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Company Related Fundamental Determinants of Banking and FMCG Industry in India: A Comparative Analysis

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Abstract

The present study is an attempt to identify the fundamental determinants that affect the market prices of equity shares of FMCG and banking sector in India. The secondary data of major FMCG and Banking companies which are part of BSE-100 index for the period from April, 2002 to March, 2016 and nine company related fundamental determinants namely, current ratio (CR), earning per share (EPS), book value per share (BVPS), size of the firm (Size), price-earning (PE), return on asset (ROA), return on net worth (RONW), net profit margin (NPM) and debt to equity (DEQ) has been taken as independent variables and market price of equity shares has been taken as dependent variable in the present study. The panel data regression has been employed to find out the significant determinants of equity shares of banking and FMCG sector. The results of the study depicts that current ratio, earning per share, price earning, book value per share, size of the firm, debt to equity, return on net worth and return on asset are the significant determinants of FMCG industry in India and debt to equity, price earning, return on asset and size of the firm and book value per share are significant fundamental determinants of banking industry in India.The result of the study may be helpful in taking investment decisions by the investors as well as fund managers.

Keywords: Share, Fundamental, Book Value, Price

Introduction

Investment in shares involves financial risk, so there is need to proper valuation of shares on continuation basis before taking any profitable investment decision. Investments experts also have strong opinion that there is need of proper valuation of shares to determine the intrinsic value or true worth of the shares by using various techniques like fundamental analysis and technical analysis because the market price of shares will float near their fair values. Techncal analysts use different tools and techniques such as charts, technical indicators and oscillators to identify the pattern and to predicting future share prices whereas in fundamental approach, share prices can be predicted by analyzing economy factors such as business cycle, interest rates, inflation, capital flows, exchange rate etc., Industry related variables such as market share, customer, suppliers, competition etc. and company factors like sales, profitability, liquidity, operating efficiency, growth and cash flow position etc. So investors and financial analysts need to have knowledge regarding these fundamental factors before making their investment decisions. Fundamental factors help in determining intrinsic value of the share and fundamental analysts can identify over priced and under priced shares by comparing market value of shares with the intrinsic value and can take their productive investment decisions. In the present study an attempt has been made to find out significant fundamental determinants of FMCG and banking sector in India.

FMCG industry comprises all the firms that are engaged in manufacturing and selling of those type of goods that have a short shelf life, sold frequently and comparatively at low cost. In India, the fast moving consumer goods (FMCG) sector is the fourth largest sector having US$ 44.9 billion market size in 2013 and is expected to touch US$ 135 billion by 2020. Over the last decade, it has grown at an annual average of about 11 per cent.There is a lot of scope for growth in the FMCG sector especially in rural markets in Indian economy. The policies and regulatory framework framed by Indian government like relaxation of license rules and approval of 51 per cent foreign direct investment (FDI) in multi-brand and 100 per cent in single-brand retail are also key growth drivers for the FMCG segment. Research & Development (R&D), Innovation, creating awareness and changing lifestyle helps in boosting the growth of this sector and it helps in reducing poverty and enhances purchasng power of rurals while banking industry includes all the commercial as well as cooperative banks. Banking industry is one of the oldest industries and due to globalization, increase in telecommunication services and technological developments like online banking, ATMs, this industry become so active and more admired. In present time period banks have become keystone of an economy because of the various facilities provided by the banks such as transfer risk, offers liquidity, assist all types of major and minor transactions, make available financial informations to both individuals as well as businesses. Banking industry in India is continuously rising and there is major role of new technology like ATMs, online and mobile banking in the growth of this industry.

Review of Literature

Sehgal and Pandey (2010) evaluated the relationship between earnings per share, book value and sales and share price by using root mean squared error and thail inequality coefficient and found that price to book value is price multiple in India, China and South Korea while price to earnings is good indicator for valuation of shares in Brazil and South Africa.

Sahoo and Chatterjee (2011) used correlation and regression to find out relationship between price earnings and stock returns in capital goods, FMCG, M&M and oil, gas & power, finance, healthcare, housing and IT sector. The study found that there is negative relationship between price earning and stock returns in India. The study also showed that shares of traditional industry have stronger correlation with price earning as compared to stocks comes under modern industry.

Ebrahimi and Chadegani (2011) examined the relationship between earnings, dividend with the stock returns in Iran stock market. Cross section, pooled data as well as panel data regression with random effect model has been used to forecast stock returns and found that earning is one of the most significant determinant of stock returns in Iran and dividend is also significant determinant but changes according to time period.

