

An empirical investigation into voluntary disclosure of financial ratios by S&P CNX 500 companies

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Preface

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Mousumi Sengupta Chairperson – SDM RCMS





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Executive Summary

The study has examined the extent of voluntary disclosure of financial ratios in India and its association with performance of the company, size and industry classification. The companies selected for the study are CNX 500 Companies. Multiple correlation and regression were used to explore the relationship between disclosure index and the selected explanatory variables. The results indicate that the extent of voluntary disclosure of ratios is significantly influenced by size, RoI of the companies and industry classification thereby indicating that companies with larger market capitalization and better return on investments relatively disclose more ratios voluntarily. The Infrastructure sector disclosed more ratios than companies from other sectors. The disclosure index was very low indicating that the companies were lacking in efforts to disclose more ratios voluntarily to various stakeholders for a better understanding and interpretation of financial statements. The sample companies disclosed 19% of the selected financial ratios in their annual reports. The paper also calls for mandatory reporting of select ratios and standardization of the methods used in calculation of financial ratios. Improved levels of voluntary disclosures will reduce information asymmetry among investors and enhance clarity about long-term business sustenance and strengthens governance norms. The paper also provides directions for future research.

Keywords : S&P CNX 500, Size, Rol, Financial Ratios, Disclosure index

JEL Classification : G10, G11



1. Introduction

Voluntary disclosures of information in annual reports of companies have increased substantially over the years and have been an area of interest for researchers over the years (Cooke, 1989; Skinner, 1994; Courtis, 1999, Hossain et al., 1995). Voluntary disclosure is disclosing information which is more than what is mandated by the regulatory authorities or agencies in various countries. According to Stanga (1976), good disclosures, among others, will foster a healthy relationship between a company and professional analysts; will tend to lessen fluctuations in security prices and help eliminate insider profit and related legal problems. Companies disclose voluntary information for varied reasons. Some companies provide voluntary disclosures in an effort to distinguish their products from those of their competitors (Tariq, 2001), while others are of the view that such disclosures of accounting information voluntarily would help raise additional capital (Craven et al., 1999). Motivating factors for voluntary disclosures as identified by Subramanyam et al., (2014) are legal liability, expectations, signalling and managing expectations. Agency theory may also explain why managers disclose voluntary information and at times, competitive market forces may induce the management to disclose more information (Firth, 1979). Better disclosure practices are helpful in boosting brand name and goodwill, mitigating frauds and in avoiding litigations and fines (Naranyaswamy, 2011).

Corporate voluntary disclosures can take several forms. Many studies were conducted on voluntary disclosures; Economic Value Added disclosures by Kaur et al., 2010, corporate social disclosures by Murthy (2008), intellectual capital disclosures by Joshi et al., (2011), human capital disclosures by Jindal et al., (2012). One noteworthy voluntary disclosure is non-mandatory financial ratios and the present study is directed in that direction. Financial ratio disclosures are critically important for several reasons. First, the disclosures could serve as the crucial information for users of financial statements, including sophisticated or non-sophisticated users. Sophisticated users (management, board of directors, investors, shareholders, stakeholders) are reliant on disclosed financial ratios to assess the performance of companies. Therefore, providing a comprehensive

set of financial ratios and how each was defined are crucial sources of information. For non-sophisticated users (laymen), the financial ratio disclosures will enable them to make an informed investment decision making. In addition, many ratios computed today are not standard. The lacks of uniformity limits the comparability in financial statements analysis and encourage companies to disclose the most favourable ratios to their firm s condition (Amran et al., 2015). According to Thomas et al., (1987), the information from ratio analysis, especially in the form of trend analysis, can be used to forecast the efficiency and profitability of a company as well as to determine its financial position, and possibly, to avoid business failures. According to Barnes (1987), 'financial ratios are used by accountants and analysts to forecast future financial variables and by researchers for predictive purposes, namely credit rating, assessment of risk and corporate failure'. Financial ratios involve establishing a relevant financial relationship between the components of financial statements for further investigation. It is a powerful tool for recognizing a company's strength as well as probable trouble spots (Bhatia et al., 2015). According to Watson et al., (2002), 'the disclosure of ratios in company accounts may provide users of financial statements with new information not calculable elsewhere, or may simply provide information available elsewhere in the same or different form'. Gibson (1982) suggested that financial ratios are more effective in projecting the financial future of a company and that it increases the quality of annual reports.

India is the chosen destination for this study owing to its unique background as an emerging market economy with rapidly growing capital markets. With the advent of liberalization, there are umpteen companies targeting funding from foreign sources. Hence, the extent of voluntarily disclosed business information available from annual reports of companies will play a huge part in attractive potential investors, both domestic and foreign. However, in India, listed companies are mostly family controlled with majority holdings in shares and board positions. Hence, such family-owned companies do not have much motivation to disclose additional business information over and above the mandatory requirements. This attribute in the Indian stock market structure provides for a fascinating understudy when looked at in the context of the rising qualm for internationalization and global transparency. This



would entail more research needed on the Indian capital market, and also call for extended studies on evaluation of voluntary disclosure patterns of Indian companies. The study gains even more prominence post the introduction of New Companies Act,2013.

The present paper focuses on voluntary disclosure of financial ratios as it would be of value to users of annual reports as seen from the above citations. This paper is based on a study by Abdullah et al., (2008) and Bhatia et al., (2015).

The objectives of this study are as follows :

- To determine the extent of voluntary disclosure of financial ratios in annual reports of S&PCNX 500 Companies
- To construct a voluntary disclosure index to be applied to annual reports of the selected S&PCNX Companies and examine the association between the index with firm specific characteristics and industry classification.

The rest of the sections are organised as follows Section 2 presents the theoretical framework and review of literature, Section 3 describes the Methodology including hypotheses development and testing, Section 4 provides the analysis and interpretation, Section 5 provides findings & Implications and Section 6 provides directions for future research.

2. Theoretical framework and literature review

Theoretical framework

Agency theory

Jensen & Meckling (1976: 308) define the agency relationship as "a contract under which one or more persons (the principals) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent." Agents correspond to managers, whereas principals correspond to shareholders from a companies' perspective. Agency costs stem from the assumption that the two parties, agents and principals, have different interests. Monitoring costs are paid by the principals, shareholders, to limit the agents' aberrant activities. Bonding costs are paid by the agents, managers, to guarantee that no harm of the principal's interests will result from their decisions and actions. Residual loss stems when decisions of the agents diverge from decisions that would maximise the principal's welfare. Accordingly, the agency cost is the summation of the monitoring cost, bonding cost, and the residual loss. The agency relationship leads to the information asymmetry problem due to the fact that managers can access information more than shareholders. Optimal contracts is one of the means of mitigating the agency problem as it helps in bringing shareholders' interests in line with managers' interests. In addition, voluntary disclosure is another means of mitigating the agency problem, where managers disclose more voluntary information reducing the agency costs and also to convince the external users that managers are acting in an optimal manner (Shehata, Narmeen; 2014).

Signalling theory

Although the signalling theory was originally developed to clarify the information asymmetry in the labour market, it has been used to explain voluntary disclosure in corporate reporting. As a result of the information asymmetry problem, companies signal certain information to investors to show that they are better than other companies in the market for the purpose of attracting investments and enhancing a favourable reputation. Voluntary disclosure is one of the signalling means, where companies would disclose more information than what is mandatorily required as per laws & regulations - in order to signal that they are better (Shehata, Narmeent;2014).

Capital need theory

Companies aim to attract external finance to increase their capital, either by debt or equity. The capital need theory suggests that voluntary disclosure helps in achieving a company's need to raise capital at a low cost. In 2001, according to the Improved Business Reporting: Insights into Enhancing Voluntary Disclosure, which is published by the Financial Accounting Standards Board as part of their broader Business Reporting Research Project, the competition for capital leads to increased voluntary disclosure. The rationale beyond this is the fact that "a company's cost of capital is believed to include a premium for investors' uncertainty about the adequacy and accuracy of the information available about the company." Therefore, reduction in a company's cost of capital is achieved when investors are able to interpret the company's economic prospects through



voluntary disclosure. The relationship between voluntary disclosure and cost of capital was thought to be a positive relationship; the higher the information disclosures, the lower the cost of capital (Shehata, Narmeent; 2014).

