Factors of Profitability of Indian Firms Listed in BSE

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ARTICLE INFO	ABSTRACT
	A primary goal of this study was to find out the profitability components of specific companies-related financial factors for Indian companies listed in BSE (formerly Bombay Stock Exchange). The research period was limited to 2009-10 to 2018-19 and a span of ten years and forty non-banking and financial companies. The necessary data is dynamic panel in nature; therefore, it was examined for a dynamic panel regression model. According to the findings, business size and growth are the most important determinants of profitability. Furthermore, company size is inversely linked to profitability, while growth is related to the fluctuation of profit rate of the companies listed in BSE. Other factors such as liquidity, risk and leverage are negatively influences on profit fluctuation in this ratio, and the result is statistically insignificant.

1.0 INTRODUCTION

Profitability is critical to company. The purpose of handing is to maximise the benefits. The output of a business is determined by the quantity of revenue gained (Akinlo, 2012). That the company's revenue is used as a measure for determining if a firm is successful. Profitability of a company may be determined by examining the profitability of its investments. Profitability is defined as an investment's ability to produce income from its usage (Batra and Kalia, 2016). This earning potential is referred to as the investment's lending power or operational efficiency. Profitability is a relative word, as is profit, and it may be quantified via its connection to other things that influence the profit (Mishra, 2011). It is the performance check, a strong motivational tool and a control

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measure in every business. In reality, profitability is a very sensitive economic indicator that is influenced by several variables that act in a number of ways (Dobson and Gerrard, 1991; Kannadhasan *et al.,* 2018; Singh and Bagga, 2019). One of the most significant factors that investors evaluate before investing in a business is their corporate profit. This would need either an increase in corporate expenditure, a rise in profits retained by the company, or an increase in dividend payments to investors (Chandha and Sharma, 2016; Das *et al.,* 2018). It is a sign of a company's strength, if its earnings rise while industry profits decrease (Ganguli, 2019; Olaniyi *et al.,* 2017). On other hand, the profits of a single company decrease while the total earnings of the industry increase, it indicates the presence of a fundamental issue. Profitability is a critical criterion for the existence of a business. In this paper, the drivers of corporate profitability were assessed by the asset return profitability. If the company have a higher profitability, lenders or shareholders may show their interest in it (Bhattacharyya and Sexena, 2009; Vijayakumar and Kadirvelu, 2003). This research is to examine if financial factors represented by return-on-investment affect and are related to profitability choices in BSE listed companies in India.

1.1 Review of Literature and Hypothesis Development

While conducting the study, the researchers conducted a comprehensive evaluation of the literature. Following the scanning, the numerous variables utilised in the research were collected from numerous literatures. Consider describing some of the hypotheses-creation studies performed by various researchers. The return on assets and the return on sales are two often used for measures the productivity. Management is meant to be concerned with making the best use of all resources, and these two stages may be appropriate in this context (Banerjee and De, 2014; Banerjee and De, 2015). In order to compute a short-term productivity perspective, revenue-based profit levels should be used. Conversely, our long-term profitability viewpoint is returned on the assets. Both profitability metrics are part of the study's methodology (Chander and Aggarwal, 2008; Ghose and Kabra, 2019). Earnings are given an absolute monetary value on an absolute business scale. In addition to allowing a business to pay its workers, greater cash reserves improve the firm's capacity to produce revenue and enhance its earnings potential on investment. As long as the big companies remain creative and efficient, this will be true (Hassan, 2015; Vijayakumar and Kadirvelu, 2003). However, it has been discovered that the positive connection between size and profitability is significant, and that after a given duration, profitability escalations at a rate proportionate to the relative growth in size. This may occur when similar tactics spread to other companies in the market, disease economies and inefficiency as a result of unmanageable growth, and a greater likelihood of public criticism of excessive profits as a company keeps growing (Bhatia and Srivastava, 2016; Dobson and Gerrard, 1991; Haron *et al.,* 2013). As a result, the impact of business size on productivity cannot be estimated in advance. Total Assets are used to calculate the size of this research. Total assets are comprised of equities, reserves, and loans. Leverage is the second factor that is taken into consideration. High leverage ratio businesses face more financial risk than low leverage ratio businesses (Akinlo, 2012). "When profits are equalised due to competition, greater debt contributes to higher net-value returns. It is argued that companies have minimal debt because they operate in high-risk industries and, as a result, see a negative connection between leverage and profitability. Make work capital choices regarding how much and what current assets are funded in order to maintain liquidity. Such choices entail a trade-off between solvency and profitability. A company with more liquidity may better trade off its profitability (Banerjee and De, 2014; Ganguli, 2019; Vijayakumar and Kadirvelu, 2003). A high current asset to current liability ratio may indicate weak management practices, as well as poor credit management and the importance of insolvent accounts receivables. A low ratio is also undesirable

