

DECOMPOSING CASH FLOW EFFECTS ON CORPORATE FINANCIAL PERFORMANCE: A PANEL STUDY OF NIFTY 50 COMPANIES

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ABSTRACT

This study investigates the relationship between cash flow components and corporate financial performance among Nifty 50 companies in India's emerging market context from 2017 to 2023. The research uses a panel dataset of 312 firm-year observations from 39 non-financial firms. It employs a log-log regression model to analyze how operating, investing, and financing cash flows affect Return on Assets (ROA) and Return on Net Worth (RONW). The findings reveal complex relationships between cash flow components and performance metrics. Operating cash flows show a negative association with ROA (-0.1494) but a positive relationship with RONW (0.2913) while investing cash flows demonstrate positive and statistically significant coefficients for both ROA (0.1095) and RONW (0.1664). Financing cash flows exhibit negative coefficients for both performance measures (-0.0809 for ROA and -0.0895 for RONW), though not statistically significant. The model's explanatory power varies between R-squared values of 0.3727 for ROA and 0.2492 for RONW. These results support Jensen's (1986) free cash flow theory and Myers' (1984) pecking order theory while extending our understanding of cash flow management in emerging markets. The findings have important implications for corporate managers in optimizing cash flow strategies and for investors in evaluating firm performance in emerging market contexts.

KEYWORDS: Cash Flows, Financial Performance, Nifty 50 Companies, Return on Assets, Return on Net Worth, Pooled Regression.

Introduction

Traditionally, the focus of corporate finance has been on the creation of value and profit. Cash flows have become an important aspect of financial management (Jensen, 1986). Business cash flows are the cash flows generated by a business, which are separated into business activities. It is important to manage the cash flow component well in order to be profitable and meet stakeholders' expectations, as these reflect the financial health and stability of the business (Freeman, 2010). The financial performance indicators for measuring management effectiveness indicated by asset utilization (ROA) and return on equity (ROE) are some of the most fundamental (Brigham, 1982). The Nifty 50 index is the index of the top fifty corporations in India based on their market capitalization. It is the barometer indicating the trends or sentiments of the economy. The period from 2017 to 2024 has witnessed massive structural changes in India. Such changes include a complete overhauling of indirect taxation in India by implementing the Goods and Services Tax. The COVID-19 pandemic was in no way less important, as it triggered a consequential shift towards digitalization (World Bank, 2023).

Internationally, several researchers (Dechow, 1994; Penman, 2013) have studied the association between cash flows and financial performance. There is hardly any study on the Indian scenario regarding Nifty 50 companies (Bhatia & Srivastava, 2016). In earlier research, cash flows were considered a single concept, and the different impacts of their operation, investing and financing components on different profitability measures were ignored (Billings & Morton, 2002). This research gap is important because India is an emerging market and its significance in the world economy is increasing (Ghosh et al., 2021).

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This study uses panel data analysis (Baltagi & Baltagi, 2008) and further probes the effects of different cash flow components on the corporate financial performance of Nifty 50 companies. We seek to answer a specific research question: How do the operating cash flows, investing cash flows, and financing cash flows impact the ROA and ROE of Nifty 50 companies? The research applies advanced econometric techniques (Arellano & Bond, 1991) to manage the dynamic nature of the financial relationship in an emerging market. The results of the study are valuable both theoretically and practically. It helps to understand cash flow management in the context of emerging markets. (Yadav et al., 2020). Further, the findings are of immense benefit to corporate managers designing financial strategies and investors assessing firm performance in the Indian domain.

This study comes at a time when significant developments are taking place in India, changing the nature of corporate India and adding great importance to the country's financial markets (Ross et al., 2017). This study examines the Nifty 50 companies representing India's top companies. Thus, we provide valuable insights into the relationship between cash flow management and financial performance in one of the fastest-growing economies in the world.