Literature review

The literature on accounting disclosures are substantial and these studies cover a broad range of issues. Studies on corporate disclosure practices either investigate mandatory or voluntary disclosures or both. Financial ratios' disclosures fall under the purview of voluntary disclosures. Keeping this in mind, literatures relating to utility of financial ratios and voluntary disclosure of financial ratios are discussed in the ensuing pages.

There has been an increasing interest in voluntary disclosures, however, there are only a few studies available on financial ratios' disclosure. Previous studies examined the use of financial ratios to predict failure/bankruptcy (Beaver, 1966; Altman, 1968, Houghton et al., 1984). According to Beever (1966), the utility of ratios depends on a particular objective for which it is being calculated. Lee et al., (1977) opined that several ratios are important enough to indicate the financial performance of companies. Financial ratios provide insights about company's financial performance (Subramanyam et al., 2009).

Williamson (1984) studied the selective reporting of financial ratios and found that three of the eleven selected ratios (i.e. return on equity, current ratio, and return on sales) were more likely to be disclosed by firms. The conclusion was that the selective reporting of financial ratios appears to be more dependent on deviation from industry medians than on improvements in the ratios. Watson et al., (2002) carried out a study on U.K companies' practices of voluntary disclosure of ratios. According to them, companies which are large in size disclose more ratios as compared to companies which are small in size. The nature of the business also has an impact on voluntary disclosure practices. It was observed that utility and media companies were disclosing fewer ratios in U.K. In Malaysia, a study conducted by Mokhtar et al. (2004) on financial ratio disclosure (both mandatory and voluntary) shows that there are variations in the extent of disclosure by Malaysian listed companies. The study revealed that the most frequently reported ratio was earnings per share (EPS), followed by dividends per share and net tangible assets per share. Since EPS and dividends per share are mandatory ratios, the findings are expected. Mokhtar et al. (2004) argued that the level of voluntary disclosure of financial ratios was still low. In addition, they concluded that firm size is significantly and positively associated with the extent of financial ratios disclosed in the annual reports.

Abdullah et al., (2008) researched on voluntary ratio disclosure practices of Malaysian Companies. They found that large and regulated companies disclose more than others and it also depends on internal and external antecedents such as firm and industry norms. They recommended that disclosures of ratios should be standardised so that the users and analysts gain from it. Aripin et al., (2011), studied the extent of financial ratios disclosure and determinants of disclosures for Australian firms. It was observed that the firm's size, non-audit fees and profitability have influence on the extent of financial ratio disclosures. Ali Uyar et al., (2012) investigated the influence of firm characteristics on voluntary disclosure of financial ratios in the annual reports of Turkish listed companies. The sample consisted of industrial firms listed in the Istanbul Stock Exchange (ISE). The findings revealed that Turkish listed firms disclose, on an average, 5.37 financial ratios in their annual reports. The results of multivariate analyses indicated that firm size, auditor size, profitability and ownership diffusion have significant positive association with voluntary disclosure level of financial ratios, while leverage does not. Bhatia et al., (2015) studied the magnitude of voluntary financial ratio disclosures in India by selecting CNX 100 National Stock Exchange companies. According to them, the magnitude of voluntary disclosure of financial ratios was low. The voluntary disclosures of financial ratios were influenced by market capitalisation and efficiency of asset usage. Amran et al., (2015) in their study of 100 selected companies from Malaysia found that on an average 18.64% of the firms disclosed financial ratios and Net Profit Ratio was the most popular ratio presented in the annual reports.

Research questions

1. Do firm specific characteristics such as profitability, liquidity, efficiency and industry classification jointly influence voluntary disclosure index?



- 2. What are the financial ratios mostly disclosed by companies in India?
- 3. What is the disclosure pattern of companies included in S&P CNX 500? (The **S&P CNX 500** is India's first broad-based stock market index of the Indian stock market. The **S&P CNX 500** represents about 96% of total market capitalization and about 93% of the total turnover on the National Stock Exchange of India (NSE). It is used for a variety of purposes such as benchmarking fund portfolios, index based derivatives and index funds.)

3. Methodology

Data and period of study

The data for the study is secondary in nature. The secondary data has been collected from the annual reports of the companies which can be downloaded from the respective company's website. The investor section in the websites contains the audited annual reports and other related documents. The period of study is for the year 2016-17.

Sample selection

S&PCNX index consists of 500 companies drawn from various sectors. A sample of 423 companies was selected for the purpose of the study. The balance belonged to banking and financial services sector and hence has been excluded from the study. The ratios and regulatory requirements of such companies are different and hence excluded from the study. The sample size is assumed to be sufficient because it satisfies the rule of thumb that a sample size larger than 30 companies and less than 500 is appropriate for most studies (Abdullah et al., 2008).

Scoring of variables and construction of index

For measuring the level of financial ratio disclosure, index of disclosure method is used, owing to its wider use by researchers and acceptability. The index for disclosure index can be created either by using weighted or un-weighted scores. Many researchers have used weighted disclosure index where in different items are assigned different weights on the basis of importance or type of disclosure (Bergamini et al, 2002; and Kang, 2006). Watson et al. (2002), Abdullah et al., (2008) in Malaysia, Bhatia et al., (2015) have used un-weighted disclosure index wherein equal importance is assigned to all the items. The basis of using un-weighted index is that the annual reports are read by various stakeholders with different objectives, thus they attach different importance to these items and as the paper is modelled in the similar lines of Abdullah et al., (2008), an un-weighted index for analysis purpose.

Financial ratios are classified into seven categories, i.e., profitability, leverage, efficiency, liquidity, dividend, turnover and investment ratios. Within these categories there is further sub classification. The mandatory accounting ratios, i.e., dividend per share and earnings per share are ignored as the study is based on voluntary disclosure of financial ratios.

For constructing the disclosure index, each company is given a score of 1 for every ratio disclosed and nil score for ratio not disclosed. Disclosure index is made by dividing the total number of financial ratio disclosed by the maximum score attained by a company in a sample, i.e., average is considered. A score sheet was prepared after perusing details of the annual report of the sampled companies.

n
Disclosure score =
$$\sum d$$

i =1, where,

d = 1 if the ratio is disclosed and nil if it is not; and n =Number of items

Model specification

Keeping in view the objective of the study, multiple regression analysis is considered as an appropriate model. The attributes that influence the voluntary financial ratio disclosure (dependent variable) are profitability, liquidity, leverage, efficiency and size of the company. Ratio disclosures also depend on the sector classification. Sector classification is considered by using dummy variables.

 $Y_{IndexI} = \alpha + \beta_1 X_{RoIf} + \beta_2 X_{CR} + \beta_3 X_{DE} + \beta_4 X_{ATR} + \beta_5 X_{size} + \Sigma \beta_j X_j + \epsilon$

Description of Dependent and Independent variables of the model are as follow :



Dependent Variable	Explanation
Index	Voluntary financial ratio disclosure represented by the ratio of the number of financial ratios disclosed by the highest score.
Independent Variables	
Rol	Profitability represented by return on investment as on March 31, 2017.
CR	Liquidity represented by current ratio as on March 31, 2017.
DE	Leverage represented by debt equity ratio as on March 31, 2017.
ATR	Efficiency represented asset turnover ratio as on March 31, 2017.
Size	Size represented by natural logarithm of market capitalisation as on March 31, 2017.
X _j = IndClass	For Industry Classification, seven dummy variables (X6 to X15) are used one each for automobiles, consumer goods, energy, infrastructure, pharmaceuticals, IT & services industry, AG and others,. Each of these is assigned a value of 1 when they fell in the industry group represented by it.

