Does External Pressure Impact Profitability? Evidence from the Nifty 500 Index of India

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Abstract

Pressure is one of the factors of fraud theory. To survive in the long run, business should be profitable. Earning profit is the primary goal of all business. This study aims to explore the effect of external pressure on the profitability of India's nifty 500 index companies. Annual financial data of 249 companies collected from the ProwessIQ database. Regression and correlation analysis was conducted using panel data from 2016 to 2024. The result shows companies with higher debt-to-equity ratios have lower profitability, potentially due to financial pressure or dishonest accounting practices. Leverage has a minimal negative effect on return on assets. Liquidity has mixed impacts on profitability, with higher liquidity potentially causing financial pressure and suspect cases of earnings manipulation. Profitability is affected by external pressure; however, its effects are dependent upon the financial factor under consideration. Understanding the link between external pressure and profitability aids corporate managers, investors, and regulators in identifying early signs of financial distress and fraudulent behaviour. Addressing external pressures proactively can enhance transparency and investor confidence. This research contributes to fraud literature by empirically testing the influence of external pressures on financial performance in an emerging market context.

Keywords: Pressure, Profitability, Leverage, Liquidity, Fraud Theory

1. Introduction

Every business needs to have a goal, and the primary goal should be to generate a profit during each and every period of production. Profit draws the attention of investors to allocate their capital and acquire shares in the company. Generally, companies knowingly adopt a number of strategies to inflate their financial results artificially. Everyone who has an interest in a company's financial health may acquire information about it from the company's financial reports. Similarly, the company's creditors are patiently waiting for their money back. So long as the company can demonstrate its financial performance, which includes earning revenue, it is under pressure to provide assurance to the lender. Consequently, the company's profitability could be

impacted by outside financial forces. Nonetheless, fraud theory argues that individuals facing pressure may engage in unethical practices if they have the opportunity and attempt to rationalise their actions.

If a company's Current Ratio (CR) is high, it means that its current assets are much greater than its current liabilities. This might look like a good thing, but it could also mean that the company is under a lot of pressure to handle its short-term debts well. Because of this, management might try to show a higher profit either by recognising revenues earlier or delaying the recognition of expenses, or by making other changes to the books. Such actions might be taken in order to assure stakeholders of the stability of the finances and keep investors' trust. If a company has a high leverage ratio (Debt to Equity), it means that it has more debt than equity. This puts pressure on the company's finances because it has to pay back loans and interest. To ease this pressure and keep investors' faith, management may be inspired to show greater profitability. One way to do this is to aggressively recognise revenue, capitalise on expenses, or use other methods of managing earnings. The goal may be to show that the financial health is stable, even though there is a risk that comes with having a lot of debt.

The profitability of a company is significantly impacted by external factors, including changes in the market, regulations, and corporate governance. The extent to which businesses respond to these pressures determines how much impact they have. The effect of pressure on a company's profitability can be observed by the fraud triangle, which shows how pressure can distort financial reporting. Financial leverage, liquidity, and profitability are interconnected and industry-specific. Increasing returns on equity through financial leverage can boost profitability; even so, it is not free from the risk of liquidity insufficiency, which is important for operational efficiency and may positively affect profitability. Exploring these connections and generalisations is essential to understanding how pressure affects a business's financial performance. Financial leverage, or the use of debt in a company's capital structure, can boost profitability through higher returns on equity, but it can also introduce risk. Conversely, liquidity, or the ability to meet short-term obligations, is critical for operational efficiency and can have a positive impact on profitability.

2. Literature Review

According to theoretical concept of fraud triangle, financial fraud is motivated by pressure, opportunity, and rationalisation (Cressey, 1953) and as pressure increases, organisations may justify unethical financial practices. External pressures in company finance, such as financial difficulty, regulatory scrutiny, and competitive market conditions, can substantially impact profitability and financial reporting behaviour (Wells, 2017). The influence of external parties on business results prior studies have established a connection between external stresses and financial performance, drawing attention to the fact that stressed-out businesses may artificially inflate their profitability (Dechow et al., 1996). A combination of economic downturns, rising debt

loads, and elevated investor expectations is what causes aggressive accounting practices, according to empirical research on Indian enterprises (Bhasin, 2016). Leverage, often measured through the debt-to-equity ratio, has been widely studied in relation to firm profitability. Modigliani & Miller (1958) proposed that under perfect market conditions, capital structure is irrelevant. However, later studies indicate that excessive leverage constrains profitability due to high-interest obligations and financial distress costs (MYERS, 1984). A company's short-term financial health can be revealed by liquidity indicators like the current ratio and Quick Ratio (QR), which reveal financial stability. Deloof (2003) found that companies with less liquidity are subject to more external pressure, which causes them to make less-than-ideal investment decisions and puts their finances at greater risk. Financial performance indicators such as return on assets (ROA) and return on equity (ROE) are essential indicators of business efficiency. Businesses under intense pressure to meet earnings targets may engage in earnings management or fraudulent financial reporting (Beneish, 1999; Healy & Wahlen, 1999).

