## Asian Resonance

 Micro Fundamental Factors of EquityStock Prices in India


Suresh K. Mittal<br>Assistant Professor, Haryana School of Business, Guru Jambheshwar University of Science \& Technology, Hisar, Haryana



Neha Goyal
Research Scholar, Haryana School of Business, Guru Jambheshwar University of Science \& Technology, Hisar, Haryana

## Abstract

The study under consideration is an attempt to extract the micro fundamental factors and further to examine the relationship between fundamental factors with the equity share prices in India. The study is based on equity stocks of 124 companies, which is part of BSE-200 index. The time period of study undertaken is April, 2001 to March, 2012. Factor analysis has been used to extract the factors from the sixteen variables undertaken and then the multiple regression model has been used to analyze the effect of these extracted factors on the market prices of equity stocks in India. The result of factor analysis observed that liquidity, profitability, leverage, sales, operating efficiency and growth are the six factors that determines the equity share prices in India. The result of multiple regression indicate that $50.5 \%$ of variation in market price of equity shares are explained by six extracted fundamental factors. The study also found that profitability and growth are the two significant factors having positive impact on the market price of equity shares. The study concluded that the growth is one of the most important factors in determining equity share prices in India.
Keywords : Market Price, Profitability, Liquidity, Leverage, Operating Efficiency.

## Introduction

Stock market plays vital role in capital formation and in economic growth of the country. Until 1980, there was a common consent among financial economists that stock markets are efficient and price of stocks changes randomly over time and therefore stock prices are unpredictable (Fama,1970; Malkiel, 2003; Pesaran, 2010). But by the beginning of 1980s, many financial economists and statisticians confirms that abnormal profits can be earned by doing technical and fundamental analysis (Fama, 1988; Shiller, 1988). Fundamental predicts share price on the basis of economy analysis (GDP, Inflation rates, interest rates etc.), industry analysis (threat of competitors, cost of entry and exit from the industry etc.) and company analysis (earnings, price, expenses etc.), whereas, technical approach predicts stock prices on the basis of historical prices and volume traded. Both techniques are very helpful in predicting stock prices but the present study concentrates only on fundamental analysis. There is no doubt that investing in equities involves high risk and high return but investing in right stock at the right price and holding for a longer time horizon would surely be a rewarding investment. Previous researchers believes that successive movement in stock prices are related with changes in fundamental indicators that are relevant for valuation of stock (Mukherji et al., (1997); Fama and French, (1992); Sharma, (2011)). Fundamental analysis helps in determination of the intrinsic value of the security and on the basis of this intrinsic/fair value, investors may make a buy, sell or hold decision. Fundamental analysts suggests that investor's should buy the stock when it is available at less than its fair value, sell it when it rises more than its fair value. The results of previous research studies also confirmed the significant role of micro determinants such as dividend per share, earnings, size of the firm, earning per share, dividend yield, debt to equity and book value per share on the pricing of equity stocks. Investors, brokers, financial companies, portfolio managers should take care of these variables while taking their rational investment decisions in the equity market. On the basis of these micro fundamental determinants, the objective of the present study is to examine the relationship between micro fundamental factors such as liquidity, profitability, growth, sales, leverage and operating efficiency with the market price of equity stocks.

## E: ISSN No. 2349-9443

## Review of Literature

Various researchers analyzed the micro and macro fundamental determinants of equity stock prices. The finding of their studies shows a mixture of outcomes depending on the scope of the study. Review of some of previous studies has been provided in this section. Sarac (2008) analyzed the behavior of the foreign investors towards the fundamental determinants while taking their investment decisions in Istanbul stock exchange. The findings of the study showed that four factors has been extracted from twenty four variables by employing factor analysis technique and the result of multiple regression found that operational leverage, profitability and solvency factors are mostly considered by foreigners while taking investment decisions, in contrast growth is not a statistically significant factor. Das and Pattanayak (2009) examined the linkage between the corporate fundamental factors and share price of the stocks in Indian stock market. The results showed that out of six factors which were extracted out of sixteen variables, return on investment, earning power, growth and valuation factors had positive impact on share prices whereas risk and volatility factors had negative impact on share prices movement of Sensex and Nifty. The study also founds that the variables comprising the factors affecting the two indices Sensex and Nifty were different. Sharma (2011) also analyzed the association of equity share prices with the fundamental variables such as book value per share, dividend per share, earning per share, price earning ratio, dividend yield, dividend payout, size in terms of sale and net worth for the period ranging from 1994 to 2009 by employing correlation and multiple regression. The outcome of the study depicted that earning per share, dividend per share and book value per share are the significant fundamental determinants of the equity stock prices and among these entire determinants dividend per share and earning per share being the strongest fundamental variables of market price of equity stocks in India.