Hypotheses development

The present study proposes to test the association between voluntary disclosure index and factors such as profitability, liquidity, efficiency, size and industry classification. The hypotheses are the following :

 H_{i} - There is significant association between voluntary disclosure index and profitability of the companies.

 H_2 - There is significant association between voluntary disclosure index and liquidity of the companies.

 H_{3} - There is significant association between voluntary disclosure index and leverage of the companies.

 $H_{4^{-}}$ There is significant association between voluntary disclosure index and size of the companies.

 H_{s} -There is significant association between voluntary disclosure index and industry classification of the companies.

Sectors	Abbreviations
IT, Software and Services	IT
Energy	Energy
Pharmaceuticals	Pharma
Automobiles	AU
Consumer Goods	CG
Agriculture	AG
Diversified	Div
Chemicals	Chem
Infrastructure	IN
Others	Others

4. Analysis and interpretation

Table I : Companies selected for the study

Sector	No. of Companies	Percentage
IT & Software	67	0.16
Energy	28	0.07
Pharma	35	0.08
Automobile	20	0.05
Consumer goods	70	0.17
Infrastructure	96	0.23
Agriculture	12	0.03
Diversified	11	0.03
Chemicals	36	0.09
Others	48	0.11
Total	423	100%

Source- Author's Classification

Table I shows the companies selected for the purpose of study. Out of 500 companies, 77 companies represented 'Banking and Financial Services'. Since the reporting pattern of such companies is different, those companies were not considered for the study. The final sample stands at 423. The table also shows that majority (23%) represented 'Infrastructure Sector' followed by Consumer Goods (20%), Automobile (17%), IT & Services (16%) respectively.

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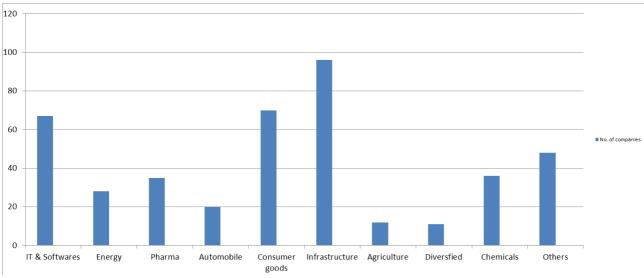


Figure I : Companies selected for the study

Table II : Number of companies disclosing
different types of ratios

Type of ratios	Number	Percentage of sample size
Profitability ratios	148	0.35
Leverage ratios	106	0.25
Liquidity ratios	26	0.06
investment ratios	59	0.14
Dividend ratios	42	0.10
Turnover ratios	42	0.10
Total	423	1.00

Table II shows the different types of ratios disclosed by companies during the period of study. The ratios were categorised as 'Profitability', 'Liquidity', 'Leverage', 'Investments', 'Turnover' and 'Dividends'. The table shows that majority of the companies disclosed profitability ratios (35%). EBITDA margin, EAT margin were the most common ratios disclosed by companies. 14% of the companies disclosed investment ratios. Return on Capital Employed and Return on Networth were the ratios most disclosed by companies. 25% of the companies disclosed leverage ratios with debt equity ratio being the most disclosed one under this category. 6 % of the companies disclosed liquidity ratios. 10% of the companies disclosed dividend ratios with dividend payout ratio being the most disclosed ratio.

(Source-Author's Classification)

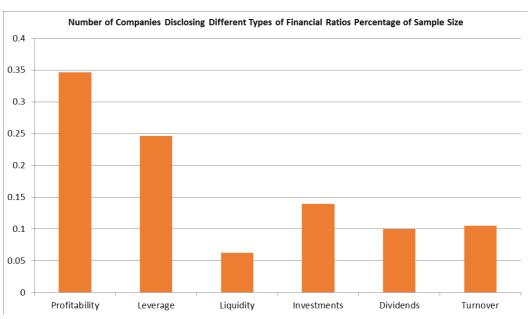


Figure II : Number of companies disclosing different types of ratios



No of financial ratios disclosure	Disclosure index	Frequency	Percentage
0	0.0000	107	25.30%
1	0.0556	54	12.77%
2	0.1111	46	10.87%
3	0.1667	40	9.46%
4	0.2222	34	8.04%
5	0.2778	40	9.46%
6	0.3333	26	6.15%
7	0.3889	24	5.67%
8	0.4444	21	4.96%
9	0.5000	6	1.42%
10	0.5556	7	1.65%
11	0.6111	7	1.65%
12	0.6667	2	0.47%
13	0.7222	3	0.71%
14	0.7778	2	0.47%
15	15 0.8333 1		0.24%
16	0.8889	2	0.47%
17	0.9444	0	0.00%
18	1.0000	1	0.24%
То	tal	423	100.00%

Table III :Frequency of companies disclosing voluntary accounting ratios

Table IV shows the descriptive statistics of the dependent variable and the explanatory variables. Out of the total number of ratios considered for the study in the disclosure list (18), the companies disclose on an average of 19.05% of the ratios which is approximately 4 ratios. This implies that the extent of voluntary disclosure of financial ratios by companies is low. The table also presents the descriptive statistics of independent variables.

(Contd....)

(Source-Author's Calculation)

Table III shows the frequency of companies disclosing financial ratios during the period of study. Out of 423 companies, 107 companies did not disclose any ratios, which is 25.30% of the sample size. 54 companies are disclosing only one ratio. There are 231companies which disclose ratios between 2 and 8. There is only one company which discloses 18 ratios which is 0.24 % of the sample.

Table IV : Descriptive statistics of dependent and explanatory variables

	Index	Rol	CR	DE	ATR	Size
Mean	0.19057	0.078	1.748	0.4875	0.9845	8.6825
Standard Error	.009	0.005	0.07	0.134	0.0401	0.06
Median	0.1667	0.062	1.36	0.19	0.861	8.454
Minimum	0	-0.43	0.002	0	0.03	6.28
Maximum	1	1.61	14.49	1.79	10.52	13.11
Count	423	423	423	423	423	423

(Source-Excel Analysis)



	Index	Rol	CR	DE	ATR	Size	ITS	Energy	Pharma	AU	CG	AG	Div	Chem	Others	IN
Index	1															
Rol	0.139**	1														
CR	-0.015	0.139**	1													
DE	-0.06	-0.035	-0.331	1												
ATR	0.99*	0.712*	0.351	-0.375*	1											
Size	0.187*	0.58**	0.414	-0.431*	0.871*	1										
ITS	-0.95	0.214	0.50*	-0.252	0.197	0.183	1									
Energy	0.73	-0.255	-0.136	0.041	-0.114	-0.177	-0.22	1								
Pharma	0.47	-0.084	0.027	-0.209	-0.020	0.019	-0.140	0.219	1							
AU	-0.024	0.046	-0.019	0.0922	0.1286	0.122	-0.119	-0.153	-0.094	1						
CG	-0.15	-0.322*	-0.057	0.301	-0.297	-0.311	-0.291	-0.373	-0.231	0.05	1					
AG	0.08	0.016	0.01	-0.17	052	-0.11	-0.011	-0.015	-0.061	-0.038	-0.076	1				
Div	-0.021	-0.039	-0.39	0.116*	0.13	0.045	0.045	-0.044	-0.015	-0.036	-0.073	-0.028	1			
Chem	0.068	0.068	-0.36	006	0.044	0.009	-0.132**	-0.081	-0.049	-0.068	-0.136**	-0.052	-0.05	1		
Other	0.031	0.023	0.09	-0.13	0.035	-0.044	0.155**	0.095	107*	-0.080	-0.159**	-0.061	-0.058	-0.109*	1	
IN	0.002	-0.157*	0.68	.076	-0.190**	-0.75	-0.235*	0.235*	0.144*-	-0.121*	0.241**	-0.093	-0.089	-0.165**	-0.194**	1

Table V : Pearson correlation coefficient among variables

*correlation is significant @ 5% level

** correlation is significant @ 1% level

Table V shows the result of Pearson Correlation Coefficients among the variables. The correlation coefficients were analysed to explore the presence of multicollinearity. Multicollinearity refers to close relations between various variables. A general rule is, if the correlation coefficient is between -0.7 and 0.7, then there is no problem using independent variables for the study (Lind et al., 2008). The correlation coefficient matrix reveals that there is no multicollinearity between the variables during the period of study. All the explanatory variables were retained for the analysis. To check further, VIF (Variance Inflation Factor) test was also conducted. It is usually accepted that if any VIF is more than 10 and the tolerance value is below 0.10, there is a problem of multicollinearity. The VIF results are shown in Table VI.