The fluctuations in market demand and competition can put pressure on businesses to innovate strategies or lower their prices, Effective credit risk management can mediate the impact of external pressures, enhancing profitability through better financial management (Tahu, 2023). Stępień et al. (2024) state that compliance with new strategies can result in costs, but it also has the potential to open up new market opportunities, which can impact overall profitability. According to a study by (Soewarno et al., 2023), material flow cost accounting (MFCA) acts as a mediator between external pressures and financial performance. This suggests that good management practices can help reduce the adverse effects of these pressures.

Earnings management is influenced by external pressure, which means that companies can modify their financial reports in order to satisfy the stakeholders (Rianto & Rina, 2021). Transparency is crucial for companies to maintain profitability, but it can also lead to ethical concerns, and adjustment may also raise ethical concerns. Organisational learning and innovation are two ways in which external stakeholder pressures improve firm performance, especially in service sectors (Shi & Tsai, 2022). So, Companies that effectively respond to these opportunities can leverage them to improve operational efficiency and profitability. Increased financial statement fraud is associated with external pressures, which can have a negative impact on profitability (Setiawan, 2019; Sinarti & Nuraini, 2019).

Companies facing high financial pressure may resort to unethical practices, ultimately undermining their long-term survivability. It is possible for businesses to increase their profitability by implementing rigorous accounting practices in response to financial pressures from external parties. However, these practices may also lead to aggressive accounting adoption and unethical consequences, such as fraud in the financial sector. Financial targets do not directly affect financial fraud. However, it can create an environment where pressure

leads to unethical decisions, in which companies facing financial strain may resort to fraud to mislead the stakeholders by appearing to have healthier financial conditions (Yuniasih et al., 2020).

According to Sulgiah Oktami et al. (2024; Yuniasih et al., 2020), fraud can be exacerbated by external factors like market competition and investor expectations, which can result in substantial financial consequences. According to Nurfadilah et al. (2024), financial distress can be caused by various types of pressure, which mediate financial statement fraud. Legal consequences, distrust from investors, and a decrease in revenue are all potential negative consequences of engaging in fraudulent financial reporting (Triyani et al., 2024).

Firms with better liquidity perform better financially, and leverage can increase returns when a company generates more than the cost of debt, leading to higher profitability metrics like ROA (Bella Nutia Febriana & Dwi Wahyuningsih, 2024). So, there is a significant relationship between liquidity, leverage, and profitability. According to Saeful Fachri et al. (2024), companies with financial liquidity are more likely to be profitable because they can invest in growth opportunities and efficiently manage operational costs; also, high leverage levels can raise financial risk and, in adverse circumstances, reduce business financial performance. This emphasises the necessity of a balanced approach to managing the effects of both liquidity and leverage in order to optimise profitability.

Despite extensive research on external pressure and firm performance in developed economies, limited studies explore these relationships in the Indian context, more specifically using a fraud theory perspective. This study bridges that gap by incorporating financial distress indicators and analysing their impact on profitability.

3. Objective and Hypotheses

The aim of the study is to analyse the impact of external pressure on the profitability of the company.

The study's null hypotheses are as follows:

H_{01}: Higher financial leverage negatively affects the profitability of Companies.

H_{02}: Increased liquidity levels positively influence the profitability of Companies.

4. Research Methodology

This study used annual financial data from the ProwessIQ database, which is a secondary source of company information. The study population consists of 258 companies out of 501 on India's Nifty 500 index as of February 6, 2025. This study applies the descriptive research design method. The study period spans the fiscal years 2016 to 2024. In the beginning, the study aimed to include all 501 companies over a ten-year period ending in March 2024. Due to the unavailability of required financial data for the study variables, we excluded 243 companies, after which consistent data is available from the financial year ending 2016.

