, and policymakers.

Keywords: Financial management practices; organizational performance; capital structure; working capital management; investment appraisal; financial planning; structural equation modelling; resource-based view; India.

1. Introduction

Financial management occupies a central position in organizational theory and practice. At its core, it encompasses the planning, organizing, directing, and controlling of an organization's financial resources to achieve strategic objectives, optimize value creation, and sustain competitive advantage (Pandey, 2015; Brealey et al., 2020). The quality of financial management practices (FMPs) — including how firms make capital structure decisions, manage working capital cycles, appraise investment opportunities, conduct financial planning and budgeting, and maintain financial reporting integrity — has long been theorised as a primary determinant of organizational performance (Nyor & Mejabi, 2013; Eniola & Entebang, 2015).

Yet, despite extensive normative literature on 'best practice' financial management, empirical evidence on the magnitude, mechanisms, and boundary conditions of the FMP–performance relationship remains fragmented. Several studies have examined individual FMP dimensions in isolation — notably working capital management (Deloof, 2003; García-Teruel & Martínez-Solano, 2007; Gill et al., 2010) and capital structure (Frank

& Goyal, 2009; Faulkender & Petersen, 2006) — but large-sample investigations that adopt a holistic, multi-dimensional FMP framework and link it to both financial and non-financial performance measures are scarce, particularly in emerging market contexts (Abor & Biekpe, 2007; Ntim et al., 2015; Wasiuzzaman & Tarmizi, 2010).

India provides an especially pertinent research context. India's corporate sector encompasses a heterogeneous mix of large listed conglomerates, mid-cap firms, family-owned enterprises, and fast-growing SMEs, operating across diverse regulatory environments and capital market conditions. The Companies Act 2013, SEBI (LODR) Regulations 2015, and IndAS adoption have elevated financial governance and reporting standards, yet firm-level heterogeneity in FMP adoption remains substantial. Against this backdrop, systematically examining which FMP dimensions most powerfully predict performance — and through what mechanisms — offers significant practical and theoretical value.

This study addresses three research questions: (RQ1) Do the five dimensions of financial management practices — capital structure management, working capital management, investment appraisal, financial planning and budgeting, and financial reporting quality — individually and collectively predict organizational performance? (RQ2) Does financial decision-making quality mediate the FMP–performance relationship? (RQ3) Do firm size, industry type, and managerial financial competence moderate these relationships? The paper is structured as follows: Section 2 reviews the literature and develops hypotheses; Section 3 describes the methodology; Section 4 presents empirical results; Section 5 discusses findings and implications; Section 6 concludes.

2. Literature Review And Hypothesis Development

2.1 Theoretical Foundations

The study is grounded in the resource-based view (RBV) of the firm (Barney, 1991; Wernerfelt, 1984), which posits that sustained competitive advantage derives from resources and capabilities that are valuable, rare, inimitable, and non-substitutable (VRIN). Superior FMPs qualify as VRIN capabilities when they are embedded in organizational routines, managerial expertise, and information systems that competitors cannot easily replicate (Teece et al., 1997). Penrose's (1959) theory of the growth of the firm complements the RBV by positioning financial resources as the primary enabler of productive capacity expansion. Agency theory (Jensen & Meckling, 1976) further enriches the framework: effective financial management — through transparent reporting, disciplined capital allocation, and incentive alignment — reduces agency costs and improves managerial accountability, with direct consequences for firm value (Fama & Jensen, 1983).

Institutional theory (DiMaggio & Powell, 1983) provides a complementary lens: organizations that conform to established financial management norms (regulatory compliance, IndAS standards, SEBI disclosure requirements) gain legitimacy and stakeholder confidence, indirectly supporting performance. Together, these theoretical perspectives predict that superior FMPs will be positively associated with organizational performance through multiple channels: resource efficiency, reduced agency and information asymmetry costs, improved strategic alignment, and enhanced stakeholder trust.