Shukla and Devani (2011) employed correlation and regression analysis to analyze the significant fundamental determinants of equity stocks in India during the time period from 2005 to 2009. The study found that price earning ratio, dividend per share, earning per share and dividend cover have the positively significant impact on the equity share prices followed by dividend yield and book value whereas growth has insignificant impact on the equity share prices. Gill et al. (2012) analyzed the relationship of fundamental determinants with the equity share prices in America. The results of the study confirmed that book value per share; earnings per share, dividend coverage, and dividend per share, dividend payout ratio, firm size, the CEO quality, and the internationality of the firm have a positive impact on the equity prices of manufacturing as well as service firms in America. Venkates et al. (2012) examined the relationship between Profitability, Liquidity and

## Asian Resonance

Operating efficiency indicators and stock returns of Information Technology, Banking and Pharmacy sectors in India during the period of 2001 to 2010. FSCORE as developed by Piotroski in the year 2000 has been used in the study and concluded that all individual fundamental indicators taken under consideration have a positive correlation with future stock returns. Bhatt and Sumangala (2012) investigated the impact of earning per share on the market price of an equity share in India during the time period 2007 to 2011 and the result of the study found that there is positive impact of earning per share on the market value of an equity share in the Indian context. Bhattacharjee (2012) analyzed the linkage between market price of equity shares and companies' size (in term of sales), growth, liquidity, profitability and dividend in Indian stock market for the time period starting from 2003 to 2008. The results of the study revealed that the dividend and size of the company are positive significant determinants of share prices. Ozlen and Ergun (2012) investigated the relationship between share prices and fundamental determinants of company such as total assets turnover ratio, debt ratio, current ratio, net profit margin, price to earnings ratio and book value in different sectors and found that book value is the most significant fundamental determinant of the stock price for all industries taken under study. The study also revealed that stock price movements of energy and metal sectors are highly correlated with the internal factors whereas, fundamental factors have very less effect on the stock prices of commercial industry. Malhotra and Tandon (2013) examined the relationship between stock prices and company specific fundamental factors for NSE 100 companies during the period 2007 to 2012. A linear multiple regression model has been employed and the results of the study showed that firms' book value, earning per share, price-earnings ratio and dividend yield are the significant determinants of the stock prices. On the other hand dividend cover and dividend per share are not significantly impacting the stock prices.

## Objectives of the Study

1. To extract the fundamental factors affecting equity share prices.
2. To identify the influence of fundamental factors on the market price of equity shares.

## Research Methodology

This section explains in detail the sample size, time period, source of data and statistical tools used in the study under consideration. The sample of 124 companies is selected out of 200 companies listed on BSE 200 indices as on June, 2013. The companies are filtered on the basis of two criteria: 1) the stock of the companies must be listed at least five years from April, 2001 to March, 2012 on BSE 200 index. 2) The data of all the variables taken in the study, of all the periods for all the companies selected must be available on PROWESS database. The present study covered the period of ten years ranging from April, 2001 to March 2012. The study comprises the period of boom, recession, recovery, political

## E: ISSN No. 2349-9443

turmoil, world economic crisis, high inflation as well as low inflation period, highest and lowest crude oil prices etc. which justify the period of study to find out meaningful conclusions. The calculation of data is based on average of tweleve years for the period from April, 2001 to March, 2012. The secondary data required for the study has been collected from PROWESS database maintained by the Centre for Monitoring Indian Economy (CMIE).

Factor analysis using Principal Component Analysis (PCA) has been applied in the study to extract the fundamental factors of equity share prices. After that, a linear multiple regression model has been employed to identify the significant fundamental factors of the market price of equity shares.
The common equation of multiple linear regression model is:

$$
Y=b_{0}+b_{1} X_{1}+b_{2} X_{2}+b_{3} X_{3}+\ldots \ldots . .+b_{n} X_{n}
$$

Where, $Y=$ dependent variable,
$X_{1}, X_{2}, X_{3} \ldots \ldots . . X_{n}=$ independent variables,
$b_{1}, b_{2}, b_{3} \ldots \ldots . . . b_{n}=$ regression coefficient of independent factors (the partial change in market price per share due to one percentage change in

## Asian Resonance

independent factor while other things remain constant)

## Data Analysis and Findings

This section shows the findings of analysis of the data taken for the present study. Under it, firstly results of factor analysis has been shown and after that results of multiple data regression has been shown. To check the appropriateness of the data and adequacy and sphericity of the data, Kaiser- MeyerOlkin (KMO) and Bartlett's test has been employed in the study

Table 1: KMO and Bartlett's Test


In the present study as shown in table 1, the value of KMO is 0.610 and significant value of Bartlett's Test of Sphericity is 0.000 , so it proves that data is adequate for processing factor analysis.

Table 2: Fundamental Factors

| Factors | Descriptive Names <br> of Factors | Eigen <br> Value | Variance <br> Explained (\%) | Cumulative Variance <br> Explained (\%) |
| :---: | :---: | :---: | :---: | :---: |
| F1 | Profitability Indicator | 3.370 | 21.064 | 21.064 |
| F2 | Liquidity Indicator | 2.659 | 16.617 | 37.681 |
| F3 | Operating Efficiency Indicator | 1.864 | 11.648 | 49.329 |
| F4 | Sales Indicator | 1.823 | 11.391 | 60.720 |
| F5 | Growth Indicator | 1.807 | 11.295 | 72.015 |
| F6 | Leverage Indicator | 1.770 | 11.061 | 83.076 |

Extraction Method: Principal Component Analysis
Rotation Method: Varimax with Kaiser Normalisation

Sixteen variables which are Return on Net
Worth, Price to Book Value, Return on Average Capital Employed, Return on Asset, Dividend Payout, Total Asset Turnover, Current Ratio, Quick Ratio, Cash Flow from Operation, Size of the Firm, Price to Sales Ratio, Net Profit Margin Ratio, Earning per

Share, Book Value per Share, Debt to Equity Ratio and Debt to Total Asset Ratio were analysed by the Principal Component Analysis and six major factors were extracted with an eigen value more than 1, which explained $83.076 \%$ of the total variance as shown in table 2.