Model	Coefficients	't' value	Sign (p)	Tolerance	VIF
(Constant)	-0.028	.066	0.008		
Rol	0.099	1.926	0.055*	0.385	2.594
CR	-0.004	-0.588	0.557	0.518	1.931
DE	0.009	0.177	0.860	0.692	1.445
ATR	0.039	0.755	0.450	0.574	1.742
SIZE	0.172	3.414	0.001*	0.387	2.586
IT	-0.098	-1.690	0.092**	0.562	1.780
Energy	-0.117	-2.201	.028*	0.834	1.199
Pharma	0.05	.099	.922	0.730	1.370
AU	0.026	0.499	0.618	0.424	2.359
CG	-0.032	-0.524	0.601	0.625	1.599
AG	-0.001	-0.015	0.988	0.899	1.113
Div	-0.037	-0.742	0.459	0.906	1.103
Chem	0.034	0.630	0.529	0.770	1.298
Others	.008	0.151	0.880	0.732	1.367
IN	0.123*	2.301	0.027*	0.424	2.359

Table VI : Summary of regression results

*Significant @ 5%. ** Significant @ 10%

Table VI reveals the summary of regression results. The adjusted R² and F values are 0.115 and 2.643 respectively, implying that the model is significant. The model can explain 11.5% variation in the disclosure index by the explanatory variables. The results indicate that there is an association between the level of disclosure, Return on Investment, firm size measured by natural logarithm of market capitalisation and industry classfication. The â values of Size(0.172) and RoI (0.099) indicates that the level of disclosure is positively associated with the size and performance of the company. This implies that large companies are more likely to disclose more ratios than smaller Companies.Similarly, companies with better returns on investments are likely to disclose financial ratios. Therefore hypothesis $H_1 \& H_{a'}$ are accepted. The β value of 'Infra is 0.123 at 5% level of significance (p<0.05), indicating that infrastructure companies disclose more ratios than companies in other sectors. The β value of 'Energy' is -0.115 (p<0.05) and IT with a â of -0.098 (p<0.10), indicates that Energy and IT companies disclose less ratios than companies in other sectors. The other variables namely, Pharma ,CG , AG, AU, others ' β ' values are not statistically significant(p>0.10). Companies of Infrastructure, Energy and IT sector have an association with voluntary disclsoure inded and hence hypothesis H_{5} is accepted. The other firm specific variable viz., DE and CR' â' values are not statistically significant(p>0.10) and therefore do not have any association with voluntary disclosure index . Hence, hypotheses . H_{a} and H_{a} are rejected.

5. Findings and implications

The anaylsis of S&P CNX500 companies shows that the voluntary disclosure of financial ratios is low. It is evident from the research that financial ratios disclosure is not of great importance for companies listed in India. Companies on an average reveal 3 to 4 ratios voluntarily. The findings are consistent with the studies of Abdullah et al., (2008), Bhatia et al., (2015) and Amran et al., (2015). The study also finds that there are two extreme samples in the study. On one hand, there are 107 companies which do not disclose any ratios, whereas there is only one company which has disclosed 18 ratios. The most common ratios published are EBITDA margin, EAT margin and Return on Capital Employed. The study also finds that only four variables, RoI, size, infrastructure and energy influence the disclosure index of companies selected for the study. The implication of the study is that large companies in terms of market capitalisation and better return on investments disclose more ratios voluntarily than smaller and relatively poor performing companies. Companies representing infrastructure sector disclose more ratios than companies from other sectors. Companies from Energy sector disclose fewer ratios when compared to companies in other sectors. The findings are inconsistent with earlier studies (Abdullah



et al, 2008; Varghese, 2011; Ai Uyar et al., 2012; Bhatia et al.,2015) which stated size, liquidity and efficiency as the variables significantly influence voluntary disclosure of finanical ratios. The study also found that there is no uniformity in disclosing financial ratios in the annual reports. This may be due to the absence of standards and lack of guidelines from the regulatory authorities. Financial ratios are considered as one of the important tools of analysis, the inclusion of which in the annual reports shall reduce the information asymmetry. Investors and analysts use ratios for comparability purposes, standardization of the method of calculations will help them compare the performance of companies sector-wise and decide on the best investment vehicle. The empirical findings show a positive relationship between disclosure index and selected performance variables. In order to apply the findings to practical use, a lot rides on on the nature of the voluntary disclosure, i.e. strategic, financial or corporate governance information. The need of the hour for the regulatory authority in India is to take a firm call on making a select set of ratios under each category mandatory, standardize calculation of ratios ensuring uniformity in disclosures, resulting in better investment decisions by stakeholders. The disclosing of ratios will strengthen the corporate governance norms and it is also an indication of sustainability of companies in terms of performance. The findings demonstrate the need for a shift in strategic thinking at the board level and senior management of listed Indian companies. Thus, the methodological approach and findings from this research enrich the existing literature on the relationship between voluntary disclosure of financial ratios, firm specific characteristics and industry classification.

6. Directions for future research

Research is an on going process. The present study has identified the following factors which can be considered when research activities in this topic are undertaken in the future to augment the literature.

a. The present study has not factored the ownership structure of the companies to explain the variation in the disclosure index. Ownership structure referers to the promoters stake in the total shareholdings of a company. The results may vary if ownership structure is also considered as an explanatory variable.

- Future studies can also consider corporate goverance variables (board composition, board size, board independence) to check whether such variables also jointly influence volunatry disclosure of ratios.
- c. Future studies can also include such as financial positon (profit or loss) and the presence of reputed audit firms' impact on voluntary disclosure ratios
- d. The present study has found that 'Industry' variable as a factor has association with disclosure index. Hence, sector specific studies can be undertaken in the future. This is to identify the discriminating factors sector-wise in terms of voluntary disclosure of ratios.
- e. A comparitive study of the extent of voluntary disclosures between companies listed in Indian and other emerging markets across the globle can be takenup. This will lend credence to the idea that top-performing companies worldwide disclose company information in a uniform manner.
- f. The present study is based on the published annual reports of the Companies. A primary survey measuring the perception of CFOs of Companies on volunatry disclosure of financial ratios will add more value to the exisiting literature.

References

- Abdullah A. B, Ismail K.I. (2008). Disclosure of voluntary accounting ratios by Malaysian listed companies. Journal of Financial Reporting and Accounting, 6(1), 1-20.
- Altman, E. (1968). Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. The Journal of Finance, 23(4), 589-609.
- Amran, Afza, Noor & Aripin, Norhani (2015). Financial Ratios: A Tool for Conveying Information and Decision Makring. Global Review of Accounting and Finance, 6(1), 151-164.
- Aripin, N., Tower, G., & Taylor, G. (2011). Insights on the diversity of financial ratios communication. Asian Review of Accounting, 19(1), 68-85.