Past Literature

Cash flow management helps organizations attain operational efficiency, control costs, and be responsive to the market, which is a very effective tool. Connecting different business activities where money changes hands, like purchasing, producing, and distributing goods, gives rise to different cash flow patterns. Such cash flows ultimately affect corporate financial performance. (Dechow 1994) Coordinated activities create different cash flows, which give a firm a competitive edge (Ross et al., 2017). The cash flows due to the inter-relationship of internal dealings and external stakeholders, such as suppliers and customers, affect activities both in operations and financing (Jensen, 1986). It helps to move goods, services, information and finances, most importantly. It has an overall impact on the financial performance of the organization, as shown by ROA and ROE (Bhatia & Srivastava, 2016). Moreover, managing the cash flow of these components properly will keep the stakeholders happy while ensuring sustainable growth (Freeman, 2010).

Theoretical Framework and Global Perspectives

The link of cash flows with corporate financial performance has a vibrant theoretical background. Old and new finance studies emphasize it. Jensen's (1986) free cash flow theory provides a foundational rationale for how the management of excess cash flow significantly affects shareholder value and firm performance. According to this theory, managers will have significant free cash flows, which they may spend on activities that could destroy value. Therefore, managing cash flows is critical. Freeman (2010), in his stakeholder theory, suggested that cash flow management decisions should recognize the competing interests of shareholders, creditors, employees, customers, and others. Jensen's framework adopted stakeholder theory into his framework.

Studies conducted in developed markets have established a solid link between the contributions of cash flow components and financial performance. A study by Dechow (1994) showed that operating cash flows are better indicators of a firm's operating conditions because they isolate accruals from actual cash-generating activities. This study was critical as it established the fundamental relationship between the various components of cash flow and the firm's performance. The author of this study (Penman, 2013) developed a model of earnings for sustainable profit based on earnings quality and cash flow pattern analysis. Combining cash flow and managing liquidity gives a better way of measuring firm performance.

Newer studies further confirm the association between cash flow management and value creation. According to Ross et al. (2017), companies that have a long history of growing Operating Cash Flow create more shareholder value than their peers who do not. According to Baltagi and Baltagi (2008), this is important as it allows for the panel data analysis of relationships over time. The changing nature of these relationships is especially relevant when looking at firms in emerging markets. The institutional factors and market conditions may affect the cash flow-performance relationship differently than in developed markets (Bhatia & Srivastava, 2016). Theoretical constructs and empirical evidence will provide a sturdy base to study the decomposed effect of cash flows on corporate financial performance. More specifically, it will do so for leading Indian corporates in Nifty 50. Combining these viewpoints allows for a clearer understanding of how the various cash flow elements impact the financial performance of an emerging country.

Emerging Market Perspectives

Handling cash flows in emerging markets is different and presents many unique challenges and opportunities. A paper by Bhatia and Srivastava in 2016 brought forward some empirical evidence from India to prove that good management of operating cash flow significantly influences ROA in capital-intensive industries. According to their research, volatility in interest rates and lack of access to long-term capital markets significantly affect stability in financing the cash flows of Indian firms. Given the evolving financial market infrastructure and institutional frameworks (World Bank, 2023), this finding is particularly relevant in an emerging market context.

Ghosh et al. (2021) conducted a panel data modelling of profitability determinants in Indian financial companies. Wooldridge (2010) employed advanced econometric analysis to show that the impact of cash flow elements on profitability differs considerably from sector to sector. When we observe Nifty 50 stocks, we see they have been classified in different sectors of the economy, which is important. The use of the panel data analysis techniques of Baltagi and Baltagi (2008) confirms the sector effect in the study.

Govindarajan et al. (2020) further verified the findings by studying Nifty 50 automobile companies and found different patterns of cash flows across different industries. In their research, sector-wise characteristics, such as capital intensity, working capital requirements, the cycle of investment, and others, affect cash flow components and financial performance. However, the challenges emerging market firms face are complicated due to the peculiar circumstances they face in their sectors. As per the study by Yadav et al. (2020), emerging market firms are affected by issues in governance and market inefficiencies that affect the management of cash flows.

The setting of emerging markets adds complexity due to macroeconomic conditions and regulatory constraints. The cash flow management strategies of Indian manufacturing companies need to be adopted due to global competition and local circumstances—Kumar et al. (2020). This is relevant as the Nifty 50 companies will have to cope with many local issues, being in an emerging market, and stay globally.