Table 3: Orthogonally Rotated Factor Rotation

| Indicators | F1 | F2 | F3 | F4 | F5 | F6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Factor 1: Profitability |  |  |  |  |  |  |
| Return on Net Worth | 0.920 |  |  |  |  |  |
| Price to Book Value | 0.796 |  |  |  |  |  |
| Return on Average Capital Employed | 0.748 |  |  |  |  |  |
| Return on Asset | 0.682 |  |  |  |  |  |
| Dividend Payout | 0.655 |  |  |  |  |  |
| Total Asset Turnover | 0.554 |  |  |  |  |  |
| Factor 2: Liquidity |  |  |  |  |  |  |
| Current Ratio |  | 0.952 |  |  |  |  |
| Quick Ratio |  |  |  |  |  |  |
| Factor 3: Operating Efficiency |  |  | 0.896 |  |  |  |
| Cash Flow from Operation |  |  | 0.818 |  |  |  |
| Size of the Firm |  |  |  |  |  |  |
| Factor 4: Sales |  |  |  | 0.949 |  |  |
| Price to Sales Ratio |  |  |  |  |  |  |
| Net Profit Margin Ratio |  |  |  |  | 0.918 |  |
| Factor 5: Growth |  |  |  | 0.902 |  |  |
| Earning per Share |  |  |  |  |  |  |
| Book Value per Share |  |  |  |  |  |  |


| Factor 6: Leverage |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Debt to Equity Ratio |  |  |  |  |  | 0.890 |
| Debt to Total Asset Ratio |  |  |  |  |  | 0.739 |

Source: Results computed through SPSS Software

As shown in Table 3, only those variables whose loading is greater than 0.50 has been taken in the study. After extraction of fundamental factors, multiple regression analysis has been employed to examine the relationship between fundamental factors and equity share prices. In the study, the average market price of equity share has been used as the dependent variable and the factors extracted from factor analysis have been taken as the independent variables as shown in table 3 . There is no problem of multicollinearity among factors because of taking factor scores as independent variables.
Theoretical Framework of the Factors
The following relationship of dependent variables with independent variable is formed:
Market Price of equity shares $=\mathrm{f}$ (liquidity, operating efficiency, sales, leverage, profitability and growth).
Dependent Variable

## Market Price (MP)

Average price of the share has been taken as market price of the share.
Market Price $=$ (Highest Price of the stock + Lowest Price of the stock)/2

## Independent Variables

## Profitability Factor

Six indicators includes under this factor. These are as follows: Return on Net Worth, Price to Book Value, Return on Average Capital Employed, Return on Asset, Dividend Payout and Total Asset Turnover.

## Liquidity Factor

This factor comprises of two indicators naming current ratio and quick ratio.

## Operating Efficiency Factor

Two indicators are included in this factor represents Cash Flow from Operation and Size of the Firm.

## Sales Factor

This factor includes two indicators naming Price to Sales ratio and Net Profit Margin ratio.

## Growth Factor

This factor comprises of two indicators, Earning per Share and Book Value per Share.

## Leverage Factor

Two indicators are included in this factor. Theae indicators are Debt to Equity ratio and Debt to Total Asset Ratio.

Table 4: Variation in Equity Share Prices

| $\mathrm{R}^{2}$ | Adj. $\mathrm{R}^{2}$ | F-statistic | p -value |
| :--- | :--- | :--- | :--- |
| 0.529 | 0.505 | 21.930 | .000 |

1. Predictors: (Constant), Leverage, Growth, Liquidity, Sales, Operating Efficiency, Profitability.
2. Dependent Variable: market price

As shown in table 4, the value of coefficient of determination ( $\mathrm{R}^{2}$ ) is 0.529 in the model. It means $52.9 \%$ of variation in the market price of equity shares is collectively explained by liquidity, profitability, growth, sales, leverage and operating efficiency indicators, in other words $47.1 \%$ of the variations in movement of share prices are accounted for by other factors not taken in the study. The value of Adjusted $R^{2}$ is 0.505 ; it means $50.5 \%$ of variation in market price of equity shares due to combination of all relevant independent variables taken in the study. It can be noted from the $F$-statistic that the $p$-value is less than 0.05 ; It shows that the regression equation is robust and explained variance is quite high than unexplained variance. Moreover F value (21.939) is found to be significant at 5 percent level of significance, suggesting that the existing model is applicable on the whole. That is, all explanatory variables powerfully verify the behavior of the market movement of equity share prices.