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- Barnes, P. (1987).The analysis and use of financial ratios: A review article. Journal of Business Finance and Accounting, 14(4), 449-461.
- Beaver, W. H. (1966). Financial ratios as predictors of failure. Journal of Accounting Research, 4(3), 71-111.
- Bergamini, I. & Zambon, S. (2002). A scoring methodology for ranking company disclosure on intangibles (EU PRISM Research Project Working Paper No. WP4). Ferrara, Italy: University of Ferrara.
- Bhatia, Meena; Dhamija, Sanjay. (2015). Voluntary Disclosures of Financial Ratios in India.South Asian Journal of Management,22(1), 28-49.
- Craven, B. & Marston, C. (1999). Financial Reporting on the Internet by leading U.K Companies. The European Accounting Review, 8(2), 321-333.
- Cooke, T. E. (1989). Voluntary corporate disclosure by Swedish companies. Journal of International Financial Management and Accounting, 1(2), 171-195.
- Courtis, J.K. (1996). Annual report financial ratio component consistency. Asian Review of Accounting, 4(1), 146-162.
- Firth, M. (1979). The impact of size, stock market listing, and auditors on voluntary disclosure in corporate annual reports. Accounting and Business Research, 273-280
- Gibson, C. H. (1982). Financial ratios in annual reports. The CPA Journal, 52(9), 18-29.
- Hossain, M., & Adams, M. (1995). Voluntary financial disclosure by Australian listed companies. Australian Accounting Review, 5(10), 45-55.
- Houghton, K. (1984). Accounting data and the prediction of business failure: The setting of priors and the age of data. Journal of Accounting Research, 22, 361-368.
- Jensen, Michael, C; & Meckling, William, H.(1976). Theory of Firm: Managing Behaviour, Agency Costs and Ownership Structure. Journal of Financial Economics, 3(4),305-310.
- Jindal, S., & Kumar, M. (2012). The determinants of HC disclosures of Indian firms. Journal of Intellectual Capital, 13(2), 221-247.

- Joshi, Mahesh., Ubha,Singh, Dharminder; Sidhu, Jasvinder. (201). Intellectual Capital Disclosures by Indian and Australian Technology Companies-A Comparative Analysis, Journal of Intellectual Capital, 13(4), 582-598.
- Kang, H. (2006). Reporting intangible assets: Voluntary disclosure practices of the top emerging market companies. Unpublished doctoral dissertation. University of New South Wales, Australia.
- Kaur M., & Narang, S. (2010). EVA disclosures in the annual reports of Indian Companies: An empirical study. Global Business Review, 11(3), 395-420.
- Lee &Tweedie (1977). The private shareholder and the corporate report: A report to the Research Committee of the Institute of Chartered Accountants in England and Wales, Institute of Chartered Accountants in England and Wales, London.
- Lind, D,A; Roberts,C,B; William,G,M; &Samuel,A,W.(2008). Statistical Techniques in Business and Economics (13th ed.),New Delhi:Tata McGraw Hill.
- Mokhtar Awang, Mustafa Mohamed Zain and Muhd Kamil Ibrahim (2004). Disclosure of financial ratio in annual report: some empirical evidence. Utusan Publications and Distributor, Kuala Lumpur Malaysia.
- Murthy, V. (2008). Corporate social disclosure practices of top software firms in India. Global Business Review, 9(2), 173-188
- Narayanaswamy, R. (2011), Financial Accounting- A Managerial Perspective (4th ed.). New Delhi: PHI Learning.
- Shehata, F, Narmeen. (2014). Theories and Determinants of Voluntary Disclosure. Accounting and Financial Research, 3(1),18-26.
- Skinner, D.J. (1994). Why firms voluntarily disclose bad news. Journal of Accounting Research, 32(1), 38-60.
- Stanga, K. G. (1976) Disclosure in published annual reports. Financial Management, 42-52.



Subramanyam, K.R., & Wild, J.J. (2014). Financial statement analysis (10th ed.). New Delhi: McGraw Hill.

- Tariq,H.(2001). An Empirical Investigation of Factors Influencing Voluntary Disclosure of Finanical Information on the Internet in GCC Countries, Qatar University.
- Thomas, J; & Evanson,R. (1987). An Empricial Investigation of Association Between Financial Ratios use and Small Business Success. Journal of Business Finance and Accounting, 14(4), 555-571
- Uyar, Ali., Merve, Kilic. (2012). The influence of firm characteristics on disclosure of financial ratios in

annual reports of Turkish firms listed in the Istanbul Stock Exchange, 8(2), 137-156.

- Varghese, R (2011). Voluntary annual report disclosures of manufacturing companies in India and their linkages with organisational demographics. South Asian Journal of Management, 18(4), 23-43.
- Watson, A., Srives, P., & Marston, C (2002). Voluntary disclosure of accounting ratios in the UK. British Accounting Review, 34(4), 289-313.
- Williamson, R. W. (1984). Evidence on the selective reporting of financial ratios. The Accounting Review, 59(2), 296-299.



Annexure	-	

Company	Industry	No. of Ratios Disclosed
3 m India Itd	Diversified	5
8K Miles Software Services Ltd.	Internet Software & Services	1
Aarti Industries Ltd.	Commodity Chemicals	6
Aban Offshore Ltd.	Exploration & Production	3
ABB India Ltd.	Heavy Electrical Equipment	2
ACC Ltd.	Cement & Cement Products	8
Adani Enterprises Ltd.	Trading	3
Adani Ports and Special Economic Zone Ltd.	Port	3
Adani Power Ltd.	Power Generation/Distribution	2
Adani Transmission Ltd.	Power Generation/Distribution	1
Aditya Birla Fashion and Retail Ltd.	Retailing	0
Aditya Birla Nuvo Ltd.	Diversified	5
Advanced Enzyme Technologies Ltd.	Pharmaceuticals & Drugs	10
Aegis Logistics Ltd.	Logistics	3
Ahluwalia Contracts (India) Ltd.	Realty	0
AIA Engineering Ltd.	Engineering - Industrial Equipments	0
Ajanta Pharma Ltd.	Pharmaceuticals & Drugs	4
Akzo Nobel India Ltd.	Paints	0
Alembic Pharmaceuticals Ltd.	Pharmaceuticals & Drugs	7
Alkem Laboratories Ltd.	Pharmaceuticals & Drugs	0
Allcargo Logistics Ltd.	Logistics	1
Alok Industries Ltd.	Textile	0
Amara Raja Batteries Ltd.	Batteries	9
Ambuja Cements Ltd.	Cement & Construction Materials	6
Amtek Auto Ltd.	Castings/Forgings	0
Anant Raj Ltd.	Construction - Real Estate	1
Apar Industries Ltd.	Electric Equipment	6
APL Apollo Tubes Ltd.	Iron & Steel Products	3
Apollo Hospitals Enterprise Ltd.	Hospital & Healthcare Services	1
Apollo Tyres Ltd.	Tyres & Allied	4
Arvind Ltd.	Textile	1
Asahi India Glass Ltd.	Glass	4
Ashok Leyland Ltd.	Automobiles-Trucks/Lcv	0
Ashoka Buildcon Ltd.	Construction - Real Estate	0
Asian Paints Ltd.	Paints	6
Astral Poly Technik Ltd.	Plastic Products	5
Astrazeneca Pharma India Ltd.	Pharmaceuticals & Drugs	11
Atul Ltd.	Chemicals	7
Aurobindo Pharma Ltd.	Pharmaceuticals & Drugs	5
Avanti Feeds Ltd.	Consumer Food	0