This study employs panel data methodology due to its advantages, including controlling for unobservable heterogeneity, eliminating estimation bias, providing more information, reducing multicollinearity, providing a substantial evidence base, and establishing complicated models for better technical efficiency. The study has not checked for the autocorrelation problem because it is commonly observed in data for an extended period.

In this study, the explanatory variable is based on the concept of fraud triangle theory. Liquidity Ratio (Current Ratio and Quick Ratio) and Leverage Ratio (Debt to Equity Ratio (DER)) are used as independent variables in the current study. Return on Assets (ROA) and Return on Equity (ROE) are studied as dependent variables.

5. Results and Discussion

Descriptive statistics help summarise and describe the main features of a dataset. It provides simple summaries of the sample and the measures. Table 1 represents the descriptive statistics of the study's dependent and independent variables and provides an overview of the financial health and performance of the companies in the dataset over the period.

Table 1: Descriptive Statistics

	CR	QR	DER	ROE	ROA
Mean	1.760	1.275	1.520	0.109	0.078
Standard Deviation	1.276	1.098	13.957	1.733	0.084
Minimum	0.050	0.048	-83.352	-82.214	-0.682
Maximum	19.824	19.814	652.047	4.673	0.873
Count	2322	2322	2322	2322	2322

On average, the companies have 1.76 times more current assets than current liabilities. There is a moderate level of variation in the current ratios across the companies. The lowest current ratio observed is 0.05, indicating that some companies might struggle to cover their short-term liabilities. The highest current ratio observed is 19.824, showing that some companies have a very high level of liquidity. On average, the companies have 1.275 times more quick assets (excluding inventories) than current liabilities. There's a moderate level of variation in the quick ratios. The lowest quick ratio observed is 0.048, indicating low quick assets in some companies. The highest quick ratio observed is 19.814, showing high quick liquidity in some companies. On average, the companies have 1.52 times more debt than equity. There's a significant level of variation in the debt-to-equity ratios, indicating diverse capital structures. The lowest DER is -83.352, indicating some companies have negative equity (more liabilities than assets). The highest DER is 652.047, showing extremely high leverage in some companies. On average, the companies generate a 10.9% return on equity. There's a high level of variation in the ROE across companies. The lowest ROE is -82.214, indicating significant losses for some companies. The highest ROE is 4.673, showing strong profitability in some

companies. On average, the companies generate a 7.8% return on assets. There's moderate variation in the ROA across companies. The lowest ROA is -0.682, indicating losses for some companies. The highest ROA is 0.873, showing strong asset profitability in some companies.

Both CR and QR indicate that, on average, companies have sufficient liquidity, but there is variability among companies. There is significant variability in the Debt-to-Equity ratio, with some companies having very high leverage and others having negative equity. ROE and ROE show moderate to high variability, indicating diverse performance in terms of profitability among the companies.

To understand the relationship between variables, we conducted a correlation test. Table 2 provides the necessary information to understand the extent to which two variables change together.

Table 2: Correlation

	CR	QR	DER	ROE	ROA
CR	1				
QR	0.943	1			
DER	-0.043	-0.032	1		
ROE	0.020	0.013	-0.974	1	
ROA	0.296	0.282	-0.074	0.124	1

A value of 0.943 shows a significant positive association between CR and QR. Because both ratios represent liquidity (CR includes inventory while QR excludes it), they naturally move together in the same direction. A correlation value of -0.043 indicates a very weak negative correlation between a company's liquidity (CR) and its leverage (DER). This suggests that companies' liquidity positions aren't strongly influenced by how much debt they carry relative to equity. There is almost no correlation between CR and ROE. With a correlation value of 0.020, a company's ability to generate profits from shareholders' equity does not show an influential relation to its current ratio. So, liquidity management alone might not impact profitability for equity holders. Study results show a weak to moderate positive correlation exists between CR and ROA. A correlation value of 0.296 suggests that as companies maintain higher liquidity, they might also be slightly better at generating returns from their assets. Efficient asset utilisation could be linked with prudent liquidity management.

Similar to CR and DER, there is a very weak negative correlation between QR and DER. That means QR and leverage are not significantly related, indicating that immediate liquidity (excluding inventory) is not heavily influenced by debt levels. Also, there is a very weak positive correlation with ROE. ROA and QR are weak to moderately correlated. Like CR and ROA, companies with better quick ratios might be slightly more efficient at generating returns from their assets.

There is a strong negative correlation between DER and ROE. This indicates that as companies take on more debt relative to equity, their return on equity dramatically decreases. High leverage might be eroding profitability due to increased interest expenses and financial risk.