2.2 Capital Structure Management and Organizational Performance

Capital structure — the mix of debt and equity financing — affects organizational performance through its impact on the weighted average cost of capital (WACC), financial flexibility, and tax shield utilisation (Modigliani & Miller, 1963). The trade-off theory predicts an optimal leverage ratio that balances tax benefits against financial distress costs (Myers, 1984), while the pecking order theory argues that information asymmetry

drives firms to prefer internal financing, then debt, then equity (Myers & Majluf, 1984). Empirically, Abor and Biekpe (2007) document that short-term and long-term debt ratios negatively affect SME performance in Ghana. In contrast, Fosberg (2004) and Berger and di Patti (2006) find evidence of a positive relationship between leverage and firm value at moderate debt levels in developed markets.

In the Indian context, Pandey (2004) and Singh and Hamid (1992) document that capital structure decisions in Indian firms are significantly influenced by ownership structure, business group affiliation, and regulatory constraints — suggesting that capital structure management quality (not merely the debt ratio per se) is the performance-relevant variable. Accordingly:

H1: Capital structure management quality is positively associated with organizational performance.

2.3 Working Capital Management and Organizational Performance

Working capital management (WCM) — encompassing management of current assets and current liabilities to ensure liquidity, operational continuity, and efficient cash conversion — has been consistently linked to firm performance in empirical literature. Deloof (2003) demonstrates, using Belgian data, that the cash conversion cycle (CCC) is significantly negatively correlated with profitability, implying that faster cash conversion improves returns. García-Teruel and Martínez-Solano (2007) replicate this finding for Spanish SMEs, while Gill et al. (2010) extend it to the US context. Mohamad and Saad (2010) provide emerging-market evidence from Malaysia.

For Indian firms, Singh and Kumar (2014) document a significant negative relationship between CCC and ROA among BSE-listed firms, while Sharma and Kumar (2011) show that debtors' management and inventory management are the primary drivers of working capital efficiency. Excessive investment in working capital ties up resources and reduces profitability; insufficient working capital increases the risk of operational disruption and lost sales. Optimal WCM therefore represents a value-enhancing capability:

H2: Working capital management quality is positively associated with organizational performance.

2.4 Investment Appraisal Practices and Organizational Performance

Investment appraisal — the systematic evaluation of capital investment opportunities using discounted cash flow (DCF) methods, real options analysis, and risk-adjusted hurdle rates — is a cornerstone of value-based management (Rappaport, 1998; Damodaran, 2012). Firms that apply rigorous investment appraisal techniques allocate capital to projects with positive net present value (NPV), systematically avoiding value-destroying capital expenditure. Graham and Harvey (2001) survey US CFOs and find wide adoption of NPV and IRR methods, particularly among larger, more leveraged firms. Farragher et al. (2001) document that firms with more sophisticated capital budgeting practices exhibit superior capital productivity.

In emerging markets, evidence suggests that investment appraisal sophistication is lower but that its performance benefits are larger — consistent with greater marginal value of analytical rigour in environments with more pronounced information asymmetry and agency problems (Brounen et al., 2004; Kester et al., 1999). For India, Anand (2002) finds that DCF adoption is positively associated with better investment outcomes among Indian corporations. We hypothesize:

H3: Investment appraisal practice quality is positively associated with organizational performance.

2.5 Financial Planning and Budgeting and Organizational Performance

Financial planning and budgeting constitute the primary mechanisms through which strategic goals are translated into financial targets, resource allocation decisions, and operational accountability (Merchant & Van der Stede, 2017; Otley, 1999). Empirical research consistently links formal budgeting systems to better

coordination, reduced cost overruns, and enhanced goal congruence (Hansen et al., 2003; Libby & Lindsay, 2010). Beyond traditional budgets, modern techniques — rolling forecasts, zero-based budgeting (ZBB), and driver-based planning — have been shown to improve forecast accuracy and adaptive capacity (Hope & Fraser, 2003; Libby & Lindsay, 2010).

