An Analytical Study on Earnings Growth and Price-Earnings Ratio Expansion of Indian Listed Mid-Cap Companies and Its Relation with Their Share Price Performance

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ABSTRACT

Investors are always on the lookout for the stocks which could deliver multiple returns in the long run. Apart from the huge returns in terms of stock price there is additional benefit in terms of lower tax outgo as long term capital gains tax is always lower than short term gains tax. In addition investors have to monitor only few companies in terms of performance and need not change the stocks frequently and look for short term gains. With few potential wealth multipliers in portfolio investor has to only monitor the continuation of has good future prospects. The present study is an attempt to establish relation of the dependent variable (share price) with independent variable (growth in earnings per share for minimum three years), so as to predict the share price in relation to growth in earnings. Earnings Per Share (EPS) is the most important parameter because it directly tells us as to how much we pay in terms of share price and how much company earns in terms of Net Profit per year. This paper attempts to provide empirical evidence on how growth in EPS and PE ratio over a minimum three year period affect the share price movement.

***Keywords**:* Earnings Per Share, PE ratio, CAGR, Multibagger

I INTRODUCTION

There is a strong theory that stock price movements are random in nature. If the stock prices do not follow the trend ofrandom walk, then one possibility is that stock prices followed mean-reversion process. In that case the share price movement's shouldbe predictable from the changes in firm fundamental values.

Reasonably good research is available on finding relation between one year EPS and share price but too little for extended times. It needs more study. Consistent growth in bottom-line should be the ideal case for multiple returns from share price. India being an emerging economy, the stock market is on the radar of domestic as well as foreign investors who poured in staggering 18 lac crores since the year 1991 when huge reforms were carried out.

Merely the thought of mega returns has always generated considerable interest among investorsbe it retail or an institution domestic as well as foreign.Often markets are filled with rumors and share price exhibits volatility. Unfortunately not much research has been carried out in this field and more study is required.

II LITERATURE REVIEW

The Dividend yield (dividend to share price) (Fama and French, 1988) and earnings-to-price ratio (Campell and Shiller, 1988) contributed significantly to the explanation of long-term stock price variation.

Kent Hickman and Glenn H. Petry,(1990) concluded that the predictions of the academically popular dividend discount models are far inferior to the court and price/earnings regression models.

Ansotegui and Esteban (2002) established a long term relationship between the Spanish stock market and itsfundamentals.

In the year 2008,Chang, Hsu-Ling, Yahn-Shir Chen, Chi-Wei Su, and Ya-Wen Chang from Taiwan found that a relationship does exist between EPS and share price but very feeble. Study was performed on Taiwan Panel Data. The empirical result indicated that the relationship existed between stock prices and EPS in the long-run. Furthermore, it was found that for the firm with a high level of growth rate, EPS has less power in explaining the stock prices however, for the firm with a low level of growth rate; EPS has a strong impact in stock prices.

III OBJECTIVES

(a) Study the share price performance of the companiesin terms of EPS growth and PE expansion for minimum three years in a row.

(b) To analyse the bearing of EPS growth and PE expansion growth on share price movement.

IV RESEARCH DESIGN

(a) Sample Design

Introduction: There are total 5137listed entities on BSE. Of these 4713 stocks are listed for equity capital. Out of the 6565 companies are suspended for trading of their shares. Stocks listed on BSE are categorized into various groups like A-Group, B-Group, Z-Group and T-Group. Window for our analysis has been confined to only mid cap shares, as this category comprises of companies which have potential to deliver EPS with consist growth.These company stocks were midcap at the time of start of reporting consistently rising EPS. Many of these stocks are still midcap and few turned into large caps. Also, we included different market sectors so as to cover the whole economy of the country, like NBFC (Non-Banking Finance Company), Consumer goods, Textile, Automobile, Information technology, Leather, FMCG (Fast Moving Consumer Goods), Packaging, Pharmaceuticals, Finance, Chemical, Tiles etc. After screening the stocks we could finalise on 37 stocks. From this population, the stocks have been selected based on the availability of the data.for the purpose of the present study sample of 13 companies has been taken into consideration.

There are two stock exchanges actively being operated at national level – Bombay Stock Exchange (BSE) and National Stock Exchange (NSE), both are located at Mumbai. Almost entire company stocks listed on NSE is also listed on BSE. Thus, BSE stocks represent the whole universe/population. All the stocks listed on BSEare the Universe or Population for the subject study.

Parameters to be studied:

EPS (Earnings per Share) – High Earnings per Share means high level of net profits delivered by the company. Since investors invest for faster rate of returns, higher EPS is always rewarded with high price by investors.
PE ratio – PE ratio is a ratio of current ruling share price divided by the EPS (Earnings Per Share) for the latest completed financial year. In a simple way it indicates the number of year it would take to recover the price paid assuming that the EPS does not grows.