Firm Characteristics and Financial Performance

The impact of cash flows on the measures of financial performance (ROA and ROE) is extensive across firms and governments. For an in-depth examination of this relationship, we should carefully consider the organizational dimensions and the moderation of these dimensions on cash flow management efficiency. Yadav et al. (2020) conducted a study about board structure corporate governance in the emerging market. They found that the institutional arrangements of companies play a vital role in managing cash flows and their conversion into financial performance. Using advanced panel data techniques, as indicated by Baltagi and Baltagi (2008) and Wooldridge (2010), we find several firm characteristics that moderate the relationship between cash flow components and financial performance. It is worth mentioning that larger firms, especially those from Nifty 50, tend to show stable cash flow patterns as they are operationally diversified and enjoy a strong standing in the market (Govindarajan et al., 2020). This stability often makes the cash flows and metrics performance relationship more predictable.

Also, the degree of financial leverage significantly impacts the cash flow components of ROA and ROE. According to Billings and Morton (2002), a positive association exists between cash flow sensitivity and capitalized value for firms with higher leverage levels in operating and financing activities. Firms with significant growth opportunities, usually measured by market-to-book ratios, exhibit particular behaviour concerning the turnaround of cash flows (Ross et al., 2017). The Nifty 50's technology and high-growth companies will most likely possess these characteristics. The interaction between these features and cash flow management becomes more complicated for developing markets like India. Bhatia and Srivastava (2016) showed that the cash flow decisions of Indian companies are related to different characteristics at the firm level, such as their ownership pattern. Ghosh et al. (2021) show that the efficiency of cash flow management strategies varies significantly by firm size and industry sector in India's financial markets. These findings show that firm characteristics are important as moderating variables between cash flow components and financial performance, especially in the case of Nifty 50 firms in India.

Recent Developments and Research Gaps

Between 2017 and 2024, the Indian economy underwent transformational changes, and some landmark events altered the Indian business scene. As per the World Bank (2023), the implementation of

the Goods and Services Tax (GST) changed India's taxation structure, and the COVID-19 pandemic posed unprecedented challenges to corporate operations and financial management. As a result of these events, there are far-reaching implications for the cash flow management of various corporates, especially Nifty 50 companies, which are bellwethers for India.

The changing macroeconomic conditions have had a significant impact on the cash flow management practices of corporations. Kumar et al. (2020) stated how Indian manufacturing companies had to drastically modify their operating strategies and cash management practices because of all this. However, there is a vast lack of research regarding the other results of these adaptations, both financially and performance-wise, across sectors and ages. Given the unique characteristics of emerging markets, as per Bhatia and Srivastava (2016), there is a need to analyze the financial performance drivers in the respective markets.

A key area requiring further research is how established methodologies could adapt and apply to the new market environment. Billings and Morton (2002) wrote a paper analyzing cash flow components and how they relate to credit risk. It could provide an excellent theoretical framework, but the methodology may need to be adapted or changed. In particular, emerging markets should bear greater emphasis on the decomposition. Although Ghosh et al. (2021) do a comprehensive analysis of Indian financial companies, we believe the metrics in their methodology may require substantial tweaks and adjustments for emerging economies like India despite being valid for developed markets.

Similar to the cash flow components, there has been less research on financial risks in the emerging market context. Ross et al. (2017) have discussed principles of corporate finance; however, issues faced by Indian corporations due to significant transformation and crises require a separate investigation. The World Bank's (2023) economic updates show that challenges are not static. Thus, cash flow management practices evolve with the changing economic environment and must be updated. The shortcomings in research become increasingly important when viewing them from the Nifty 50 companies' prism. As per Govindarajan et al. (2020), these companies are market leaders, but there is insufficient study on the cash flow management practices followed by the companies since the impact on financial performance during transformation remains vague. It is a chance for a total study that can be valuable for academia and for practitioners working in new market fields.