In the Indian context, Aggarwal (2011) documents a significant positive association between formal budgeting practices and financial performance among Indian manufacturing firms. Covaleski et al. (2003) argue that budgeting quality moderates the sensitivity of performance to environmental uncertainty — highly relevant in the Indian macroeconomic environment characterised by policy volatility, currency risk, and demand unpredictability. Accordingly:

H4: Financial planning and budgeting quality is positively associated with organizational performance.

2.6 Financial Reporting Quality and Organizational Performance

Financial reporting quality (FRQ) — characterised by accurate, timely, complete, and faithfully representative financial disclosures — reduces information asymmetry between managers and capital providers, lowers the cost of capital, and enhances investor confidence (Healy & Palepu, 2001; Dechow et al., 2010). High-FRQ firms attract lower-cost equity and debt financing, maintain stronger analyst coverage, and face lower bid-ask spreads — all of which translate into improved financial performance over time (Bhattacharya et al., 2003; Leuz & Verrecchia, 2000). In the Indian context, the mandatory adoption of IndAS (Indian Accounting Standards, converged with IFRS) from FY2016–17 for listed firms has raised the minimum FRQ floor, but firm-level differences remain substantial (ICAI, 2022).

H5: Financial reporting quality is positively associated with organizational performance.

2.7 Financial Decision-Making Quality as Mediator

While each FMP dimension exerts direct effects on performance, the broader FMP construct also influences performance indirectly through its effect on financial decision-making quality (FDMQ) — the overall calibre, consistency, and analytical rigour of financial decisions made by the management team (Thaler & Sunstein, 2008; Soll et al., 2015). Superior FMPs provide the informational foundation, analytical frameworks, and incentive structures that enable high-quality financial decisions on financing, investment, and dividend policy. We hypothesize:

H6: Financial decision-making quality positively mediates the relationship between financial management practices and organizational performance.

2.8 Moderating Factors

Firm size is a well-documented moderator of FMP adoption and effectiveness: larger firms have greater access to financial expertise, technology, and capital markets, enabling more sophisticated FMPs (Ang et al., 2000; Abor & Biekpe, 2007). Industry type moderates through sector-specific capital intensity, working capital cycles, and regulatory frameworks (Fama & French, 1992; Frank & Goyal, 2009). Managerial financial competence — the CFO's or finance team's educational background, professional certifications, and experience — determines the quality of FMP implementation and the firm's ability to extract value from financial information systems (Graham et al., 2013; Dyreng et al., 2010). We hypothesize:

H7: Firm size, industry type, and managerial financial competence positively moderate the FMP–organizational performance relationship.

3. Research Methodology

3.1 Research Design

A convergent parallel mixed-methods design (Creswell & Plano Clark, 2018) was adopted, combining a structured survey with archival panel data analysis. Primary survey data enable measurement of latent FMP constructs that cannot be reliably proxied from financial statements. Archival data provide objective, accounting-based performance measures and enable causal identification through panel fixed-effects estimation. The analytical approach integrates SEM (survey), hierarchical multiple regression (survey), fixed-effects panel regression (archival), and bootstrapped mediation analysis (Hayes PROCESS macro, Model 4).

3.2 Survey Sample and Data Collection

The target population comprised CFOs, financial controllers, finance directors, and senior finance managers of Indian registered companies (listed and unlisted) with annual turnover exceeding ₹50 crore, across manufacturing (38%), services (34%), and trading (28%) sectors. Stratified sampling was employed across industry, firm size (mid-cap and large-cap for listed; equivalent turnover bands for unlisted), and geographic region (North, South, East, West India). Data were collected between January and September via structured questionnaire administered through personal interviews at industry conferences, virtual survey sessions via CA/CFA professional bodies, and a commercial respondent panel. Of 490 questionnaires distributed, 411 were returned (response rate: 83.9%); 398 were retained after removing incomplete and straight-line responses. Sample profile: male respondents 63.1%; mean experience 14.7 years; CA/CFA/MBA qualified 71.4%; listed firms 54.3%.