Leverage does not have a significant linear relationship with return on assets as correlation value -0.074 shows DER and ROA have a weak negative correlation. This could mean that debt levels are not directly impacting how effectively companies use their assets to generate profits.

There is a weak positive correlation between ROE and ROA. Companies that are efficient at generating returns from their assets tend to provide slightly better returns to equity holders. However, the relationship is not strong, suggesting other factors like financial structure might be playing significant roles.

Table 3: Regression Statistics

Statistic	Model 1 (ROE)	Model 2 (ROA)
Multiple R	0.974	0.302
R Square	0.949	0.091
Adjusted R Square	0.949	0.09
Standard Error	0.391	0.081
Observations	2322	2322
F-Statistic	14430	77.78
Significance F	0.00	0.00

In Table 3, Model 1 R^2 is 0.949, which means 94.9% of the variation in the dependent variable (ROE) is explained by the independent variables (CR, QR, and DER). F-statistic value 14430.002 is highly significant ($p = 0.000$), indicating a strong model fit.

Model 2 data in Table 3 shows that only 9.1% of ROA variation is explained by the independent variables. F-statistic (77.78, $p < 0.000$) shows the model is statistically significant, but its explanatory power is low.

Table 4: Coefficients

		Coefficients	Standard Error	t Stat	P-value
Model 1	Intercept	0.350	0.014	24.432	0.000
	CR	-0.059	0.019	-3.087	0.002
	QR	0.037	0.022	1.660	0.097
	DER	-0.121	0.001	-207.987	0.000
Model 2	Intercept	0.044	0.003	14.980	0.000
	CR	0.018	0.004	4.517	0.000
	QR	0.002	0.005	0.425	0.671
	DER	0.000	0.000	-3.091	0.002

In Table 4, the model 1 coefficient for DER is negative and highly significant (p = 0.000). Which means our first null hypothesis is accepted. So, higher financial leverage negatively impacts the profitability (ROE). While looking at liquidity metrics, CR has a negative and significant coefficient (p = 0.002), and QR is positive but statistically insignificant (p = 0.097). Since CR negatively affects ROE and QR is not significant, the second null hypothesis of the study is rejected in Model 1. So, higher liquidity negatively affects profitability (ROE).

In Table 4 data, Model 2 F-statistic (77.78, p < 0.000) shows the model is statistically significant, but its explanatory power is low. So, the first null hypothesis is accepted, as financial leverage negatively affects profitability (ROA). However, the impact is economically small. While studying liquidity metrics, CR has a significant positive effect on ROA (p = 0.000), which supports the second null hypothesis of the study. While QR is insignificant (p = 0.671), it shows quick assets alone do not affect ROA. Therefore, the second null hypothesis of the study is accepted, confirming that increased liquidity positively influences profitability ROA.

The most notable difference is the vastly different R-squared values. Model 1 explains nearly 95% of the variance, while Model 2 explains only about 9%. This suggests that the dependent variable in Model 1 is much more predictable using the independent variables CR, QR, and DER than the dependent variable in Model 2. The magnitudes of the coefficients also differ considerably, indicating that the impact of the predictors varies substantially between the two models.

6. Conclusion

The study analyses how outside factors like financial leverage and liquidity affect the profitability of companies in the Nifty 500 Index. The fraud triangle theory is used, which says that pressure, opportunity, and rationalisation are what drives financial fraud. Capital structure with more debt compared to equity has a negative impact on profitability. The debt-to-equity ratio is significantly linked to lower profitability (ROE). Because, companies with high debt in capital structure have to pay more in interest, which lowers returns to shareholders. Companies that use more debt in capital may run into financial trouble, which can be influenced by outside pressure to change earnings or adopt dishonest accounting practices. However, leverage has a small negative effect on ROA. This means that the amount of debt a company has does not always affect how well it uses its assets to make money. Also, liquidity has mixed effects on profitability, which supports the second hypothesis in part. When looking at ROE, a higher CR makes the business less profitable, but QR does not matter. So, high financial liquidity could mean that things are not working as well as they should, which could cause financial pressure and earnings manipulation. For ROA, more liquidity has a positive effect on profitability. External pressure, in the form of high financial leverage, significantly reduces profitability, while liquidity has both positive and negative effects depending on the profitability metrics (ROE or ROA). This

suggests that smart liquidity management can improve operational performance and lower the financial stress that leads to fraud. The study provides insights into corporate governance practices that mitigate risk.

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