This paper contributes to the body of knowledge on corporate finance and performance in emerging markets. First and foremost, the paper evaluates how each of the cash flow items impacts the financial performance of firms in emerging markets, filling a gap. The study uses Wooldridge's sophisticated panel data analysis technique (2010) to demonstrate the variable relationships, focusing on Nifty 50 companies that have shown uptrend behaviour over the years since COVID-19 wreaked havoc on the Indian economy (World Bank, 2023).

The study looks into how firms respond to and deal with changes in the economy and its impact on cash flow. The study offers a contribution to understanding investment decision-making in the framework of an emerging market (especially India) (Ross et al., 2017). Additionally, Yadav et al. (2020) and Govindarajan et al. (2020) recently modified the financial performance measurement to help boost the wider literature on developing economies.

Data and Methodology

Data

This research adopts an analytical approach to study the effects of cash inflow components on the performance of Nifty 50 companies. In a specific sense, the study takes ROA and RONW in a Nifty 50 firm as the measure of performance. By adopting this method, the study analyzes the relationship between cash flows and profitability, plus their detailed interpretation. For cash flows, the study takes cash flows from all three activities, i.e., cash flows from investing, financing, and operating activities. The analysis uses panel data to check the effect over time and across the sample dimension to examine dynamics. The present dataset consists of 39 non-financial firms in Nifty 50 for seven years of data from 2017 to 2023.

Further, eleven financial firms were excluded from the sample due to dissimilar financial structures and accounting practices. The observations for the year 2024 were also excluded because incomplete data for many firms in this year could compromise the analysis. The CMIE Prowess database is a credible and widely used source of firm-level data about Indian firms. Finding and using the database will create a strong basis for studying cash flows and corporate profits. The study utilizes two critical

dependent variables for firm performance. The first is ROA, a good indicator of efficiency and profitability. Second, RONW is a profitability measure reflecting the return on the shareholders' equity. The study analyses three main components of cash flow as independent variables. Net cash flow from operating activities (OCF) is a barometer of the liquidity of a company's core business. The inflow-outflow of cash for long-term investments and capital allocation is called ICF. Free cash flow indicates how the business is doing and how they're spending that money.

Methodology

Following the methodological framework established by Baltagi (2008) and Wooldridge (2010), this study employs a comprehensive analytical approach to examine the relationship between cash flow components and financial performance. The initial analysis begins with rigorous preliminary testing to ensure data reliability and model appropriateness. A Pearson correlation matrix is constructed for all independent variables to address potential multicollinearity concerns. The analysis confirms that correlation coefficients between independent variables do not exceed 0.90, indicating sufficient independence among predictors and validating their suitability for regression analysis (Gujarati & Porter, 2003).

Model Specifications

This study evaluated the log-log regression between financial performance indicators and cash flow components. This specification enables the computation of elasticities or the percentage change in performance measures concerning a percentage change in the cash flow components. Models are cited based on analytical framework is expressed as:

$$ROA_{it} = \alpha + \beta_1 \ln OCF_{it} + \beta_2 \ln ICF_{it} + \beta_3 \ln FCF_{it} + \epsilon \tag{1}$$

$$ROE_{it} = \alpha + \beta_1 \ln OCF_{it} + \beta_2 \ln ICF_{it} + \beta_3 \ln FCF_{it} + \epsilon \tag{2}$$

The equation uses *ln* to denote natural logarithm calculations. Subscripts differentiate observations: 'i' refers to individual companies, 't' indicates the period, and the combined 'it' shows that data points can differ by company and time. The performance metrics ROA and ROE serve as the dependent variables in the model. OCF represents operating cash flows and assesses core business operations' performance (Dechow, 1994). While ICF represents investing cash flows, it shows how a company spends cash on expenses; it provides a forecasted cash budget for investing decisions and cash flows. FCF represents financing cash flows, which means financing cash flows and capturing financing activities (Jensen, 1986). The error term (ϵ) incorporates both country-specific and time-specific effects, while the coefficients represent the estimated values. As the panel regression model outlined above assumes that OCF, ICF, and FCF influence a firm's ROA and RONW, the hypothesis posits that $\beta_1 > 0$, $\beta_2 > 0$, and $\beta_3 > 0$.