since there would be little margin of safety (Ahmad and Etudaiye-Muhtar, 2017; Batra and Kalia, 2016; Joshi, 2010)". Growth was chosen as the other variable. Growth is essential for a business even if it is not one of its primary objectives. The explanation is that growth assists the company in achieving its goal by expanding the amount of its income growth by providing scope for projects and exercising management performance to increase managerial productivity, resulting in a lower investment production ratio and therefore a higher profit (Haron *et al.,* 2013; Jiang *et al.,* 2018; Panda *et al.,* 2013; Purohit and Khanna, 2012). It would very certainly have a positive connection with production.

Table 1 – Hypothesis Development

	Hypothesis	**Supporting Literature**
H_{01}	Profitability is negatively impacted by liquidity	(Dobson and Gerrard, 1991; Haron et al., 2013; Olaniyi *et al.,* 2017; Vijayakumar and Kadirvelu, 2003)
H_{02}	Profitability is negatively impacted by firm size	(Akinlo, 2012; Banerjee and De, 2015; Chander and Aggarwal, 2008)
H_{03}	Profitability is negatively impacted by growth	(Ganguli, 2019; Ghose, 2017; Ahmad *et al.,* 2015; Vijayakumar and Kadirvelu, 2003)
H_{04}	Profitability is negatively impacted by risk	(Bhattacharyya and Saxena, 2009; Ahmad *et al.,* 2015)
H_{05}	Profitability is negatively impacted by leverage	(Azhagaiah and Deepa, 2012; Haron, 2014; Hassan, 2015; Purohit and Khanna, 2012)

2.0 METHODOLOGY

The study considered for the sample of BSE listed Sensex 50 companies, which consist of non-banking, and financial firms' companies. The present study confined the period of from 2009-2010 to 2018-19 about 10 years. The data is dynamic structured panel in nature with time series and cross sections. The final sample consists of 40 non-financial firms, which comprise into 400 observations. Dynamic Panel Data (DPDs) were employed in the study to accommodate unobserved heterogeneity when utilising inside transformations, such as one-way dynamic panel variables, or first differences for series data panel data analysis. This capacity to eliminate unobserved heterogeneity is also the basis for estimators created for DPD models. In these models, one or more variables are delayed, allowing for the modelling of a full adjustment process to take place.

2.1 Model Framework

Arellano and Bond (1991) used the Dynamic Panel Data (DPD) method often attributed to Holtz-Eakin, Newey, and Rosen to popularise their findings. Because instrumental variables do not utilise all of the information available in a sample, this method was created. Using the Generalized Method of Moments (GMM) to forecast the dynamic panel data pattern may lead to more efficient predictions. Let's have a look at these equations:

$$y_{it} = X_{it}\beta_1 + W_{it}\beta_2 + u_i + \varepsilon_{it}$$

Whereas, X_{it} has just exogenous regressors, W_{it} includes Predefined regressors (including intervals of y) and endogenous explanatory variables, all of which may be linked with u_i, the unobserved individual influence. The u_i and its related excluded bias are removed by first extracting the equation.