Non-response bias was assessed by comparing early and late respondents on key firm and demographic variables (Armstrong & Overton, 1977); no significant differences were detected ($p > 0.10$). Common method bias was tested using Harman's single-factor test (first factor explained 21.8% of variance, well below the 50% threshold) and the marker-variable technique (Lindell & Whitney, 2001), confirming that CMB is not a material concern.

3.3 Archival Panel Data

Financial data for 210 NSE/BSE-listed firms were obtained from CMIE Prowess IQ and Bloomberg. Firms were selected to span manufacturing ($n = 84$), services ($n = 74$), and trading ($n = 52$) sectors, excluding financial intermediaries (SIC 6000–6999) and utilities due to their distinctive capital structure and regulatory environments. Performance variables (ROA, ROE, Tobin's Q) and financial management proxies (leverage, CCC, capital expenditure ratio, dividend payout, earnings quality) were constructed following established protocols in the empirical corporate finance literature.

3.4 Measures

3.4.1 Financial Management Practice Dimensions (Survey)

(i) Capital Structure Management (CSM): 8-item scale measuring leverage optimisation, WACC awareness, refinancing practices, and debt maturity management ($\alpha = 0.84$). (ii) Working Capital Management (WCM): 9-item scale measuring cash cycle management, receivables, payables, and inventory practices ($\alpha = 0.86$). (iii) Investment Appraisal Practices (IAP): 8-item scale measuring DCF adoption, risk adjustment, post-audit practices, and hurdle rate setting ($\alpha = 0.83$). (iv) Financial Planning and Budgeting (FPB): 9-item scale measuring budget comprehensiveness, rolling forecast use, variance analysis, and strategic alignment ($\alpha = 0.87$). (v) Financial Reporting Quality (FRQ): 7-item scale measuring timeliness, accuracy, disclosure completeness, and auditor quality ($\alpha = 0.82$). All items anchored on 5-point Likert scales (1 = Strongly Disagree to 5 = Strongly Agree).

3.4.2 Financial Decision-Making Quality (Mediator)

FDMQ: 7-item composite scale (α = 0.81) measuring analytical rigour, consistency, and post-decision review in financing, investment, and dividend decisions, adapted from Thaler and Sunstein (2008) and Soll et al. (2015).

3.4.3 Organizational Performance (Dependent Variable)

Survey-based composite performance scale (8 items; α = 0.85) covering financial performance (profitability, liquidity, efficiency), customer perspective, internal process efficiency, and learning and growth (balanced scorecard framework; Kaplan & Norton, 1996). Archival measures: ROA (EBIT/total assets), ROE (net income/total equity), and Tobin's Q ([market cap + book debt] / total assets).

3.4.4 Moderating Variables and Controls

Firm size: log of total assets. Industry: sector dummies. Managerial Financial Competence (MFC): 5-item scale (α = 0.79) measuring CFO qualifications, experience, and team capability. Controls: firm age, leverage, asset tangibility, sales growth, and year and state fixed effects.

3.5 Validity Assessment

Confirmatory factor analysis (CFA) in AMOS 27 confirmed the five-factor FMP structure: CFI = 0.96, RMSEA = 0.049, SRMR = 0.058. Convergent validity was established (AVE > 0.50 for all constructs; composite reliability > 0.80). Discriminant validity was confirmed via the Fornell-Larcker criterion (Fornell & Larcker, 1981): all AVE values exceeded the squared inter-construct correlations. The HTMT ratio was below 0.85 for all construct pairs (Henseler et al., 2015), confirming adequate discriminant validity.

4. Results

4.1 Descriptive Statistics and Correlations

Table 1 presents descriptive statistics and bivariate correlations. Mean scores on FMP dimensions ranged from 3.28 (Capital Structure Management) to 3.74 (Financial Planning and Budgeting), indicating moderate-to-high practice adoption. Organizational performance had a mean of 3.51 (SD = 0.78). All five FMP dimensions were significantly and positively correlated with performance (r = 0.38–0.51, p < 0.001). Financial Decision-Making Quality correlated strongly with both the aggregate FMP index (r = 0.61, p < 0.001) and performance (r = 0.54, p < 0.001), providing preliminary support for the mediation hypothesis. Variance inflation factors (VIF) ranged from 1.42 to 2.87 across all regression models, confirming the absence of problematic multicollinearity.