Bajaj Auto Ltd.	Automobile Two & Three Wheelers	1
Bajaj Corp Ltd	CONSUMER GOODS	3
Bajaj Hindusthan Sugar Ltd.	Sugar	0
Balkrishna Industries Ltd.	Tyres & Allied	0
Ballarpur Industries Ltd.	Paper & Paper Products	1
Balmer Lawrie & Company Ltd.	Diversified	0
Balrampur Chini Mills Ltd.	Sugar	16
BASF India Ltd.	Pesticides & Agrochemicals	4
Bata India Ltd.	Retailing	8
BEML Ltd.	Engineering - Industrial Equipments	5
Berger Paints India Ltd.	CONSUMER GOODS	0
BGR Energy Systems Ltd.	Engineering - Construction	4
Bharat Electronics Ltd.	Engineering - Industrial Equipments	2
Bharat Forge Ltd.	Forgings	3
Bharat Heavy Electricals Ltd.	Engineering - Industrial Equipments	8
Bharat Petroleum Corporation Ltd.	Refineries	5
Bharti Airtel Ltd.	Telecommunication - Service Provider	7
Bharti Infratel Ltd.	Telecommunication - Service Provider	7
Bhushan Steel Ltd.	Steel & Iron Products	0
Biocon Ltd.	Pharmaceuticals & Drugs	3
Birla Corporation Ltd.	Diversified	2
Bliss GVS Pharma Ltd.	Pharmaceuticals & Drugs	0
Blue Dart Express Ltd.	Courier Services	2
Blue Star Ltd.	CONSUMER GOODS	4
bombay Burmah Trading Corporation Ltd.	Agriculture	0
Bombay Dyeing & Manufacturing Company Ltd.	Textile	1
Bombay Rayon Fashions Ltd.	Textile	0
Bosch Ltd.	Engineering - Industrial Equipments	2
Brigade Enterprises Ltd.	Construction - Real Estate	8
Britannia Industries Ltd.	Consumer Food	9
Cadila Healthcare Ltd.	Pharmaceuticals & Drugs	5
Caplin Point Laboratories Ltd.	Pharmaceuticals & Drugs	6
Carborundum Universal Ltd.	Abrasives	18
Castrol India Ltd.	Lubricants	1
CCL Products (India) Ltd.	Tea/Coffee	0
Ceat Ltd.	AUTOMOBILE	6
Century Plyboards (India) Ltd.	Wood & Wood Products	7
Century Textiles & Industries Ltd.	Diversified	0
Cera Sanitaryware Ltd.	Ceramics/Marble/Granite/Sanitaryware	1
CESC Ltd.	Power Generation/Distribution	0
CG Power & Industrial Solutions Ltd.	Electric Equipment	10
Chambal Fertilisers & Chemicals Ltd.	Fertilizers	0



Chennai Petroleum Corporation Ltd.	Refineries	3
Cipla Ltd.	Pharmaceuticals & Drugs	0
Coal India Ltd.	Mining & Minerals	11
Coffee Day Enterprises Ltd.	Hotel, Resort & Restaurants	0
Colgate-Palmolive (India) Ltd.	Household & Personal Products	0
Container Corporation Of India Ltd	SERVICES	5
Coromandel International Ltd.	Fertilizers	1
Cox & Kings (India) Ltd.	Travel Services	2
Credit Analysis And Research Ltd.	Ratings	1
CRISIL Ltd.	Ratings	2
Crompton Greaves Consumer	Consumer Durables - Domestic	2
Electricals Ltd.	Appliances	
Cummins India Ltd.	Diesel Engines	0
Cyient Ltd.	IT - Software	15
Dabur India Ltd.	Diversified	2
Dalmia Bharat Ltd.	Miscellaneous	1
DB Corp Ltd.	Printing And Publishing	10
DB Realty Ltd.	Construction - Real Estate	0
DCM Shriram Ltd.	CONSUMER GOODS	4
Deepak Fertilisers & Petrochemicals Corporation Ltd.	CHEMICALS	0
Den Networks Ltd.	TV Broadcasting & Software Production	0
Dhanuka Agritech Ltd.	Pesticides & Agrochemicals	2
Dish TV India Ltd.	TV Broadcasting & Software Production	0
Divis Laboratories Ltd.	Pharmaceuticals & Drugs	5
DLF Ltd.	Construction - Real Estate	0
Dr. Lal Pathlabs Ltd.	Hospital & Healthcare Services	2
Dr. Reddys Laboratories Ltd.	Pharmaceuticals & Drugs	10
Dredging Corporation Of India Ltd.	Shipping	0
Dynamatic Technologies Ltd.	Compressors / Pumps	3
E.I.D. Parry (India) Ltd.	Sugar	14
eClerx Services Ltd.	BPO/ITeS	1
Eicher Motors Ltd.	Automobile Two & Three Wheelers	3
EIH Ltd.	Hotel, Resort & Restaurants	2
Emami Ltd.	Household & Personal Products	5
Engineers India Ltd.	Engineering	6
Eros International Media Ltd.	Film Production, Distribution & Entertainment	1
Escorts Ltd.	Automobiles-Tractors	0
Essel Propack Ltd.	Plastic Products	2
Eveready Industries (India) Ltd.	Batteries	5
Exide Industries Ltd.	Batteries	1
FAG Bearings India Ltd.	Bearings	3
FDC Ltd.	Pharmaceuticals & Drugs	0



Finolex Cables Ltd.	Cable	5
Finolex Industries Ltd.	Plastic Products	0
Firstsource Solutions Ltd.	Plastic Products	0
Fortis Healthcare Ltd.	Hospital & Healthcare Services	0
Future Consumer Ltd.	Trading	0
Future Lifestyle Fashions Ltd.	Miscellaneous	8
Future Retail Ltd.	Retailing	2
GAIL (India) Ltd.	Industrial Gases & Fuels	8
Gateway Distriparks Ltd.	Logistics	2
GATI Ltd.	Logistics	5
Gayatri Projects Ltd.	Engineering - Construction	3
GE Power India Ltd.	Engineering - Construction	0
GE T&D India Ltd.	Electric Equipment	0
Gillette India Ltd.	Household & Personal Products	2
Glaxosmithkline Consumer Healthcare Ltd.	Consumer Food	5
Glaxosmithkline Pharmaceuticals Ltd.	Pharmaceuticals & Drugs	3
Glenmark Pharmaceuticals Ltd.	Pharmaceuticals & Drugs	2
GMR Infrastructure Ltd	Infrastructure	0
Godfrey Philips India Ltd	Tobacco	0
Godrej Consumer Products Ltd.	Household & Personal Products	3
Godrej Industries Ltd.	Chemicals	8
Godrej Properties Ltd.	Construction - Real Estate	0
Granules India Ltd.	Pharmaceuticals & Drugs	3
Grasim Industries Ltd.	Diversified	7
Greaves Cotton Ltd.	Diesel Engines	8
Greenply Industries Ltd.	Wood & Wood Products	11
Grindwell Norton Ltd.	Abrasives	6
Gujarat Fluorochemicals Ltd.	Chemicals	5
Gujarat Gas Ltd.	Trading	0
Gujarat Mineral Development Corporation Ltd.	Mining & Minerals	0
Gujarat Pipavav Port Ltd.	Port	0
Gujarat State Fertilizers & Chemicals Ltd.	Chemicals	3
Gujarat State Petronet Ltd.	Gas Transmission/Marketing	0
Gulf Oil Lubricants India Ltd.	Lubricants	3
GVK Power & Infrastructure Ltd.	Power Generation/Distribution	0
Hathway Cable & Datacom Ltd.	Telecommunication - Service Provider	0
Havells India Ltd.	Electric Equipment	5
HCL Infosystems Ltd.	Trading	0
HCL Technologies Ltd.	IT - Software	4
Heidelberg Cement India Ltd.	Cement & Construction Materials	5
	centent à construction materials	5