3.0 RESULT AND DISCUSSION

The dynamic panel data regression has analysed with the help of predicted financial variables. The result shows that profitability is the dependent factor which is used a lag for one year also included in the regression model. The basis of the estimation model one step dependent variables used and other explanatory variables are predicted in the return on investment. The diagnostic model has perfectly done at this calculation. The Sargon and Wald test proved that dynamic panel model is fitted good.

Table 2 – One Step Dynamic Panel Model Regression Analysis

	Coefficient	**Std. Error**	**z**	**p-value**
Profitability (-1)	−0.0339524	0.0205265	−1.654	0.0981
Consta	0.389654	0.134873	2.889	0.0039
Liquidity	−0.00416530	0.0156959	−0.2654	0.7907
Firmsize	−0.289695	0.117074	−2.474	0.0133
Growth	0.247835	0.107200	2.312	0.0208
Risk	0.950627	0.649543	1.464	0.1433
Leverage	−0.179624	0.116107	−1.547	0.1219
		Value		
Residual Sum of Square		33.07855		
Regression Std. Error		0.297001		
Sargan over-identification test: X^2 (358)		790.663	0.0000	
Wald (joint) test: X^2 (6)		2091.43	0.0000	
Test for AR (1) errors: z		-1.65093	0.0988	
Test for AR (2) errors: z		-1.78691	0.0740	
"Pesaran CD test for cross-sectional dependence Test statistic: z = 15.255954, with p-value = P ($|z| > 15.256$) = 1.5e-052, Average absolute correlation = 0.463"				

Dependent variable: Profitability

The explanatory variable of liquidity is negatively related to the profitability but the result [z=-2.654, p-value = 0.7907] is not significant. The firm size is inversely associated with the profitability and the result [z=-2.474, p-value = 0.0133] is statistically significant at 5% level. The growth of the firm is positively associated with the profitability and the result [z=-2.312, p-value = 0.0208] is statistically significant at 5% level. The firm risk is negatively associated with the