Table 5: Factors of Equity Share Prices

| Factors | Unstandardized Coefficients |  | Standardized | t- value | p-value |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | B | Std. Error | Beta |  |  |
| Constant | 586.557 | 50.510 |  | 11.613 | . 000 |
| Profitability | 215.584 | 50.715 | . 270 | 4.251 | . 000 |
| Liquidity | -66.990 | 50.715 | -. 084 | -1.321 | . 189 |
| Operating Efficiency | -44.039 | 50.715 | -. 055 | -. 868 | . 387 |
| Sales | -13.583 | 50.715 | -. 017 | -. 268 | . 789 |
| Growth | 532.301 | 50.715 | . 666 | 10.496 | . 000 |
| Leverage | 46.157 | 50.715 | . 058 | . 910 | . 365 |

a. Dependent Variable: Market price

As shown in the table 5 , the value of Constant indicates that the value of market price per share would be 586.557, even in the absence of the value of liquidity, leverage, growth, sales, operating efficiency, profitability factors. In the coefficient of variable table, significance value of $t$ statistics and unstandardized beta reveals that profitability and growth are the two factors that have positive and
significant impact on the market price of equity shares, while all other factors like liquidity, operating efficiency, sales and leverage are insignificant factors. In the present study units of measurement of variables are different, then standardized beta value would be useful for direct comparison The standardized beta values tells the number of standard deviations that the outcome will vary as a result of one

## E: ISSN No. 2349-9443

standard deviation change in independent variable (Andy field, 2005). The outcome of $t$-Statistics (4.251) and standardized beta value of profitability factor implies that with all other factors held constant, as profitability factor increases by one standard deviation, the value of market price of equity shares increases by 0.270 standard deviation. The value of $t-$ Statistics (10.496) and standardized beta value of growth factor indicates that with all other factors held constant, as value of growth factor increases, say by one standard deviation bring about a 532.301 increase in standard deviation of the market price of equity stocks. On the basis of standardized beta, the study also concluded that growth has the highest value ( 0.666 ), means growth is the most important factor in determining of market price of equity shares followed by profitability factor. The result of the study supports the results of previous studies such as Das and Pattanayak (2009), Malhotra and Tandon (2013) but doesn't support with the studies like Shukla and Devani (2011), Sarac (2008).

## Conclusion and Managerial Discussion

Market price of equity shares are determined by various fundamental variables. The main objective of the present study was to extract the fundamental factors and then examine the relationship between company fundamental factors with the market price of equity shares. Factor analysis and multiple regression model has been employed to achieve the objectives. The study found that profitability, growth, liquidity, leverage, sales and operating efficiency indicators are the six fundamental factors that affects the equity share prices. The most powerful indicator among them is the profitability factor as it revealed highest variance $21.064 \%$ among all of the other factors. The study also concluded that $50.5 \%$ of variation in market price of equity shares due to combination of these six factors. The results also revealed that profitability and growth are the factors that have strong power to predict the market price of equity shares and growth is the strongest between the two factors, followed by the profitability factor. The study also found that there is positive impact of growth and profitability on share prices. Liquidity, operating efficiency, sales and leverage are insignificant and have a negative relation with the equity share prices. For long term investors, more particularly for those who invest in shares of insurance companies and pension funds as their holding period is very long, is very necessary to take care of these factors while invest in equity stock market. These key fundamental factors are useful in making investment decisions because of their strong power to predict the market price of equity shares. The present study is based on company fundamental variables like earning per share, debt to equity ratio, price to sales ratio etc. other economy and industry related determinants like interest rates, oil prices, bargaining power of buyer and suppliers etc., also influence the market price of equity shares. So an extensive study can be conducted on the fundamental variables related to economy, industry and company

## Asian Resonance

to examine relationship with the equity share prices in India.

## References

1. Bartellet, M.S., (1950), "Tests of Significance in Factor Analysis", British Journal of Statistical Psycology, Vol. 3, pp. 77-85.
2. Basilevsky A., (1994), "Statistical Factor Analysis \& Related Methods: Theory \& Applications," John Wiley, New York.
3. Bhatt $P$ and Sumangala JK (2012), "Impact of Earnings per share on Market Value of an Equity Share: An Empirical study in Indian Capital Market", Journal of Finance, Accounting and Management', Vol. 3, No. 2, pp. 1-14.
4. 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.
5. Das $N$ and Pattanayak J.F (2009), "Fundamental factors affecting the Indian stock market- A comparative study of SENSEX and NIFTY", Journal of Indian Business Research, pp. 1-35.
6. Fama, E. F. (1970), "Efficient Capital Markets: A Review of Theory and Empirical Work", Journal of Finance, Vol. 25, pp. 383-417.
7. Fama, E. F. \& K. R. French, (1988), "Permanent and Temporary Components of Stock Prices", Journal of Political Economy, Vol. 96 (2), pp. 246-273.
8. Fama, E. F. \& K. R. French, (1992), "The CrossSection of Expected Stock Returns," Journal of Finance, Vol. 47, pp. 427-465.
9. Field A (2005), "Discovering Statistics Using SPSS for Windows", Sage Publications, London.
10. Gill A, Biger $N$ and Mathur N (2012), "Determinants of Equity Share Prices Evidence from American Firms", International Research Journal of Finance and Economics, Issue 90, pp. 176-192.
11. Graham, B. (2005), Security Analysis: McGrawHill.
12. Kaiser, H.F., (1974), "An Index of Factorial Simplicity". Psychometrica, Vol. 39, pp. 31-36.
13. Malkiel, B.G. (2003), "The Efficient Market Hypothesis and Its Critics", Journal of Economic Perspectives, Vol. 17 (1), pp. 59-82.
14. Malhotra N. K. (2008), "Marketing Research- An Applied Orientation", 5th Ed., New Delhi, Prentice hall of India.
15. Malhotra N and Tandon K (2013), "Determinants of Stock Prices: Empirical Evidence from NSE 100 Companies", International Journal of Research in Management and Technology (IJRMT), Vol. 3, No.3, pp. 86-95.
16. Mukherji, S., Dhatt, M. S., \& Kim, Y. H., (1997), " A fundamental analysis of Korean stock returns", Financial Analysts Journal, Vol. 53, No. 3, pp. 75-80.
17. Ozlen $S$ and Ergun U (2012), "Internal Determinants of the Stock Price Movements on Sector Basis, "International Research Journal of Finance and Economics". Issue 92, pp. 111-117.
18. Pesaran, M.H. (2010), "Predictability of Asset Returns and the Efficient Market Hypothesis." IZA Discussion Papers, Institute for the Study of Labor.
19. Sarac M (2008), "Does Fundamental Analysis matter for foreign investors? An empirical analysis of foreign investment in the Istanbul Stock exchange", Journal of Economic and Social Research, Vol. 9, No. 2, pp.37-59.
20. Sharma S (2011), "Determinants of Equity Share Prices in India," Journal of Arts, Science and Commerce, Vol.-II, Issue 4, pp. 51-60.
21. Campbell, J.Y. \& Shiller, R.J. (1988), "The dividend-price ratio and expectations of future