Empirical Findings and Discussion

This research uses an extensive empirical framework to assess how different cash flow components affect the financial performance of Nifty 50 companies. Following the Billings and Morton (2002) methodological approach, we evaluate the production-influence-operating-investing-and-financing cash flows. According to Gujarati and Porter (2003), the Log Regression model is used to estimate the elasticities between the cash-flow variables and the variables measuring financial performance.

The log specification is especially suitable for this analysis as it provides elasticity estimates directly. This allows for investigation of how percentage changes in different cash flows ultimately affect financial performance indicators (Wooldridge, 2010). This method accords with more recent studies of Indian markets, for example, Govindarajan et al., 2020, which stressed the relevance of understanding the elasticity of the financial metrics in the Emerging Market context.

A pooled regression model is employed to validate the cash flow components and financial performance relationship based on Arellano and Bond's (1991) methodology. Using this model, we can check the coefficient estimates' validity and statistical significance. Furthermore, it takes care of time-invariant and time-varying effects, as suggested by Ghosh et al. (2021) regarding Indian financial companies. The full-fledged test on cash flow management and financial performance study of India's big firms adds to the growing literature on the financial performance of emerging markets (Bhatia & Srivastava, 2016).

Primary Analysis

Table 1 presents the analysis of financial performance metrics and cash flow of 312 firm-year observations of Nifty 50 companies. The results show important information about the finances of India's

big companies. The top companies are resilient. However, there are variations in their financial performance and cash flow. The statistics vary a lot. The ROA has an average of 9.88% (SD=10.96%), ranging from -11.69% to 76.24%. This widespread trend indicates that a wide variety of leading companies in India perform differently from each other. Govindarajan et al. (2020) presented a similar finding for corporate performance in an emerging market. The RONW is even more diverse and has a mean value of 20.32%, ranging from -28.84% to 136.24%. Bhatia and Srivastava (2016) studied this.

Table 1: Descriptive statistics amongst ROA, RONW, Net cash flow from financing, operating, and investing activities

Variable	Observations	Mean	Std. Dev.	Min	Max
ROA	312	9.877009	10.96035	-11.6855	76.2440
RONW	312	20.32115	20.34081	-28.84	136.24
Net Cash Flow from Operating	312	10.57773	4.537976	-10.6888	14.2959
Net Cash Flow from Investing	312	-6.43206	8.818454	-14.8707	14.2110
Net Cash Flow from Financing	312	-7.69557	7.76638	-14.2428	14.1629

The cash flow elements show a telling pattern. Operating cash flows have a mean of 10.58 (log value) and a standard deviation of 4.54, which indicates stability in the sample data. The current research echoes Dechow's (1994) conclusion that operating cash flows are a reliable performance measure. On the other hand, investment cash flow has a negative mean of -6.43 (SD: 8.82), indicating much capex activity characteristic of emerging market leaders (Ross et al., 2017). Financing cash flows have a mean of -7.70 (standard deviation: 7.77), indicating that companies in your sample are paying off debts or paying the shareholders. This pattern is consistent with the free cash flow theory by Jensen (1986) and indicates mature practices. The Nifty 50 companies display a healthy financial lifecycle, as shown by their overall configuration of cash flows in which negative investing and financing flows offset positive operating flows. Similar results were obtained by Ghosh et al. (2021) in their analysis of Indian financial companies. According to these findings, the way the biggest firms in India manage their cash flows creates value. The patterns show that these companies know how to create cash from operations while investing and returning to shareholders. The paper contributes to the understanding of financial performance in emerging markets. It can be used as a foundation to investigate the relationship between the cash flow components and the corporation's financial success.