Hexaware Technologies Ltd.	IT - Software	8
Himachal Futuristic Communications Ltd.	Telecommunication - Equipment	6
Himatsingka Seide Ltd.	Textile	5
Hindalco Industries Ltd.	Metal - Non Ferrous	8
Hindustan Construction Company Ltd.	Construction - Real Estate	5
Hindustan Copper Ltd.	Metal - Non Ferrous	0
Hindustan Media Ventures Ltd.	Printing And Publishing	4
Hindustan Petroleum Corporation Ltd.	Refineries	7
Hindustan Unilever Ltd.	Household & Personal Products	10
Hindustan Zinc Ltd.	Metal - Non Ferrous	5
Honeywell Automation India Ltd.	Consumer Durables - Electronics	0
Housing Development & Infrastructure Ltd.	Construction - Real Estate	2
HSIL Ltd.	Ceramics/Marble/Granite/Sanitaryware	13
HT Media Ltd.	Printing And Publishing	2
ICRA Ltd.	Ratings	4
Idea Cellular Ltd.	Telecommunication - Service Provider	5
Igarashi Motors India Ltd.	Electric Equipment	5
IL&FS Transportation Networks Ltd.	Engineering - Construction	4
Indiabulls Real Estate Ltd.	Construction - Real Estate	0
Indian Oil Corporation Ltd.	Refineries	7
Indo Count Industries Ltd.	Textile	4
Indoco Remedies Ltd.	Pharmaceuticals & Drugs	7
Indraprastha Gas Ltd.	Industrial Gases & Fuels	0
Infibeam Incorporation Ltd.	IT - Software	0
Info Edge (India) Ltd.	BPO/ITeS	2
Infosys Ltd.	IT - Software	5
Ingersoll-Rand (India) Ltd.	Compressors / Pumps	7
Inox Leisure Ltd.	Film Production, Distribution & Entertainment	4
Inox Wind Ltd.	Electric Equipment	5
Intellect Design Arena Ltd.	IT - Software	4
Interglobe Aviation Ltd.	Airlines	6
International Paper APPM Ltd.	Paper & Paper Products	5
Ipca Laboratories Ltd.	Pharmaceuticals & Drugs	0
IRB Infrastructure Developers Ltd.	Engineering - Construction	3
ITC Ltd.	Cigarettes/Tobacco	4
ITD Cementation India Ltd.	Engineering - Construction	8
J Kumar Infraproject Ltd.	Engineering - Construction	0
Jagran Prakashan Ltd.	Printing And Publishing	6
Jai Corp Ltd.	Steel & Iron Products	5
Jain Irrigation Systems Ltd.	Plastic Products	8
Jaiprakash Associates Ltd.	Cement & Construction Materials	0



Jaiprakash Power Ventures Ltd.	Power Generation/Distribution	0
Jaypee Infratech Ltd.	Construction - Real Estate	0
JB Chemicals & Pharmaceuticals Ltd.	Pharmaceuticals & Drugs	5
JBF Industries Ltd.	Textile - Manmade Fibres	7
Jet Airways (India) Ltd.	Airlines	0
Jindal Poly Films Ltd.	Plastic Products	0
Jindal Steel & Power Ltd.	Steel/Sponge Iron/Pig Iron	6
JK Cement Ltd.	Cement & Construction Materials	0
JK Lakshmi Cement Ltd.	Cement & Construction Materials	7
JK Tyre & Industries Ltd.	Tyres & Allied	6
JMT Auto Ltd.	Auto Ancillary	4
Johnson Controls - Hitachi Air Conditioning India Ltd.	Air Conditioners	8
JSW Energy Ltd.	Power Generation/Distribution	5
JSW Steel Ltd.	Steel & Iron Products	5
Jubilant FoodWorks Ltd.	Consumer Food	2
Jubilant Life Sciences Ltd.	Chemicals	2
Just Dial Ltd.	Miscellaneous	4
Jyothy Laboratories Ltd.	Household & Personal Products	9
Kajaria Ceramics Ltd.	Ceramics/Marble/Granite/Sanitaryware	7
Kalpataru Power Transmission Ltd.	Transmission Towers / Equipments	5
Kansai Nerolac Paints Ltd.	Paints	0
Kaveri Seed Company Ltd.	Agriculture	13
KEC International Ltd.	Engineering - Construction	8
Kesoram Industries Ltd.	Diversified	4
Kitex Garments Ltd.	Textile	5
Kolte Patil Developers Ltd.	Construction - Real Estate	4
KPIT Technologies Ltd.	IT - Software	6
KPR Mill Ltd.	Textile	0
KRBL Ltd.	Consumer Food	7
KSB Pumps Ltd.	Engineering - Industrial Equipments	4
Kwality Ltd.	Consumer Food	12
La Opala RG Ltd.	Glass	6
Lakshmi Machine Works Ltd.	Textile - Machinery	0
Lanco Infratech Ltd.	Engineering - Construction	0
Larsen & Toubro Ltd.	Engineering - Construction	8
Linde India Ltd.	Industrial Gases & Fuels	0
Lupin Ltd.	Pharmaceuticals & Drugs	7
Mahanagar Gas Ltd.	Gas Transmission/Marketing	0
Mahanagar Telephone Nigam Ltd.	Telecommunication - Service Provider	0
Mahindra & Mahindra Ltd.	Automobiles - Passenger Cars	8
Mahindra CIE Automotive Ltd.	Forgings	8
Mahindra Holidays & Resorts India Ltd.	Hotel, Resort & Restaurants	8



Mahindra Lifespace Developers Ltd.	Construction - Real Estate	2
Mangalore Refinery & Petrochemicals		
Ltd.	Refineries	2
Manpasand Beverages Ltd.	Consumer Food	0
Marico Ltd.	Solvent Extraction	11
Marksans Pharma Ltd.	Pharmaceuticals & Drugs	6
Maruti Suzuki India Ltd.	Automobiles - Passenger Cars	10
Max India Ltd.	Diversified	7
Mayur Uniquoters Ltd.	Miscellaneous	6
Mcleod Russel India Ltd.	Tea/Coffee	0
Merck Ltd.	Pharmaceuticals & Drugs	7
Mindtree Ltd.	IT - Software	7
MMTC Ltd.	Trading	0
MOIL Ltd.	Mining & Minerals	3
Monsanto India Ltd.	Agriculture	11
Motherson Sumi Systems Ltd.	Auto Ancillary	5
Mphasis Ltd.	IT - Software	2
MRF Ltd.	Tyres & Allied	7
Narayana Hrudayalaya Ltd.	Hospital & Healthcare Services	3
Natco Pharma Ltd.	Pharmaceuticals & Drugs	4
National Aluminium Company Ltd.	Metal - Non Ferrous	6
Navin Fluorine International Ltd.	Chemicals	7
Navkar Corporation Ltd.	Logistics	2
NBCC (India) Ltd.	Construction - Real Estate	0
NCC Ltd.	Engineering - Construction	4
Network 18 Media & Investment Ltd.	TV Broadcasting & Software Production	0
NHPC Ltd.	Power Generation/Distribution	0
NIIT Technologies Ltd.	IT - Software	2
Nilkamal Ltd.	Plastic Products	9
Nitin Fire Protection Industries Ltd.	Engineering - Industrial Equipments	1
NLC India Ltd.	Power Generation/Distribution	6
NMDC Ltd.	Mining & Minerals	0
NTPC Ltd.	Power Generation/Distribution	4
Oberoi Realty Ltd.	Construction - Real Estate	4
Oil & Natural Gas Corporation Ltd.	Oil Exploration	5
Oil India Ltd.	Power Generation/Distribution	0
Omaxe Ltd.	Construction - Real Estate	0
Oracle Fiancial Services Software limited	IT-Software	2
Orient Cement Limited	Cement and construction materials	2
Orissa Minerals Development Company	Mining and minerals	0
Page industries	Textile	2