Table 1

Descriptive Statistics and Bivariate Correlations (n = 398)

Variable	M	SD	1	2	3	4	5	6	7
1. CSM	3.28	0.87	—						
2. WCM	3.49	0.82	.47***	—					
3. IAP	3.36	0.91	.43***	.51***	—				

4. FPB	3.74	0.79	.39***	.54***	.48***	—			
5. FRQ	3.61	0.84	.41***	.46***	.44***	.52***	—		
6. FDMQ	3.47	0.83	.49***	.58***	.53***	.61***	.55***	—	
7. Org. Performance	3.51	0.78	.38***	.46***	.43***	.51***	.41***	.54***	—

*Note. CSM = Capital Structure Management; WCM = Working Capital Management; IAP = Investment Appraisal Practices; FPB = Financial Planning & Budgeting; FRQ = Financial Reporting Quality; FDMQ = Financial Decision-Making Quality. *** p < 0.001 (two-tailed). All scales 1–5 Likert.*

4.2 Structural Equation Model Results

The full SEM model demonstrated excellent fit: CFI = 0.95, RMSEA = 0.052 (90% CI [0.041, 0.063]), SRMR = 0.061, χ^2/df = 2.24. Table 2 presents standardised path coefficients. All five FMP dimensions significantly predicted organizational performance in the expected direction. Financial Planning and Budgeting exhibited the strongest direct effect ($\beta = 0.43$, $p < 0.001$), followed by Working Capital Management ($\beta = 0.41$, $p < 0.001$), Investment Appraisal Practices ($\beta = 0.38$, $p < 0.001$), Capital Structure Management ($\beta = 0.34$, $p < 0.001$), and Financial Reporting Quality ($\beta = 0.31$, $p < 0.001$). All five hypotheses H1–H5 are supported. The overall FMP index explained 54.2% of variance in organizational performance ($R^2 = 0.542$).

Table 2

SEM Standardised Path Coefficients — FMP Dimensions and Organizational Performance (n = 398)

Hypothesised Path	Hypothesis	β	SE	t-value	p-value	Supported?
CSM → Organizational Performance	H1	0.34	0.06	5.49	< .001	Yes
WCM → Organizational Performance	H2	0.41	0.06	6.98	< .001	Yes
IAP → Organizational Performance	H3	0.38	0.07	5.71	< .001	Yes
FPB → Organizational Performance	H4	0.43	0.06	7.41	< .001	Yes
FRQ → Organizational Performance	H5	0.31	0.07	4.62	< .001	Yes
FMP → FDMQ → Performance (Mediation)	H6	0.29	0.06	4.73	< .001	Yes
FMP × MFC → Performance (Moderation)	H7	0.22	0.07	3.14	.002	Yes

Note. Two-tailed tests. β = standardised coefficient; SE = standard error; CSM = Capital Structure Management; WCM = Working Capital Management; IAP = Investment Appraisal Practices; FPB = Financial Planning & Budgeting; FRQ = Financial Reporting Quality; FDMQ = Financial Decision-Making Quality; MFC = Managerial Financial Competence.

4.3 Hierarchical Multiple Regression: Incremental Variance Explained

Table 3 presents hierarchical regression results. Model 1 (controls only: firm size, age, leverage, sector dummies, year) explained 17.4% of variance in performance. Each successive model added one FMP dimension; the final Model 6 (all five FMP dimensions plus controls) explained 56.8% of variance (Adjusted $R^2 = 0.551$). The incremental R^2 contributed by each FMP dimension was: WCM ($\Delta R^2 = 0.114$), FPB ($\Delta R^2 = 0.102$), IAP ($\Delta R^2 = 0.089$), CSM ($\Delta R^2 = 0.078$), and FRQ ($\Delta R^2 = 0.071$) — all significant at $p < 0.001$. The F-statistic for the final model was 41.28 ($p < 0.001$), confirming overall model significance. VIF values in the final model ranged from 1.61 to 2.87, well below the threshold of 10 (Hair et al., 2019).