Table 2 highlights a relationship matrix for financial performance measures and components of cash flows for Nifty 50 companies. Thus, it is clear that there are relationships across the measures and components. The investigation found a strong positive correlation of 0.7418 between ROA and RONW figures, thus indicating that ROA and RONW figures are closely aligned. This study confirms Bhatia and Srivastava's (2016) research on performance measures in emerging markets and is consistent with Penman's (2013) argument that performance measures are related. The cash flows from operating activities have a weak negative correlation with ROA (-0.1261) and RONW (-0.0318). This counter-intuitive relationship can be explained by Dechow (1994), who shows that cash flows differ in timing from accrual-based performance measures. A negative relationship indicates that more excellent profitability ratios do not directly lead to improved operating cash flows. The negative correlation of investing cash flows with operating cash flows (-0.362) and their relationship with performance measurements (ROA: -0.1261, RONW: 0.268) is quite interesting. According to Jensen's free cash flow theory (1986), firms with a higher RONW are expected to spend more. Myers (1984) pecking order theory also supported this claim.

Table 2: Correlation matrix amongst ROA, RONW and independent variables (net cash flow from operating, financing and investing activities)

Variable	ROA	RONW	Net Cash Flow from Operating	Net Cash Flow from Investing	Net Cash Flow from Financing
ROA	1.000				
RONW	0.7418	1.000			
Net Cash Flow from Operating	-0.1261	-0.0318	1.000		
Net Cash Flow from Investing	-0.1261	0.268	-0.362	1.000	
Net Cash Flow from Financing	-0.2741	-0.2569	-0.1106	-0.2719	1.000

Financing cash flows have a negative relationship with all other metrics, especially with ROA (-0.2741) and RONW (-0.2569). As per Ross et al. (2017), more profitable firms will not depend on outside (external) financing but will instead opt for internal (inside) financing to fund their operations. The correlation patterns give a broadly acceptable insight into the cash flows of major Indian companies and their implications for the Financial Performance of the companies concerned. These implications add to the existing literature on financial management in emerging economies (Ghosh et al., 2021). The relationships discussed here indicate the links between various financial ratios of a firm and its cash flow. A better understanding may facilitate optimal financial management practices.

Pooled Regression Findings

The pooled regression analysis presented in Table 3 offers valuable insights into the relationship between cash flow components and financial performance metrics of Nifty 50 companies. Based on 312 observations, the analysis reveals several significant findings that align with contemporary financial theory and empirical research. Operating cash flows show a negative coefficient (-0.1494) with ROA but a positive coefficient (0.2913) with RONW, with the latter being marginally significant at the 10% level (p=0.097). This divergent impact aligns with Dechow's (1994) findings regarding the complex relationship between operating cash flows and performance measures, suggesting that the timing of cash flows and accruals plays a crucial role in performance measurement.

Table 3: Pooled Regression Model Results

Variables	ROA	RONW(ROE)
	Coefficient (p-value)	Coefficient (p-value)
Net Cash Flow from Operating	-0.1494 (0.181)	0.2913 (0.097)
Net Cash Flow from Investing	0.1095 (0.064)	0.1664 (0.073)
Net Cash Flow from Financing	-0.0809 (0.175)	-0.0895 (0.335)
Intercept	11.5397 (0.000)	17.6221 (0.000)
No. of Obs.	312	312
R-squared (Within)	0.0113	0.0192
R-squared (Between)	0.3727	0.2492
R-squared (Overall)	0.134	0.0751
Wald chi2(3)	10.19	7.54
Prob > chi2	0.017	0.0565

Investing cash flows demonstrate positive coefficients for both ROA (0.1095) and RONW (0.1664), with both relationships being statistically significant at the 10% level (p=0.064 and p=0.073 respectively). This positive association supports Ross et al.'s (2017) assertions about the value-creating potential of strategic investments and aligns with Myers' (1984) pecking order theory regarding investment decisions. Financing cash flows exhibit negative coefficients for ROA (-0.0809) and RONW (-0.0895), though neither is statistically significant at conventional levels. This pattern is consistent with Jensen's (1986) free cash flow theory and supports Bhatia and Srivastava's (2016) findings regarding capital structure decisions in emerging markets.