## Asian Resonance

dividends and discount factors," Review of financial studies, Vol. 1 (3), pp. 195-228.
22. 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.
23. Venkates CK, Tyagi M. and Ganesh L (2012), "Fundamental analysis and stock returns: An Indian Evidence", Global Advanced Research Journal of Economics, Accounting and Finance, Vol. 1, No. 2, pp. 33-39.
24. http://en.wikipedia.org/wiki/Fundamental_analysis , 3/12/2014, 8:03:41 PM.
25. http://www.unicist.org/papers/fundamental_analy sis_en.pdf, 5/12/2014, 10:23:37 PM.
26. http://www.internationalresearchjournaloffinancea ndeconomics.com

## Appendix

| Factor Scores of Six Factors |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Company Name | Profitability | Liquidity | Operating Efficiency | Sales | Growth | Levarage | Market Price |
| A B B Ltd. | 0.095 | 0.047 | -0.555 | -0.477 | -0.062 | 0.086 | 1110.344 |
| A C C Ltd. | -0.049 | -0.695 | 0.157 | -0.201 | 0.049 | -0.333 | 612.721 |
| Adani Enterprises Ltd. | -0.280 | -0.152 | -0.524 | -0.745 | -0.056 | 0.912 | 297.419 |
| Aditya Birla Nuvo Ltd. | -1.035 | -0.593 | -0.264 | -0.328 | 0.036 | -0.327 | 593.550 |
| Ambuja Cements Ltd. | -0.057 | -0.429 | 0.126 | -0.164 | -0.614 | -0.768 | 171.588 |
| Andhra Bank | 0.311 | 2.461 | 1.063 | 0.710 | -0.705 | 0.156 | 76.993 |
| Apollo Hospitals Enterp. Ltd. | -0.664 | -0.416 | -0.618 | -0.231 | -0.508 | -0.729 | 385.348 |
| Apollo Tyres Ltd. | -0.306 | -0.856 | -0.118 | -0.525 | -0.771 | -0.199 | 135.679 |
| Ashok Leyland Ltd. | -0.151 | -0.341 | -0.020 | -0.667 | -0.926 | 0.039 | 64.104 |
| Asian Paints Ltd. | 1.152 | -0.478 | -0.247 | -0.278 | -0.012 | -0.453 | 1066.690 |
| Aurobindo Pharma Ltd. | -0.664 | 0.098 | -0.737 | -0.505 | 0.224 | 0.368 | 373.190 |
| Axis Bank Ltd. | 0.011 | 2.288 | 1.030 | 1.741 | -0.033 | 0.429 | 519.235 |
| Bajaj Holdings \& Invst. Ltd. | -0.470 | -1.039 | 0.124 | 0.557 | 0.679 | -1.156 | 961.200 |
| Bank Of Baroda | -0.077 | 2.767 | 2.040 | 0.242 | 0.164 | 0.041 | 333.048 |
| Bank Of India | -0.193 | 1.968 | 1.875 | 0.284 | -0.380 | 0.321 | 182.544 |
| Bata India Ltd. | -0.466 | -0.339 | -0.905 | -0.609 | -0.573 | -0.386 | 189.479 |
| Bharat Electronics Ltd. | -0.103 | -0.081 | -0.064 | -0.293 | 0.918 | -0.107 | 973.535 |
| Bharat Forge Ltd. | 0.061 | -0.384 | -0.414 | -0.116 | -0.461 | 0.572 | 381.577 |
| Bharat Heavy Elect. Ltd. | -0.066 | -0.135 | 0.780 | -0.415 | 0.434 | -0.049 | 1219.823 |
| Bharat Petroleum Co. Ltd. | 0.022 | -0.729 | 0.737 | -1.235 | 0.204 | 0.896 | 410.685 |
| Bharti Airtel Ltd. | -0.414 | -1.518 | 0.894 | 1.589 | -0.170 | -0.750 | 368.184 |
| Bhushan Steel Ltd. | -0.729 | -0.177 | -0.418 | -0.473 | 0.865 | 1.168 | 387.925 |
| Bosch Ltd. | 0.327 | 0.014 | -0.820 | -0.065 | 6.474 | -0.465 | 4755.585 |
| Britannia Industries Ltd. | 0.788 | -0.642 | -0.657 | -0.497 | 0.355 | -0.334 | 956.265 |
| C E S C Ltd. | -1.039 | -0.316 | -0.043 | -0.386 | -0.105 | 1.137 | 220.210 |
| Cadila Healthcare Ltd. | -0.222 | -0.337 | -0.607 | -0.062 | -0.246 | -0.461 | 435.210 |
| Castrol India Ltd. | 2.360 | -0.051 | -0.312 | -0.383 | -0.694 | -0.644 | 306.542 |
| Century Tex. \& Inds. Ltd. | -0.373 | -0.826 | -0.073 | -0.392 | -0.560 | 0.325 | 299.079 |
| Chambal Fert. \& Chem. Ltd. | -0.352 | 0.005 | -0.240 | -0.626 | -0.921 | 0.559 | 38.652 |
| Cipla Ltd. | -0.082 | -0.019 | -0.414 | -0.076 | -0.110 | -0.884 | 536.652 |
| Colgate-Palmolive India Ltd. | 3.677 | -0.353 | -0.203 | 0.019 | -0.620 | -0.026 | 412.785 |
| Container Co. Of India Ltd. | 0.043 | 1.512 | -0.825 | -0.501 | 0.883 | -1.063 | 945.088 |
| Crompton Greaves Ltd. | 0.069 | -0.125 | -0.495 | -0.564 | -0.423 | 0.312 | 252.115 |
| Cummins India Ltd. | 0.297 | 0.095 | -0.546 | -0.382 | -0.660 | -1.046 | 254.398 |
| Dabur India Ltd. | 1.435 | -0.491 | -0.593 | -0.078 | -0.623 | -0.489 | 93.933 |
| Dr. Reddy'S Lab. Ltd. | -0.335 | 0.433 | -0.499 | -0.186 | 0.393 | -0.770 | 1069.690 |
| EIHLtd. | -0.556 | -0.733 | -0.200 | 0.048 | -1.041 | -0.557 | 205.946 |

