40 Top companines – Advantages and Risk Impaction on Indian Stock Market

Shipa Agarwal

Associate Professor, Department of Business Administration St Joseph Engineering College, Mangaluru, Karnataka, India

Pradeep Anto
Professor and Dean, Department of Business Administration St Joseph Engineering College, Mangaluru, Karnataka, India

Sangeetha J
Associate - Finance & Accounts, ETC Management Services Pvt Ltd, Bengaluru,Karnataka, India

M.M. Mukhopadya
Associate Professor, Department of Management Studies Visvesvaraya Technological University, Belagavi, Karnataka, India

Abstract

The current study examines the performance of top 40 companies based on market capitalization for the period of 5 years (2015-2019). Competitive advantage is measured using asset turnover ratio and profit margin and risk is measured using financial leverage. Book to market ratio is used as a measure of market performance of the firms. The results indicate that profit margin has the most significant impact on the market performance in the Indian stock market.

Keywords: Competitive advantage, Asset turnover ratio, Book-Market ratio, Risk, Market performance, Profit margin

Introduction

A firm is said to have competitive advantage when it has established a method of offering the same benefit as a competitor but at lower cost or when it can provide additional benefits at the same cost as a competitor. The two forms of competitive advantage are cost advantage or differentiation advantage. In order to retain competitive advantage, a firm must have resources and skills that outweigh that of competitors

Risk has always been a part of financial activity. Risk can be defined as the probability of an unpredictable or negative outcome. Any action or operation which results in any form of loss can be called as risk. Market performanceof companies provides a basis for success of firms. The book to market ratio (BMR) is one of the measures of market performance. Firms analyse their bookto market ratio with that of their peers as well as other companies outside the industry to obtain a sense of the size of the performance.

Literature Review

Fama & French (1995) document that book to market ratio is related to economic fundamentals. Firms with high (low) book values relative to stock prices are found to have low (high) earnings on assets. They also find that high-BMR firms tend to be persistently distressed, and low-BMR firms enjoy sustained profitability (growth stocks). Maji & Hazarika (2016) studied the performance of Indian banks for 39 commercial banks from 1999-2013. The study concluded that there was a strong correlation between returns on assets and book to market ratio. Fairfield & Yohn, (2001) studied the breakdown of profitability into asset turnover and profit margin and concluded that variations in asset turnover would be useful in book to market ratio forecasting. Baba & Manaf (2016) analyzed 100 leading firms in Malaysia from 2008 to 2012. They inferred that the operating profit margin had a significant effect on the firm value measured by book to market ratio. Arora et al., (2016) analysed the performance of the Indian manufacturing sector and found that managing risk through growth, sustainability performance, sales growth and asset growth were correlated to market performance. Sar (2019) investigated the impact of competitive advantage and risk on market performance of top 20 global companies. The study concluded that leverage had the greatest impact on market performance.

Objectives

- To determine asset turnover ratio, profit margin, financial leverage and book to market ratio.
- To find the competitive advantage and risk on market performance of top 40 companies of Indian stock market.
- To examine the impact of asset turnover,profit margin and financial leverage on market performance.

Research Design

A sample of top 40 companies based on market capitalization as on December 2019 has been taken for the study for a period of 5 years (2015-2019). Financial data was collected from annual reports of the companies. Asset turnover ratio, profit margin, leverage and book to market was determined from the available data. Asset turnover is used as a measure of cost advantage, profit margin is used for differentiation advantage and financial leverage is used to measure financial risk.

The analysis estimates regression equation. Book to market ratio (BMRij) is taken as dependent Variable and asset turnover ratio (ATij), profit margin (PMij) and leverage (LEVij) is taken as independent variables. If any statistically significant association is found between the dependent and the independent variables, then it is concluded that competitive advantage and risk have a significant impact on market performance of firms.

BMRit = a + b.ATit + c.PMit + d.LEVit + uit….i=1,2,3 and t=2015, 2016…… 2019

In the above equation 'a' is the constant terms,b, c and d are the coefficients of ATit, PMit , LEVit. uit is the error term.

Table 1: List of Top 40 Companies by MarketCapitalisation

Name of the Company	Rank on 31-12-2019	Market Capitalisation on 31-12-2019
Reliance Industries Ltd	1	959727
Tata Consultancy Services Ltd	2	846182
Hindustan UnileverLtd	3	417657
Housing Development Finance Corporation Ltd	4	416013
Infosys Ltd	5	305834
SBI Life Insurance Company Ltd	6	283803
Bharati Airtel	7	256603
Maruti Suzuki IndiaLtd	8	212506
Larsen & Toubro Ltd	9	183104
Asian Paints Ltd	10	166023
HCL Tech	11	162494
ONGC	12	157694
Bajaj Finserv Ltd	13	145718
Wipro Ltd	14	143397
Nestle India Ltd	15	138725
HDFC Life InsuranceCo. Ltd	16	126880
Ultra Tech Cement Ltd	17	124607
Bharat Petroleum Corporation Ltd	18	98484
Bajaj Auto Ltd	19	88564
Shree Cement Ltd	20	80987
Adani Ports	21	78720
Tech Mahindra	22	76727
Godrej Consumer	23	76034
Britannia IndustriesLtd	24	72722
Berger Paints India Ltd	25	54704
Eicher Motors Ltd	26	54314