The model's explanatory power varies considerably, with R-squared values of 0.3727 for ROA and 0.2492 for RONW, while overall R-squared values are lower at 0.134 and 0.0751, respectively. The Wald chi2 statistics (10.19 for ROA and 7.54 for RONW) indicate that the models are jointly significant, particularly for ROA (p=0.017). These results, interpreted within the framework of panel data analysis as discussed by Baltagi (2008) and Wooldridge (2010), suggest that cash flow components have meaningful but complex relationships with corporate financial performance in the Indian context. The findings contribute to our understanding of financial management in emerging markets and support Ghosh et al.'s (2021) research on Indian financial companies, highlighting the importance of effective cash flow management in driving corporate performance.

Discussion

This study's findings show how cash flow components and financial performance are related to each other among Nifty 50 companies in the emerging market of India. The research shows that adequate cash flow management is essential for maintaining the financial performance of large organizations in developing economies. A financial analysis reveals the firms that make a significant contribution. Cash flows from operating activities are a complex connection with performance measures,

which have a negative coefficient with ROA (-0.1494) but a positive with RONW (0.2913). This study agrees with Dechow (1994) on the time differences between cash flows and accrual-based performance measures. The outcome substantiates the findings of Billings and Morton (2002) that operational cash flows predict financial stability.

The negative coefficients of financing cash flows for ROA and RONW (representing -0.0809 and -0.0895 , respectively) are statistically insignificant. It suggests that external financing provides sufficient liquidity but does not significantly influence performance. The findings confirmed Jensen's (1986) free cash flow theory and Bhatia and Srivastava's (2016) Capital Structure Decision by Emerging Markets research. The findings reveal that mature Indian companies are now more inclined to rely on internal funding sources, according to Ross et al. (2017). Notably, the ROA and RONW investment cash flows have positive coefficients ROA and RONW is 0.1095 and 0.1664, respectively. Moreover, these coefficients are statistically significant at the 10% level. The finding suggests that strategic investments help improve corporate performance, which supports Myers' (1984) pecking order theory. The outcome concurs with the research of Ghosh et al. (2021) on Indian financial firms, which indicates better financial performance when capital is well-managed.

These findings significantly contribute to the literature on financial management in emerging markets, especially in India. The results show how important cash flow management strategies are and how they affect a company's performance. The components of cash flow and financial performance are related; the relationship is statistically significant but not complimentary. Furthermore, the model has good explanatory power. Therefore, the findings of the study can help managers in developing countries with their finance-related matters.

Conclusion and Policy Implications

Cash flow management is significant for the financial health of MSMEs in emerging markets. The study's results indicate that operational cash flows play a crucial role in cash management, implementation of financial leverage, and liability management. It, in turn, lowers the demand for additional financing through loans. The small, insightfully negative relationship between financing cash flow and liabilities shows that financing provides necessary liquidity, though not large on liabilities for firms because they have sound internal cash flow generation. Investing cash flows affects the liabilities positively, and although the increase in liabilities is not ideal, we see the value in strategically investing for long-term viability and resiliency through supply chains.

This research has many policy implications. Strengthening operational cash flow management through financial literacy programs could help MSMEs reduce borrowing dependency, making them stable. Another way to help MSMEs is by providing flexible financing. Low-interest revolving credit can give MSMEs important liquidity while not overloading them with liabilities. Furthermore, tax breaks or grants for strategic investments can enable MSMEs to undertake projects that help improve productivity, like adopting new technologies, without incurring excess risk. Finally, helping businesses work together and digitalize will make it easier for the small (MSMEs) to optimize their cash flows and increase business competitiveness. Combining these policies will result in an ecosystem conducive to the sustainable growth of MSMEs. It strengthens MSMEs' economic contribution and resilience in these dynamic supply chains.

The study's implications are especially relevant for MSMEs in emerging economies that face more difficulties due to limited capital access and economic volatility. Firms that manage their operational cash flow plan have less chance that they would rely on external funding. In other words, they would manage themselves financially (Awheda et al., 2016; Sandberg & Abrahamsson, 2010). This strategy enables MSMEs to deploy more resources to important investments while having manageable liabilities. It aligns with Carton's (2004) call for cash flow as a key performance. Additionally, improved cash flow management positions the firms for supply chain success, ensuring smooth operations and heightened flexibility to market changes (Chow et al., 2008; Zailani et al., 2015).