P: ISSN No. 0976-8602
E: ISSN No. 2349-9443

RNI No.UPENG/2012/42622 VOL.-IV, ISSUE-II, April-2015

## Asian Resonance

| Engineers India Ltd. | -0.141 | -0.015 | -0.338 | -0.110 | -0.355 | -0.801 | 543.969 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Essar Oil Ltd. | -1.415 | -0.889 | -0.021 | -0.163 | -0.595 | 1.724 | 62.321 |
| Exide Industries Ltd. | -0.142 | -0.200 | -0.550 | -0.478 | -0.512 | -0.362 | 109.269 |
| Federal Bank Ltd. | -0.149 | 4.550 | -0.168 | 0.039 | 0.048 | 0.345 | 221.015 |
| Financial Tech. (India) Ltd. | 0.303 | 0.021 | -1.749 | 2.561 | 0.530 | -0.883 | 782.196 |
| Future Retail Ltd. | -0.847 | -0.429 | -0.744 | -0.537 | -0.326 | 0.252 | 410.344 |
| G A I L (India) Ltd. | -0.219 | -0.665 | 1.035 | -0.386 | -0.386 | -0.781 | 260.667 |
| Glaxo Consumer Health. Ltd. | 0.237 | -0.218 | -0.516 | -0.180 | 0.039 | -0.959 | 868.615 |
| Glaxo. Pharma. Ltd. | 0.717 | -0.516 | -0.082 | 0.323 | -0.196 | -1.150 | 1099.550 |
| Glenmark Pharma. Ltd. | -0.308 | -0.045 | -0.987 | 0.057 | -0.324 | -0.002 | 288.260 |
| Godrej Consumer Products | 4.393 | -0.043 | -0.879 | 0.046 | -0.148 | 0.410 | 159.808 |
| Godrej Industries Ltd. | -0.279 | -0.868 | -0.488 | -0.016 | -0.908 | -0.254 | 159.808 |
| Grasim Industries Ltd. | -0.406 | -0.575 | 0.027 | -0.077 | 2.277 | -0.508 | 1616.200 |
| Great Eastern Shipping Co. | -0.369 | 0.820 | -0.388 | -0.362 | -0.045 | -0.096 | 183.783 |
| Gujarat Fluorochemicals Ltd. | -0.566 | 0.450 | -1.046 | 0.341 | 0.215 | -0.881 | 252.594 |
| GujaratMineralDev.Co. Ltd. | -0.652 | -0.344 | -0.415 | 0.034 | -0.326 | -0.554 | 197.308 |
| H C L Technologies Ltd. | 0.195 | -0.167 | -0.076 | 0.188 | -0.737 | -1.068 | 336.488 |
| H D F C Bank Ltd. | -0.052 | -0.665 | 1.497 | 3.814 | 0.113 | -0.158 | 867.765 |
| Hero Motocorp Ltd. | 2.232 | -0.708 | 0.336 | -0.520 | 0.386 | -0.396 | 890.317 |
| Hexaware Technologies Ltd. | -0.828 | 1.666 | -1.428 | -0.538 | -0.559 | -1.043 | 172.256 |
| Hindalco Industries Ltd. | -0.877 | -0.165 | 0.318 | -0.370 | 0.670 | -0.497 | 469.898 |
| Hindustan Pet. Co. Ltd. | -0.091 | -0.618 | 0.687 | -1.241 | 0.109 | 0.759 | 302.171 |
| Hindustan Unilever Ltd. | 3.492 | -0.523 | 0.689 | -0.043 | -0.691 | 0.397 | 230.158 |
| Hindustan Zinc Ltd. | 0.197 | 1.314 | -0.132 | -0.384 | 0.260 | -1.036 | 323.196 |
| Housing Dev. Fin. Co Ltd. | 0.169 | -0.596 | -0.089 | 0.534 | 0.373 | 3.879 | 1148.285 |
| I C I C I Bank Ltd. | -0.382 | 0.324 | 1.522 | 2.306 | 0.002 | 1.137 | 553.973 |
| I D B I Bank Ltd. | -0.697 | 0.449 | 1.631 | 0.102 | -0.536 | 2.622 | 71.888 |
| I N G Vysya Bank Ltd. | -0.786 | 1.026 | 0.169 | 0.604 | -0.244 | 0.174 | 246.738 |