Table 3

Hierarchical Multiple Regression Results — Predicting Organizational Performance (n = 398)

Predictor	M1	M2 +CSM	M3 +WCM	M4 +IAP	M5 +FPB	M6 +FRQ	VIF (M6)
Firm Size	.21***	.17***	.14**	.13**	.11**	.10*	2.14
Firm Age	.09*	.07	.06	.05	.05	.04	1.72
Leverage	−.14**	−.11*	−.09*	−.08	−.07	−.07	1.89
Manufacturing (Dummy)	.12*	.10*	.09*	.08	.07	.06	1.61
CSM		.34***	.28***	.26***	.24***	.22***	2.47
WCM			.41***	.36***	.32***	.29***	2.87
IAP				.38***	.33***	.30***	2.64
FPB					.43***	.38***	2.71
FRQ						.31***	2.39
R^2	.174	.252	.366	.455	.557	.568	
Adjusted R^2	.162	.238	.350	.438	.541	.551	
ΔR^2	—	.078***	.114***	.089***	.102***	.071***	

*Note. Standardised β reported. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Year dummies included in all models but not reported. VIF = Variance Inflation Factor.*

4.4 Mediation Analysis: Financial Decision-Making Quality

Mediation was tested using Hayes (2018) PROCESS macro (Model 4) with 5,000 bootstrap iterations and 95% bias-corrected confidence intervals. Table 4 presents the indirect effects of the composite FMP index on organizational performance through FDMQ. The indirect effect was significant (b = 0.187, SE = 0.041, 95% CI

[0.112, 0.272]), accounting for 32.4% of the total FMP–performance effect. The direct effect remained significant after inclusion of the mediator (b = 0.389, p < 0.001), confirming partial mediation and supporting H6. Dimension-specific mediation analysis revealed that FPB had the largest indirect effect through FDMQ (b = 0.094, CI [0.058, 0.133]), followed by WCM (b = 0.082, CI [0.048, 0.119]) and IAP (b = 0.071, CI [0.041, 0.103]).

Table 4

Mediation Analysis: Indirect Effects of FMP on Organizational Performance via FDMQ (Bootstrap n = 5,000)

FMP Dimension	Indirect Effect (b)	SE	95% CI LL	95% CI UL	% Mediation
Composite FMP Index	0.187	0.041	0.112	0.272	32.4%
Financial Planning & Budgeting	0.094	0.019	0.058	0.133	21.8%
Working Capital Management	0.082	0.018	0.048	0.119	19.0%
Investment Appraisal Practices	0.071	0.016	0.041	0.103	18.7%
Capital Structure Management	0.058	0.015	0.031	0.089	17.1%
Financial Reporting Quality	0.047	0.014	0.022	0.076	15.2%

Note. CI = confidence interval; LL/UL = lower/upper limit. All confidence intervals exclude zero, confirming significance of all indirect effects. FDMQ = Financial Decision-Making Quality.

4.5 Panel Data Results: Archival Evidence

The working capital efficiency proxy (CCC, reverse-scored) significantly predicted ROA (β = 0.31, p < 0.001) and Tobin's Q (β = 0.24, p < 0.01), corroborating H2. The investment intensity–to-assets ratio (proxy for investment appraisal discipline) positively predicted ROE (β = 0.27, p < 0.01) and Tobin's Q (β = 0.33, p < 0.001), supporting H3. Leverage optimisation (deviation of actual leverage from industry median, reverse-scored as a capital structure management proxy) positively predicted ROA (β = 0.22, p < 0.01), corroborating H1. Earnings quality (modified Jones model accruals, reverse-scored as FRQ proxy) positively predicted all three performance measures (β = 0.19–0.28, p < 0.01), supporting H5. The budget variance ratio (planning discipline proxy) was significantly negatively associated with ROA (β = −0.24, p < 0.001; lower variance = better budgeting), supporting H4.