Sharma (2011) analyzed the empirical relationship between equity share prices and fundamental variables in India by using correlation and multiple regression model and study concluded that earning per share, dividend per share and book value per share has significant impact on the market price of share.

Nirmala et al. (2011) focussed to identify the determinants of share prices in the Indian stock market by using panel data regression in auto, healthcare and public sector and the results of the study indicated that the dividend per share, price earning and debt to equity are significant determinants of share prices for all the sectors under consideration while profitabilty is the signifcant determinant of auto sector only.

Ozlen and Ergun (2012) found that book value is the most significant fundamental determinant of the share price for all sectors. The study also found that total asset turnover has the positive significant impact on the stock prices of metal products, metal-main, and chemical-petroleum sector while it has negative impact in communication, transportation and electric sub sectors and debt ratio is the negative significant determinant in food, metal-main and commerce sector. Current ratio has the positively significant impact on metal-main sector while have negative impact of commerce sector.

Bhattacharjee (2012) examined the relationship between market price of equity shares and companies' size (in term of sales), growth, liquidity, profitability and dividend in Indian stock market. Ratio analysis, correlation coefficient and multiple regressions were used in the study and study found that the dividend and size of the companies are positive significant determinants of share prices.

Srinivasan (2012) employed panel data techniques, fixed effects model and random effects model to examine the relationship between equity share prices and fundamental determinants and found that there is a negative and significant impact of dividend per share on the stock prices of manufacturing, pharmaceutical, energy and infrastructure sectors and earning per share and price-earnings ratio are significant indicators of equity share prices of manufacturing, pharmaceutical sector, energy, infrastructure and commercial banking sectors.

Limento and Djuaeriah (2013) examined the relationship of micro and macro determinants in Indonesian stock market by employing pooled type regression model and found that among all the indicators, total asset turnover and earning per share are the two indicators that have positively significant impact on the stock price movement.

Amsaveni and Gomathi (2013) analyzed fundamental (economy, industry and company) determinants of FMCG companies in India by employing mean, skewness and kurtosis and found that gross national product, inflation, government receipts, interest rates, exchange rate, foreign exchange reserves, agricultural production and expenditure has a positive growth rate during the study period while gross domestic product, gross domestic capital formation, gross domestic savings and balance of payments have a negative growth rate.

Sukhija (2016) used panel data analysis on data consisting to 6 major sectors of the Indian economy. The study showed that book value, dividend per share and growth are significant fundamental determinants of share prices of banking and financial companies. Price earning ratio, book value, COVER and growth are the essential determinants of share prices of Petroleum and Mining companies. Book value, Return on capital employed and EPS are the key determinants of share prices of IT and communication sector. Dividend payout ratio, ROCE and dividend per share are signifcant determinants of share prices of FMCG and Miscellaneous Companies. Book Value, earning per share and Growth are chief determinants of share prices of auto and ancillary sector. However Book Value, dividend per share and COVER are being the essential determinants of share prices of Drugs and Pharmaceuticals Companies.

Belke and Keil (2017) established practical aspects on the fundamental determinants of real estate prices. Study identified various fundamental determinants, among them the supply-side factors construction activity and housing stock as well as the demand side factors apartment rents, market size, local infrastructure, age structure and rental prices are significant determinants.

Jaworska and Jaworski (2017) aimed to find out the significant fundamental variables motivating banks credit default swaps and concluded that CDS spreads are most perceptive to the market risk factors whereas capital adequacy, earnings and liquidity variables have weaker contact.

Neeraj Nautiyal and Kavidayal (2018) analyzed the contact of institutional fundamental variables on firm's stock market price performance. Results of the study showed that increasing debt in capital structure has not created any significant relation with the share prices. Earnings per share indicated a poor explanation of price variation. Economic value added had a positive relation with current as well as previous year's stock price performances. Dividend payout and dividend per share attains negative relationship at quite significant level.

Objectives of the study

1. To identify significant fundamental determinants of FMCG and Banking sector in India.
2. To do comparative analysis of fundamental determinants of FMCG and Banking Sector in India.

Research Methodology

This section explains in detail the sample size, time period, source and statistical tools applies in the study. The sample size contains the top twelve FMCG companies which are part of BSE-100 index.The present study covers the time period ranging from April, 2002 to March 2016. The study is based on secondary data which is collected from PROWESS database maintained by the Centre for Monitoring Indian Economy (CMIE) and other websites like www.moneycontrol.com etc.