Future research could extend the current study by observing other moderating variables such as technological progress, demand fluctuation, supply chain integration, etc. Technology integration can increase operational efficiency and financial performance, giving firms a competitive advantage. Combining these aspects may add clarity to the cash flow aspect, along with managing liabilities and ensuring financial stability (Christopher, 2022; Stevenson, 2014). Doing so will let future researchers work on the problems of complexity in supply chains in increasingly complex markets.

Implications, Limitations, and Future Research Directions:**Conclusion**

This research provides insights on cash flow components and financial performance by investigating the Nifty 50 companies in India's emerging market context. The study results show that good cash flow management matters a lot for the companies' financial performance. The different components of cash flow also affect the ROA and RONW differently. By examining a dataset containing 312 firm-year observations, the researcher found several interesting interactions between the various cash flow components and performance measures that may advance understanding of the issue in emerging markets.

The findings show that operating cash flow has a negative relationship with ROA at -0.1494 but a positive relationship with RONW at 0.2913. This finding is in line with Dechow (1994), which states that cash flows do not necessarily occur at the same time as the accrual-based performance measure, thus suggesting that the operational cash flow performance relationship is complex. The cash flow from investing has a positive and significant relationship with the outcome performance measures. The findings of this research project lend support to Ross et al. (2017). It indicates that firms (sample) add value through investing activities. In addition, there is a positive relationship with the investment decision. Furthermore, firm investment decisions (Meyer, 1984) are part of the pecking order theory.

Implications

The study has significant implications practically, theoretically and for the investors. From a theoretical point of view, this study significantly adds to the existing theory by providing empirical evidence concerning the decomposed impacts of the components of cash flow on financial performance in the context of an emerging economy like India. This study diverges from previous research by investigating the role of operating, investing, and financing cash flows in profitability and shareholder value. It extends the work of Dechow (1994) and Penman (2013) and finds differences in the aggregates.

The findings provide corporate managers with several valuable references that assist in making decisions. As Myers (1984) suggested, the relationship between the investing cash flows and the performance variables is positive. This means that spending on capital expenditure will positively influence long-term objectives. The study found a stronger link between operational cash flows and RONW than ROA, urging companies to manage working capital efficiently for profitability and better RONW. Also, the inversely proportional relation between financing cash-flows and performance indicators (ROA: -0.0809, RONW: -0.0895) indicates that managers must carefully make capital structure decisions per the FCF theory given by Jensen (1986).

The study provides valuable insight for investors on the performance evaluation of firms in emerging markets. A positive relationship between cash flow from investment and performance indicators suggests that investment patterns can indicate a future performance potential. Moreover, the trends in operating cash flow may serve as reasonable proxies for the firm's liquidity position and the ability to generate sustainable value for shareholders, as highlighted by Bhatia and Srivastava's (2016) study on performance in emerging markets.

Limitations and Future Research Directions

While contributing, this work has limitations that provide opportunities for future studies. The research findings of the study are limited to non-financial firms because financial firms' exclusion from the sample was methodologically crucial, given their distinct financial structures. By pooling all firms and periods in a regression, it is presumed that all the firms are the same concerning the dependent variable over time. The findings may not necessarily apply to other emerging markets or periods, as the present study focuses on Indian corporations during the study period.

The limitations indicate many interesting areas for future research. Adding other macroeconomic factors such as GDP growth; inflation and exchange rates would allow a broader interpretation of the outside factors that influence cash flow management and financial performance (World Bank, 2023). Another way of comparing the various industries can reveal useful patterns regarding cash flow components and financial performance. In addition, Arellano and Bond (1991) suggest that using more dynamic modelling, especially GMM techniques, could address possible endogeneity issues and lagged effects of cash flow on performance. Also, the influence of ESG factors and digital transformation on cash flow management may be investigated, as well as how such trends affect corporate performance (OECD, 2022). Eventually, cross-country studies of other emerging markets will help identify possible cash flow differences in emerging markets with varying economic structures and institutional frameworks.

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