profitability, which implies firms having higher the risk will not earn the profit. The regression result [z=1.464, p-value = 0.1433] proved that not significant. Finally, the leverage is the proxy of capital structure of the firm, which is negatively associated with the profitability and the [z=-1.547, p-value = 0.1219] result is not significant.
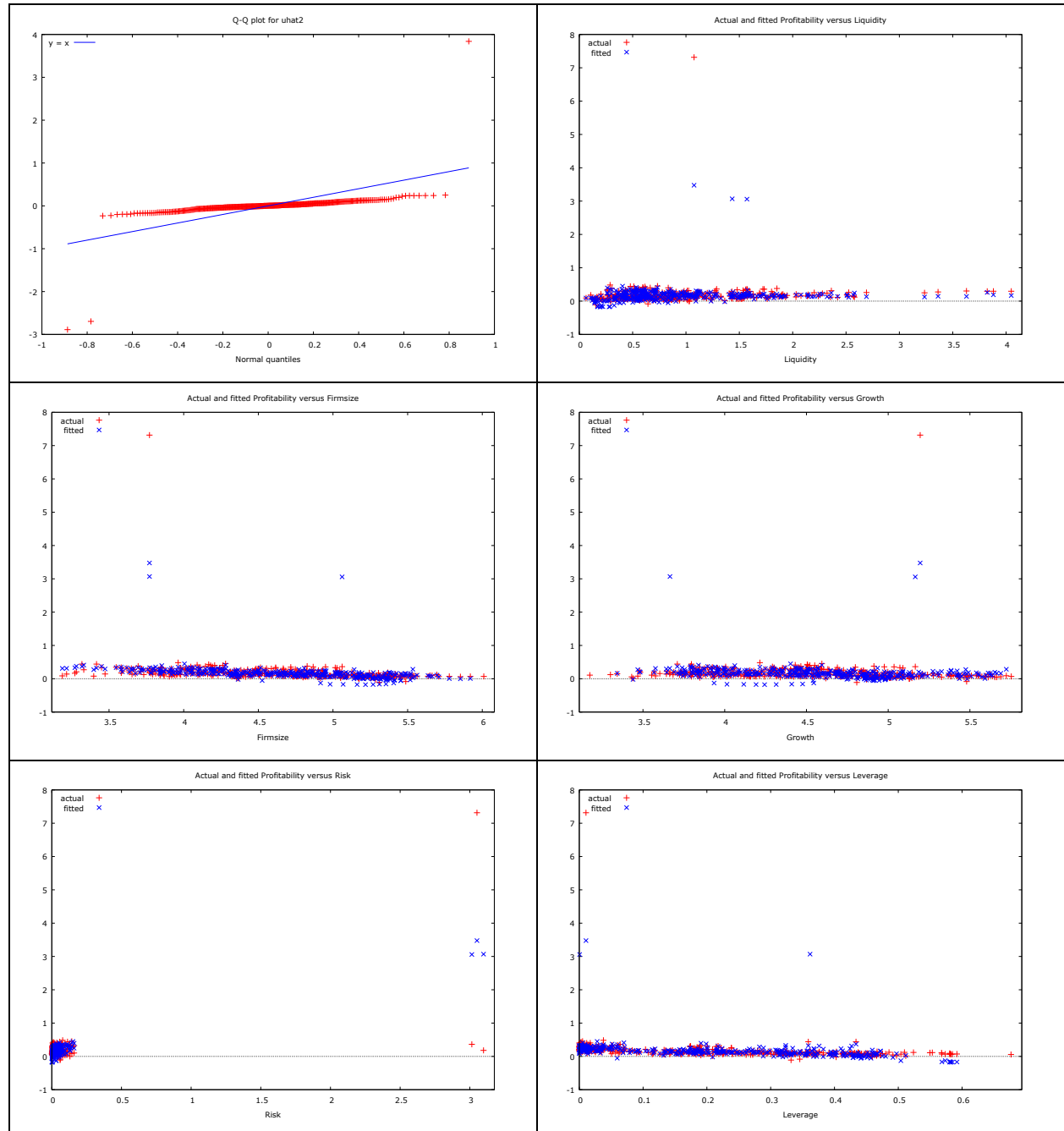

Figure 1 – Actual and Fitted Regressor Plots against Independent Variables

4.0 CONCLUDING REMARKS AND RESEARCH IMPLICATIONS

In this article, an attempt has been made the determinants of the profitability of BSE Sensex 50 companies from 2009-10 to 2018-19. The findings show that company size and growth are the most important predictors of profitability. Furthermore, company size is inversely linked to profitability, while growth is related to the fluctuation of profit rate of BSE listed companies in India.

However, all other variables, except risk, have a negative effect on profit variation in this ratio. In summary, company profitability factors should be considered for firm size and growth when evaluating the profitability of BSE listed companies in India. The study's results have consequences for policymakers, investment analysts, financial institutions, and company boards. Indian capital market is well established, although being in a developing country, with a large number of listed companies, and it attracts significant foreign portfolio investment. Certain weaknesses may be used by companies to increase their flexible management power, regardless of these features.

	Hypothesis	Result	Remarks
H_{01}	Profitability is negatively impacted by liquidity	Negative	Not Significant
H_{02}	Profitability is negatively impacted by firm size	Positive	Significant at 0.05 level
H_{03}	Profitability is negatively impacted by growth	Positive	Significant at 0.05 level
H_{04}	Profitability is negatively impacted by risk	Negative	Not Significant
H_{05}	Profitability is negatively impacted by leverage	Negative	Not Significant

The findings of this research will be helpful to investors, lenders, and business entities. It will also assist financial managers in determining their optimum capital structure in order to optimise the firm's worth. The next research may include a broader range of businesses or be industry-specific.

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