General Insurance Corporation of India	27	45167
Bosch Ltd	28	42879
United Spirits Ltd	29	42294
Ambuja Cements	30	41798
Colgate Palmolive India Ltd	31	41053
Havells India Ltd	32	39961
Cipla Ltd	33	38719
Bajaj Holdings & Investment Ltd	34	37977
P&G	35	36495
United Breweries Ltd	36	34396
Whirlpool	37	31054
MRF	38	27528
ACC Ltd	39	27487
Page Industries Ltd	40	25445

Asset Turnover Ratio = Sales / Total Assets
H_1: Asset turnover has a significant impact on market performance.
Profit margin is used to identify competitive advantage - differentiation advantage. It is an indicative of price premium associated with a firm'sproducts and services.
Profit Margin = (Net income / Net Sales) *100
H_2: Profit margin has a significant impact on market performance.
Leverage has been used as a risk predictor of a company. To the degree that the company is ableto fulfill its debt servicing obligation from the corporate cash flow, high leverage leads to higher equity returns. However,in an uncertain business environment, the use of higher debt levels to financeassets leads to higher
Financial Leverage = EBIT / EBT
H_3: Leverage has a significant impact on market performance.
A company's market performance is best understood by measuring its worth, or how valuablethe company is. Book to market ratio is used as an indicator of firm's market performance for a varietyof purposes such as due diligence for mergers and acquisitions,establishing an acceptable investmentportfolio for high net-worth investors,generating benchmark values for primary issues and foreign direct investors investments.

Book to Market Ratio = Shareholders Equity / Market Capitalization

Asset turnover is used to measure competitive advantage-cost advantage. It is often used as an indicator of efficiency with which a business deploys its assets to generate revenue.

Discussions

The correlation values, mean and standarddeviation for the various measures are presented in Table 2.

Table 2: Correlation and Statistics

	Asset Turnover	Profit Margin	Financial Leverage	Book - Market Ratio	Mean	Standard Deviation
Asset Turnover	1	-.349**			1.51	1.37
Profit Margin	-.349**	1			23.32	33.10

Financial Leverage	-.179*	-0.05	1		1.12	0.36
Book - Market Ratio	0.022	.278**	-0.083	1	2.69	4.38

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed)

It can be observed that the correlation coefficient between asset turnover and book to market ratio is not statistically significant. The correlation between profit margin and book to market ratio is 0.278 and statistically significant at 0.01 level. The firm's ability to price products and services become relevant to market performance. The study also finds that there is no statistically significant correlation between financial leverage and book to market ratio. Table 3 presents the model summary. The adjusted R square of 0.081 implies that 8% of variation in the market performance is explained by asset turnover, profit margin and leverage.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.309[a]	.095	.081	4.1964630

a. Predictors: (Constant), Financial Leverage, ProfitMargin, Asset Turnover

Table 4: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	363.27	3	121.09	6.87	.000[b]
Residual	3451.62	196	17.61		
Total	3814.89	199			

a. Dependent Variable: Book - Market Ratio
b.Predictors: (Constant), Financial Leverage, ProfitMargin, Asset Turnover

Table 5: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.71	1.18		1.44	.152
Asset Turnover	.40	.24	.13	1.70	.092
Profit Margin	.04	.01	.32	4.37	.000
Financial Leverage	-.54	.84	-.05	-.65	.519

Dependent Variable: Book - Market Ratio

Table 4 presents the F Value and corresponding p value indicating a statistically significant finding with p-value less than 0.05.

Table 5 indicates that profit margin impacts the dependent variable book to market ratio. The study rejects H_1 and H_3 as the p value is greater than the levelof significance 0.05. This implies that asset turnoverand financial leverage do not have significant impacton market performance. The study accepts H_2 as the p value is 0.000. Profit margin has the most significant impact with regression coefficient of 0.04inferring that improved profit margins lead to better market performance and higher competitive advantage.

Conclusion

The study evaluates the performance of top 40 companies based on market capitalization for the period of 5 years. Competitive advantage is measured using asset turnover ratio and profit margin and risk is measured using financial leverage. Book to market ratio is used as a measure of market performance of a firms. The result indicates that profit margin has the most significant impact on the market performance. The result is in contrast to Dempsey (2010) and Tilehnouei & Shivaraj (2014) and Sar (2019).

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