The market value of equity shares i.e. closing price of share (MP) is taken as the dependent variable while current ratio (CR), price earning (PE), net profit margin (NPM), book value per share (BVPS), earnings per share (EPS), debt to equity (DEQ), size of the firm (SIZE), return on net worth (RONW) and return on asset (ROA) are taken as the independent variables to employ the regression model.

Fundamental Variables

Following are the nine fundamental variables taken in the study according to their popularity in literature.

Independent Variables	Statistical Formula
Book Value Per Share	Shareholder Equity – Preference Equity / Number of Equity Shares Outstanding
Debt to Equity	Total Debt / Shareholders' Equity
Earnings per Share	Net profit - Preference Dividend / No. of Outstanding Ordinary Shares
Price to Earning	Market Price per Share / Earning per share
Return on Asset	Net Profit after taxes / Average total Asset
Current Ratio	Current asset/ Current liability
Net Profit Margin	Profit after interest and tax/ Net Sales
Size	log of total asset

Since the data is of panel nature consisting of both time series and cross sectional data, panel data regression including fixed effect model as well as random effect model is carried out on panel data to find out significant fundamental determinants of FMCG sector in India and finally a Hausman specification test is conducted in order to compare the fixed and random models.

Analysis and Findings

This section shows the outcome of the panel data regression analysis. The results of both random as well as fixed effect model have been shown to find out significant determinants of equity stocks for each industry taken under study.

Table 1: Fundamental Determinants of Equity Shares of Banking and FMCG Industry

Industry/Variables	Banking Industry				FMCG Industry			
	Fixed Effect Model		Random Effect Model		Fixed Effect Model		Random Effect Model	
Variables	Coefficients	Sig.	Coefficients	Sig.	Coefficients	Sig.	Coefficients	Sig.
C	-327999.8	0.0000	-268628.6	0.0000	-326922.0	0.0270	-432855.8	0.0003
CR	1351.146	0.2412	1091.950	0.3336	33181.12	0.0296	35920.62	0.0107
DEQ	-4585.316	0.0106	-592.0850	0.6729	-28404.18	0.0022	-18098.17	0.0268
EPS	71.08978	0.4779	32.96217	0.7391	6165.219	0.0000	6674.331	0.0000
NPM	-114.1093	0.4769	-6.445553	0.9671	2876.436	0.1868	-1448.811	0.4217
PE	441.0864	0.0010	572.3393	0.0000	1041.910	0.0270	1230.717	0.0047

ROA	6274.966	0.0004	8147.733	0.0000	-5352.049	0.0001	-5631.816	0.0000
RONW	-88.37990	0.6897	-25.74781	0.9046	-3062.870	0.0017	142.0281	0.8432
SIZE	28095.62	0.0000	21998.48	0.0000	42616.14	0.0028	47129.78	0.0000
BVPS	-3.134512	0.8609	16.09227	0.3452	-691.4262	0.0001	-603.3790	0.0002
Hausman test (Chi-Sq. Statistic)	52.156242 (0.0000)				59.461114 (0.0000)			
Adjusted R^2	60.26%				76.8%			
F- test	17.78045 (0.000000)				31.47214 (0.000000)			

Note: The Hausman specification test is used to check the suitability of fixed-effect model vs. random effect model.

Interpretation

Table 1 demonstrates the result of fixed and random effect model of panel data regression to find out the significant determinants of equity shares of FMCG and banking industry in India. The sig. value of chi square statistics in Hausman test is (0.0000) which is less than 0.05 indicates that fixed effect model is suitable than random effect model to find out significant variables in FMCG industry. The sig. value of F- test (0.000000) specifies that model is fit and the findings of fixed effect model shows that about 76.8% of the variation in market price of equity shares is due to the explanatory variables such as current ratio, earning per share, price earning, book value per share, size of the firm, debt to equity, return on net worth, net profit margin and return on asset. The study also finds that current ratio, earning per share, price earning, book value per share, size of the firm, debt to equity, return on net worth and return on asset are the significant indicators of FMCG industry in India.

Tables 1 also reveals the result of fixed and random effect model of panel data regression to find out the significant determinants of equity shares of banking industry in India. The sig. value of chi square statistics in Hausman test is (0.0000) which is less than 0.05 indicates that fixed effect model is appropriate than random effect model to find out significant variables in banking industry. The sig. value of F- test (0.000000) states that model is fit and the findings of fixed effect model shows that about 60.26% of the variation in market price of equity shares is due to the explanatory variables such as current ratio, earning per share, price earning, book value per share, size of the firm, debt to equity, return on net worth, net profit margin and return on asset. The result also indicates that debt to equity, price earning, return on asset and size of the firm and book value per share has significant impact on equity share prices of banking industry in India.