| IT C Ltd. | 0.555 | -0.732 | 0.924 | 0.066 | -0.347 | -1.048 | 492.365 |
| I V R C L Ltd. | -0.693 | -0.242 | -0.686 | -0.602 | -0.319 | 0.380 | 181.994 |
| India Cements Ltd. | -1.077 | -0.592 | -0.178 | -0.349 | -0.639 | 0.646 | 95.319 |
| Indian Hotels Co. Ltd. | -0.727 | -0.853 | -0.143 | 0.027 | -0.754 | -0.409 | 298.088 |
| Indian Oil Corpn. Ltd. | -0.111 | -0.634 | 1.009 | -0.981 | 0.324 | 0.662 | 353.602 |
| Indian Overseas Bank | 0.374 | 2.416 | 1.371 | 0.270 | -0.678 | 0.406 | 72.279 |
| Indusind Bank Ltd. | -0.326 | 2.300 | 0.127 | 0.759 | -0.818 | 0.321 | 91.408 |
| Infosys Ltd. | 1.355 | 1.869 | -0.183 | -0.212 | 1.638 | -0.985 | 2982.600 |
| J S W Steel Ltd. | -0.593 | -0.573 | 0.412 | -0.332 | 0.685 | 2.166 | 425.130 |
| Jain Irrigation Systems Ltd. | -0.619 | -0.161 | -0.708 | -0.366 | -0.444 | 0.823 | 259.025 |
| Jindal Steel \& Power Ltd. | -0.076 | -0.632 | -0.151 | 0.086 | 1.619 | 0.375 | 973.767 |
| Kotak Mahindra Bank Ltd. | -0.236 | -1.551 | -0.800 | 7.133 | -0.136 | 0.355 | 374.923 |
| L I C Housing Finance Ltd. | -0.035 | 0.229 | -0.579 | -0.170 | 0.131 | 4.795 | 231.844 |
| Larsen \& Toubro Ltd. | -0.074 | -0.563 | 0.574 | -0.461 | 0.310 | 0.313 | 1212.960 |
| Lupin Ltd. | -0.078 | -0.061 | -0.623 | -0.296 | 0.037 | 0.109 | 565.754 |
| M M T C Ltd. | 2.375 | -0.881 | -0.586 | -0.536 | -0.256 | 2.620 | 6072.723 |
| M R F Ltd. | -0.513 | -0.235 | -1.253 | -0.434 | 6.155 | 0.473 | 3508.298 |
| Mahindra \& Mahindra Ltd. | -0.099 | -0.528 | 0.195 | -0.504 | -0.123 | -0.159 | 476.256 |
| Mangalore Ref. \& Pet. Ltd. | -0.442 | -0.424 | 0.208 | -0.945 | -0.580 | 1.567 | 44.025 |
| Marico Ltd. | 0.954 | -0.354 | -0.929 | -0.447 | -0.257 | -0.233 | 192.879 |
| Max India Ltd. | -1.728 | -0.474 | -0.832 | 0.295 | -0.579 | -1.064 | 232.694 |
| Mphasis Ltd. | -0.375 | 0.439 | -0.884 | -0.069 | -0.077 | -1.122 | 379.265 |
| N M D C Ltd. | 0.518 | 1.008 | 0.001 | 0.179 | 0.700 | -1.265 | 1451.523 |
| National Alum. Co. Ltd. | -0.360 | 0.623 | 0.128 | -0.313 | -0.564 | -0.895 | 195.181 |
| Nestle India Ltd. | 4.766 | -0.208 | 0.145 | 0.054 | 0.101 | 0.283 | 1574.950 |
| Neyveli Lignite Corpn. Ltd. | -0.788 | 0.509 | 0.123 | -0.161 | -0.831 | -0.694 | 70.442 |
| Oil \& Natural Gas Co. Ltd. | 0.106 | -1.794 | 5.386 | -0.507 | 0.135 | -1.810 | 676.379 |
| Opto Circuits (India) Ltd. | 0.407 | 0.081 | -1.335 | 0.220 | -0.579 | -0.827 | 167.077 |
| Pidilite Industries Ltd. | 0.104 | 0.103 | -0.865 | -0.433 | -0.425 | -0.681 | 181.571 |
| Piramal Enterprises Ltd. | 0.983 | -0.281 | -0.269 | 1.161 | -0.476 | -0.474 | 338.592 |
| Punjab National Bank | 0.165 | 1.614 | 2.318 | 0.717 | 0.976 | 0.094 | 584.430 |