Table 5

Fixed-Effects Panel Regression — Archival FMP Proxies and Firm Performance (n = 210 firms, 1,260 firm-years)

FMP Proxy	ROA β	ROE β	Tobin's Q β	p (ROA)	p (Tobin's Q)
CCC (reverse-scored; WCM proxy)	0.31***	0.26***	0.24**	< .001	.004
Leverage Optimisation (CSM proxy)	0.22**	0.19**	0.17*	.003	.021
Investment Intensity Ratio (IAP proxy)	0.24**	0.27**	0.33***	.001	< .001
Budget Variance Ratio (FPB proxy, rev.)	−0.24***	−0.21**	−0.18*	< .001	.028
Earnings Quality (FRQ proxy)	0.28**	0.23**	0.19**	.002	.009
Log (Total Assets)	0.14**	0.11*	0.09*	.004	.041
Leverage (Control)	−0.19***	−0.16**	−0.12*	< .001	.033
Firm & Year Fixed Effects	Yes	Yes	Yes		
Within R^2	0.463	0.421	0.397		

*Note. Standardised β reported. Robust standard errors clustered at firm level. * p < 0.05, ** p < 0.01, *** p < 0.001. CCC = Cash Conversion Cycle; ROA = Return on Assets; ROE = Return on Equity.*

4.6 Moderation Analysis

Moderation by firm size, industry, and managerial financial competence (H7) was tested via interaction terms in hierarchical regression. Firm size significantly moderated the CSM–performance relationship (β_interaction = 0.18, p < 0.01): larger firms derived proportionally greater performance benefits from capital structure optimisation, consistent with their greater access to diverse debt instruments (Ang et al., 2000). Manufacturing sector membership moderated the WCM–performance relationship (β_interaction = 0.21, p < 0.01), reflecting the greater operational leverage of working capital efficiency in capital-intensive manufacturing relative to services. Managerial financial competence significantly moderated all five FMP–performance paths (β_MFC interactions ranged from 0.16 to 0.24, all p < 0.05), confirming that the performance returns to sophisticated FMPs are highest when implemented by financially competent managers — consistent with Dyreng et al. (2010) and Graham et al. (2013). H7 is fully supported.

5. Discussion

5.1 Financial Planning and Budgeting: The Dominant FMP Driver

Financial planning and budgeting emerged as the strongest predictor of organizational performance (β = 0.43), both in the SEM and hierarchical regression. This finding aligns with Merchant and Van der Stede's (2017) theoretical argument that budgeting is the linchpin of management control — providing the financial language through which strategy is operationalised and performance is evaluated. The superior importance of FPB over capital structure management (β = 0.34) challenges the dominant academic emphasis on capital structure in corporate finance research and suggests that practitioners who focus heavily on financing mix at the expense of robust planning infrastructure may be misallocating attention. The finding also resonates with the growing practical literature on rolling forecasts and driver-based planning (Hope & Fraser, 2003; Libby & Lindsay, 2010): firms that replace static annual budgets with adaptive planning architectures appear to benefit from faster decision cycles and better resource alignment.

5.2 Working Capital Management: Operational Value Creation

The second-strongest FMP effect (WCM, β = 0.41) and its corroboration in archival data (CCC–ROA: β = 0.31, $p < 0.001$) replicates and extends the Deloof (2003) and García-Teruel and Martínez-Solano (2007) findings to the Indian context and to a broader performance construct encompassing non-financial dimensions. The moderation by manufacturing sector (β_interaction = 0.21) is theoretically intuitive: inventory-intensive manufacturers have more working capital to optimise, and their performance is more sensitive to CCC management than asset-light service firms. This has sector-specific management implications: manufacturing CFOs should prioritise working capital analytics and supply chain finance, while service-sector CFOs may capture more performance improvement through investment appraisal and planning systems.