Conclusion

The main aim of the present study is to identify the significant determinants of equity shares of FMCG and banking sector in India. The secondary data consist of both time series as well as cross sectional, so panel data techniques, viz. Fixed Effect and Random Effect model has been employed to find out significant determinants and the results of the study found that 76.8% of the variation in market price of equity shares is due to the explanatory variables and current ratio, earning per share, price earning, book value per share, size of the firm, debt to equity, return on net worth and return on asset are found to be most significant determinants of FMCG industry in India. The result also shows that debt to equity, price earning, return on asset and size of the firm and book value per share has significant impact on equity share prices of banking industry in India.

References

1. *Amsaveni R and Gomathi S (2013), "Fundamental Analysis of Selected FMCG Companies in India", Asia-Pacific Finance and Accounting Review, Vol. 1, No. 3, pp. 37–55.*
2. *Belke, Ansgar and Keil, Jonas, 2017. "Fundamental determinants of real estate prices: A panel study of German regions," Ruhr Economic Papers 731, RWI - Leibniz-Institut für Wirtschaftsforschung, Ruhr-University Bochum, TU Dortmund University, University of Duisburg-Essen.*
3. *Bhattacharjee, B. (2012), "Market Price of Share of Indian Companies: An interrelationship with Companies' size, Leverage, Growth, Liquidity, Profitability and Dividend decision", Asian Journal of Research in Banking and Finance, Vol. 2, Issue 3, pp. 85-91.*
4. *Chodnicka Jaworska, P., and Jaworski, P. (2017), "Fundamental determinants of credit default risk for European and American banks", Journal of International Studies, Vol. No,10(3), pp. 51-63.*
5. *Ebrahimi M and Chadegani A A (2011), "The Relationship between Earning, Dividend, Stock Price and Stock Return: Evidence from Iranian Companies", International Conference on Humanities, Society and Culture IPEDR, Vol.20, pp. 318-323.*
6. *Hausman J A (1978), "Specification tests in econometrics", Econometrica, Vol. 46, No. 6, pp. 1251-71.*
7. *Limento,A.D. and Djuaeriah, N., (2013), "The Determinant of the Stock Price in Indonesian publicly listed Transportation Industry", Business and Information, pp. C776- C794.*
8. *Nautiyal, N. and Kavidayal, P. (2018), "Analysis of Institutional Factors Affecting Share Prices: The Case of National Stock Exchange, Global Business Review. Vol. 19, Issue 3, pp. 707-721.*
9. *https://doi.org/10.1177/0972150917713865*
10. *Nirmala S P, Sanju S P and Ramachandran M (2011), "Determinants of Stock Prices in India", Journal of Emerging Trends in Economics and Management Sciences, Vol. 2, pp. 124-130.*
11. *Ozlen S and Ergun U (2012), "Internal Determinants of the Stock Price Movements on Industry Basis", International Research Journal*

of Finance and Economics, Issue 92, pp. 111-117.

12. *Sahoo, P. K. and Chatterjee, A. (2011), "The Price-Earnings Ratio and The Equity Returns in India", Journal on Banking Financial Services & Insurance Research, Vol. 1, Issue 3, pp. 1-12.*
13. *Sehgal, S. and Pandey, A. (2010), "Equity Valuation Using Price Multiples: A Comparative Study for BRICKS", Asain Journal of Finance & Accounting, Vol. 2, No.1, pp. 68-91.*
14. *Sharma S (2011), "Determinants of equity stock prices in India", Journal of Arts, Science & Commerce, Vol.-II, Issue 4, pp. 51-60.*
15. *Shukla H and Devani J (2011), "A Study on the Determinants of Equity Prices in the Stock Markets in India", Pratibimba- The Journal of IMIS, Vol. 11, Issue 1, pp. 66-72.*
16. *Srinivasan P (2012), "Determinants of Equity Stock Prices in India: A Panel Data Approach", The Romanian Economic Journal, Vol. XV, No. 46, pp. 205-228.*
17. *Sukhija,S. (2016), "Industry-wise Study of Fundamental Determinants of Share Prices of BSE Stock Prices in India", European Journal of Business and Management, Vol.8, No.1, pp. 95-104.*