P: ISSN No. 0976-8602
E: ISSN No. 2349-9443

RNI No.UPENG/2012/42622 VOL.-IV, ISSUE-II, April-2015

## Asian Resonance

| Ranbaxy Laboratories Ltd. | -0.394 | -0.520 | -0.065 | -0.144 | -0.799 | -0.240 | 567.106 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reliance Capital Ltd. | -0.673 | -0.269 | -1.513 | 3.932 | -0.060 | 0.372 | 419.060 |
| Reliance Industries Ltd. | -0.482 | -1.242 | 3.471 | -0.853 | 0.623 | -0.555 | 909.256 |
| Reliance Infrastructure Ltd. | -1.006 | -0.129 | -0.022 | -0.311 | 0.380 | -0.197 | 591.738 |
| Satyam Comp. Serv. Ltd. | -0.751 | 2.958 | -1.104 | -1.126 | -0.430 | -0.291 | 281.629 |
| Sesa Goa Ltd. | 0.638 | 0.058 | -0.368 | -0.091 | 1.059 | -1.038 | 712.429 |
| Shriram Trans. Fin.Co. Ltd. | -0.070 | 0.323 | -0.624 | 0.394 | -0.220 | 3.194 | 232.277 |
| Siemens Ltd. | 0.386 | -0.295 | -0.158 | -0.311 | 0.055 | -0.001 | 1123.585 |
| Sintex Industries Ltd. | -0.913 | 0.347 | -0.841 | -0.484 | -0.205 | 0.124 | 168.746 |
| State Bank Of India | -0.181 | 0.101 | 3.493 | 0.811 | 1.571 | 0.053 | 1132.835 |
| Steel Auth. Of India Ltd. | -0.326 | -0.081 | 1.330 | -0.725 | -0.547 | 0.364 | 92.435 |
| Sterlite Ind. (India) Ltd. | -0.898 | -0.457 | -0.012 | -0.320 | -0.159 | -0.238 | 501.442 |
| Sun Pharm. Inds. Ltd. | 0.226 | 1.280 | -1.041 | 0.440 | 0.109 | -0.662 | 803.850 |
| Tata Chemicals Ltd. | -0.518 | -0.542 | 0.069 | -0.346 | -0.628 | -0.405 | 192.973 |
| Tata Communications Ltd. | -0.706 | -0.482 | 0.282 | -0.205 | -0.390 | -0.868 | 301.679 |
| Tata Global Beverages Ltd. | -0.567 | -0.992 | -0.225 | 0.114 | -0.467 | -1.057 | 461.592 |
| Tata Motors Ltd. | -0.293 | -0.976 | 0.786 | -0.541 | -0.288 | 0.250 | 497.685 |
| Tata Power Co. Ltd. | -0.836 | -0.117 | 0.074 | -0.308 | 0.027 | -0.224 | 578.550 |
| Tata Steel Ltd. | -0.170 | -0.841 | 1.530 | -0.341 | 0.387 | -0.271 | 394.310 |
| Thermax Ltd. | -0.064 | -0.591 | -0.309 | -0.276 | -0.424 | -0.593 | 371.331 |
| Titan Industries Ltd. | 0.707 | -0.302 | -0.617 | -0.487 | -0.184 | 1.169 | 828.738 |
| Unitech Ltd. | -0.263 | -0.601 | -0.529 | 0.214 | -0.344 | 1.186 | 344.929 |
| United Spirits Ltd. | -0.595 | -0.664 | -0.413 | -0.341 | -0.252 | 0.213 | 649.886 |
| Videocon Industries Ltd. | -1.030 | 0.119 | -0.386 | -0.550 | 1.040 | 0.476 | 180.990 |
| Vijaya Bank | 0.318 | 3.066 | 0.853 | 0.013 | -0.845 | 0.271 | 42.548 |
| Voltas Ltd. | 0.249 | -0.305 | -0.491 | -0.596 | -0.567 | 0.363 | 189.125 |
| Wipro Ltd. | 0.641 | 0.128 | 0.133 | -0.080 | -0.080 | -0.643 | 813.227 |
| Zee Entert. Enterp. Ltd. | -0.835 | -0.199 | -0.450 | 0.397 | -0.828 | -1.070 | 165.877 |
|  |  |  |  |  |  |  |  |