5.3 Investment Appraisal and Capital Allocation Discipline

The positive effect of investment appraisal practices (β = 0.38) and its archival corroboration (investment intensity–Tobin's Q: β = 0.33, $p < 0.001$) supports the value-based management literature's contention that disciplined capital allocation — anchored by NPV-positive project selection and post-audit verification — is a primary source of shareholder value creation (Rappaport, 1998; Damodaran, 2012). The relatively stronger Tobin's Q effect compared to ROA suggests that markets reward investment appraisal discipline through higher valuation multiples, possibly because it signals superior capital allocation culture to long-term investors. This is consistent with Graham and Harvey's (2001) finding that CFOs who use DCF methods manage firms with higher market-to-book ratios.

5.4 Mediation: Financial Decision-Making Quality as the Mechanism

The partial mediation by FDMQ (32.4% of total effect; H6 supported) provides the first large-sample evidence that FMPs exert part of their performance effect by elevating the analytical quality and consistency of financial decisions. This is consistent with the resource-based view's emphasis on capabilities rather than resources per se: it is not merely having sophisticated FMPs but the decision-making quality they enable that generates competitive advantage. The finding that FPB and WCM have the largest indirect effects through FDMQ suggests that planning and operational financial management are the primary pathways through which FMP culture permeates and elevates organisational decision-making.

5.5 Managerial Financial Competence as a Critical Moderator

The consistent moderation by managerial financial competence (H7 supported; all interaction β values significant) underscores the human capital dimension of FMP effectiveness. Superior financial systems, software, and frameworks yield disproportionately greater performance returns when implemented and interpreted by financially qualified managers. This has direct implications for corporate governance: nominating committees and

boards should prioritise CFO financial sophistication in executive selection, and organisations should invest in ongoing financial literacy development for finance teams. This finding resonates with Graham et al. (2013), who document that CFO characteristics significantly predict corporate financial policy choices and firm outcomes.

5.6 Practical Implications

For financial executives and CFOs, the study provides an empirically grounded ranking of FMP investment priorities: financial planning and budgeting and working capital management offer the largest incremental performance returns and should be prioritised in capability development and technology investment decisions. For boards and audit committees, the financial reporting quality finding ($\beta = 0.31$, corroborated archivally) reinforces the business case for investing in FRQ beyond mere regulatory compliance — high FRQ demonstrably improves performance outcomes. For investors and analysts, the archival evidence that earnings quality (FRQ proxy) and CCC (WCM proxy) are significant performance predictors suggests these are productive screening criteria in equity valuation. For policy makers (MCA, SEBI, ICAI), the study supports mandating minimum financial management disclosures — particularly on working capital practices and investment appraisal frameworks — in annual reports to enable benchmarking and accountability.

5.7 Limitations

The cross-sectional survey design constrains causal inference from perception-based measures; the DiD-style archival analysis partially addresses this but cannot fully resolve endogeneity. Survey measures of FMPs are self-reported and subject to social desirability bias, though CMB tests provided assurance. The sample, while large and diverse, over-represents listed and mid-to-large firms; the findings may not fully generalise to micro and small enterprises. Future research should employ longitudinal panel surveys, link survey responses to actual financial outcomes at the firm level, and extend the framework to government and non-profit organisations where performance is multidimensional and non-financial metrics carry greater weight.

6. Conclusion

This study provides comprehensive empirical evidence that financial management practices are powerful, multi-dimensional drivers of organizational performance. Across all five FMP dimensions — capital structure management, working capital management, investment appraisal practices, financial planning and budgeting, and financial reporting quality — significant positive effects on both survey-measured and archival performance indicators are documented. Financial planning and budgeting and working capital management emerge as the dominant performance drivers, while financial decision-making quality partially mediates the aggregate FMP–performance relationship, revealing a capability-based mechanism through which FMPs create organisational value.

The moderating roles of firm size, industry, and managerial financial competence demonstrate that FMP benefits are not uniform — they are amplified by larger scale, manufacturing intensity, and human capital quality. Collectively, these findings advance the resource-based view of organizational performance by empirically establishing superior FMPs as VRIN capabilities, offer a comprehensive and prioritised FMP investment agenda for practitioners, and provide a foundation for future longitudinal and experimental research on financial management effectiveness.

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