PE ratio being price paid for given earnings indicates that higher the ratio higher the confidence of investors in future prospects of the company. Thus it is partly derived from past performance which has already been captured in EPS growth.

Consistently healthy EPS growth makes the investors confident of its future prospects.

In this study data has been considered for minimum three years. Three years duration has been considered to rule out the inconsistent players.

Technique used for studying the three years data: CAGR (Compounded Annual Growth Rate)
Mathematically, it can be represented as
CAGR = Compounded Annual Growth Rate = (Final amount / Initial amount)^$^{(1/n)}$
Where, n = Number of years
This has been derived from Compound Interest formula
i.e. A = P (1 + r / 100)^^{n}
Where,
A = Final Amount
P = Starting or Principal Amount
R = Rate of Interest
N = Number of periods (mostly years)

V ANALYSIS & INTERPRETATION

CAGR (Compound Annual Growth Rate) is very a useful measure of measuring growth over multiple time periods generally years. It can be considered as the growth rate that multiplies the initial investment amount to the final investment amount assuming that the investment has been compounding over the time period under consideration.

In other words CAGR is that geometric progression ratio that provides a fixed rate of return over the time period.

Analysis of EPS and PE ratio CAGR for minimum three years after posting a consistently rising EPS. All the data has been adjusted wherein the company if issued Bonus shares or stock split.

Sr. No	Company	Period	No. of years	EPS CAGR (%)	PE ratio CAGR (%)	Share Price CAGR (%)
1	**Amara Raja Batteries**	FY13 - 16	3	19.52%	23.92%	48.11%
2	**Aurobindo Pharma**	FY13 - 18	5	29.41%	10.65%	43.21%
3	**Bajaj Finance**	FY10 - 19	9	42.85%	13.10%	61.56%
4	**Control Print**	FY12 - 15	3	27.43%	40.34%	78.83%
5	**Garware Technical Fibres**	FY12 - 19	7	27.04%	24.48%	58.13%
6	**Divi's Laboratories**	FY11 - 16	5	20.46%	2.78%	23.82%
8	**Greenply Industries**	FY11 - 18	7	25.48%	4.55%	31.19%
9	**Indusind Bank**	FY12 - 18	6	23.22%	10.71%	36.41%
10	**Kajaria Ceramics**	FY11 - 17	6	26.60%	24.84%	58.04%
11	**P I Industries**	FY13 - 17	4	44.83%	10.69%	60.32%
12	**Tata Elxsi**	FY14 - 19	5	31.02%	-2.28%	28.03%
13	**VIP Industries**	FY15 - 19	4	27.94%	14.04%	45.91%
	Average		**5.33**	**28.90%**	**14.82%**	**47.80%**

(a) Interpretation

(i) Average EPS CAGR is placed at 28.90%.
(ii) Average PE ratio CAGR is placed at 14.82%.
(iii) Except for Tata Elxsi all the companies have reported positive PE ratio CAGR. This company is quite dependent on group company Tata Motors which is not doing well from pretty long time.
(iv) Excluding Tata Elxsi average PE ratio CAGR would have been 16.37%
(v) Average share price CAGR is 47.80%
(vi) In case of Amara Raja Batteries and Control Print, PE ratio has much higher contribution than EPS growth which was later corrected when the investor hopes shattered and share price declined due to lower EPS figures in subsequent years.
(vii) In case of Bajaj Finance, Divi's Lab and Greenply Industries investors PE expansion is low as they already are ruling at high PE ratio.
(viii) Higher the duration of consistent growth, higher the share price gains. This is amply indicated by Bajaj Finance, Garware Technical Fibres, Kajaria Ceramics and Aurobindo Pharma.
(ix) Average CAGR share price increase is very high at 47.80% that means doubling of money in one year and 10 months only. As much as $2/3^{rd}$ of this rise is explained by the financial performance and rest through expansion in PE ratio

VI FINDINGS/ CONCLUSION

Based on the tabulated data there is conclusive evidence that the share price rises rapidly when most of the below mentioned criteria is met.

(a) Minimum three years EPS growth is positive and upward of 25% yearly growth
(b) EPS growth adds double the contribution of PE ratio in explaining the multiple returns in terms of share price.
(c) PE does expand rapidly when the company starts delivering fast growth in Earnings Per Share. But investors are not willing to expand the PE further once the earnings growth stabilizes.
(d) It is not the financial performance alone which explains the rise in share price. Expansion in PE plays a very significant role.
(e) Wide variation in expansion in PE indicates that past good performance explains only partly in investor confidence (PE ratio). Other factors can be management, sector prospects etc.
(f) Dividend can have crucial contribution in PE expansion. Needs further study.
(g) The parameters for most of the companies are near to average which indicates that there is no sector specific bias for investor confidence.

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