Persistent Systems Ltd.	IT - Software	2
Petronet LNG Ltd.	Industrial Gases & Fuels	1
Pfizer Ltd	Pharmaceutical and drugs	3
Phoenix Mills Ltd	Construction-Real Estate	2
PI Industries Ltd	Pesticides and agrochemicals	5
Pidilite industries	Chemicals	9
PNC Infratech Limited	IT-Software	5
Power Grid Corporation of India	Power generation/Distribution	4
Praj Industries Limited	Engineering-Electrical equipments	1
Prestige Estate projects Ltd	Construction-Real Estate	4
Prism Cement Ltd.	Diversified	0
Procter & Gamble Hygiene & Health Care Ltd.	Household & Personal Products	1
PTC India Ltd.	Power Generation/Distribution	1
Punj Lloyd Ltd.	Engineering - Construction	1
PVR Ltd.	Film Production, Distribution & Entertainment	1
Radico Khaitan Ltd.	Breweries & Distilleries	3
Rain Industries Ltd.	Petrochemicals	2
Rajesh Exports Ltd.	Jewellery manufacturer	1
Rallis India Ltd.	Pesticides & Agrochemicals	1
Ramco Systems Ltd.	IT - Software	0
Ramkrishna Forgings Ltd.	Forgings	4
Rashtriya Chemicals & Fertilizers Ltd.	Fertilizers	1
RattanIndia Power Ltd.	Power Generation/Distribution	1
Raymond Ltd.	Textile - Weaving	1
Redington (India) Ltd.	Trading	8
Relaxo Footwears Ltd.	Household & Personal Products	3
Reliance Communications Ltd.	Telecommunication - Service Provider	1
Reliance Defence and Engineering Ltd.	Shipping	0
Reliance Industrial Infrastructure Ltd.	Engineering - Construction	1
Reliance Industries Ltd.	Refineries	5
Reliance Infrastructure Ltd.	Power Generation/Distribution	0
Reliance Power Ltd.	Power Generation/Distribution	1
Rolta India Ltd.	IT - Software	3
Ruchi Soya Industries Ltd.	Consumer Food	1
Sadbhav Engineering Ltd.	Engineering - Construction	3
Sanofi India Ltd.	Pharmaceuticals & Drugs	3
Schneider Electric Infrastructure Ltd.	Electric Equipment	2
Sequent Scientific Ltd.	Pharmaceuticals & Drugs	1
SH Kelkar & Co Ltd.	Chemicals	3
Sharda Cropchem Ltd.	Trading	5
Shilpa Medicare Ltd.	Pharmaceuticals & Drugs	3
Shipping Corporation Of India Ltd.	Shipping	2



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Shoppers Stop Ltd.	Consumer goods	16
Shree Cement Ltd.	Cement & Construction Materials	9
Shree Renuka Sugars Ltd.	Sugar	0
Siemens Ltd.	Electric Equipment	1
Simplex Infrastructures Ltd.	Engineering - Construction	0
Sintex Industries Ltd.	Plastic Products	2
Siti Networks Ltd.	TV Broadcasting & Software Production	0
SJVN Ltd.	Power Generation/Distribution	3
SKF India Ltd.	Bearings	6
SML Isuzu Ltd.	Automobiles-Trucks/Lcv	0
Snowman Logistics Ltd.	Logistics	4
Sobha Ltd.	Construction - Real Estate	12
Solar Industries (India) Ltd.	Chemicals	6
Somany Ceramics Ltd.	Ceramics	3
Sonata Software Ltd.	IT - Software	4
SRF Ltd.	Diversified	1
State Trading Corporation Of India Ltd.	Trading	0
Steel Authority Of India Ltd.	Steel & Iron Products	11
Strides Shasun Ltd.	Pharmaceuticals & Drugs	1
Sun Pharma Advanced Research Company Ltd.	Miscellaneous	0
Sun Pharmaceutical Industries Ltd.	Pharmaceuticals & Drugs	0
Sundram Fasteners Ltd.	Trading	7
Sunteck Realty Ltd.	Construction - Real Estate	1
Suprajit Engineering Ltd.	Auto Ancillary	7
Supreme Industries Ltd.	Plastic Products	5
Suven Life Sciences Ltd.	Pharmaceuticals & Drugs	4
Suzlon Energy Ltd.	Electric Equipment	1
Swan Energy Ltd.	Textile	0
Symphony Ltd.	Consumer Durables - Domestic Appliances	1
Syngene International Ltd.	Miscellaneous	1
Take Solutions Ltd.	IT - Software	1
Tamil Nadu Newsprint & Papers Ltd.	Paper & Paper Products	2
Tata Chemicals Ltd.	Fertilizers	4
Tata Coffee Ltd.	Tea/Coffee	1
Tata Communications Ltd.	Telecommunication - Service Provider	1
Tata Consultancy Services Ltd.	IT - Software	6
Tata Elxsi Ltd.	IT - Software	3
Tata Global Beverages	Tea/Coffee	2
Tata Motors Ltd.	Automobiles-Trucks/Lcv	5
Tata Power Company Ltd.	Power Generation/Distribution	3
Tata Sponge Iron Ltd.	Steel/Sponge Iron/Pig Iron	1
Tata Steel Ltd.	Steel & Iron Products	13



Tech Mahindra Ltd.	IT - Software	4
Techno Electric & Engineering	Engineering - Construction	1
Company Ltd.		_
Texmaco Rail & Engineering Ltd.	Railways Wagons	1
The Great Eastern Shipping Company Ltd.	Shipping	3
The India Cements Ltd.	Cement & Construction Materials	0
The Indian Hotels Company Ltd.	Hotel, Resort & Restaurants	1
The Ramco Cements Ltd.	Cements	2
Thermax Ltd.	Engineering - Industrial Equipments	1
Thomas Cook (India) Ltd.	Travel Services	0
Tide Water Oil Company (India) Ltd.	Lubricants	2
Timken India Ltd.	Bearings	2
Titan Company Ltd.	Diamond & Jewellery	6
Torrent Pharmaceuticals Ltd.	Pharmaceuticals & Drugs	3
Torrent Power Ltd.	Power Generation/Distribution	6
Trent Ltd.	Retailing	0
Trident Ltd.	Textile - Spinning	5
Triveni Turbine Ltd.	Engineering - Industrial Equipments	6
TTK Prestige Ltd.	Consumer Durables - Domestic Appliances	0
Tube Investments Of India Ltd.	Cycles	10
TV Today Network Ltd.	TV Broadcasting & Software Production	1
TV18 Broadcast Ltd.	TV Broadcasting	0
TVS Motor Company Ltd.	Automobile Two & Three Wheelers	4
TVS Srichakra Ltd.	Tyres & Allied	6
Uflex Ltd.	Plastic Products	0
Ultratech Cement Ltd.	Cement & Construction Materials	7
Unichem Laboratories Ltd.	Pharmaceuticals & Drugs	3
Unitech Ltd.	Construction - Real Estate	0
United Breweries Ltd.	Breweries & Distilleries	0
United Spirits Ltd.	Breweries & Distilleries	0
UPL Ltd.	Pesticides & Agrochemicals	1
VA Tech Wabag Ltd.	Miscellaneous	1
Vakrangee Ltd.	Miscellaneous	0
Vardhman Textiles Ltd.	Textile	0
Vedanta Ltd.	Metal - Non Ferrous	3
V-Guard Industries Ltd.	Electric Equipment	11
Vinati Organics Ltd.	Chemicals	0
VIP Industries Ltd.	Household & Personal Products	8
Voltas Ltd.	Air Conditioners	2
VRL Logistics Ltd.	Logistics	3
VST Industries Ltd.	Cigarettes/Tobacco	2
Wabco India Ltd.	Auto Ancillary	1

An empirical investigation into voluntary disclosure of financial ratios by S&P CNX 500 companies



Welspun Corp Ltd.	Castings/Forgings	3
Welspun India Ltd.	Textile	8
Whirlpool Of India Ltd.	Consumer Durables - Domestic Appliances	0
Wipro Ltd.	IT - Software	2
Wockhardt Ltd.	Pharma	4
Wonderla Holidays Ltd.	Amusement Parks/Recreation/Club	3
Zee Entertainment Enterprises Ltd.	TV Broadcasting & Software Production	7
Zee Learn Ltd.	Educational Institutions	0
Zensar Technologies Ltd.	IT - Software	1
Zydus Wellness Ltd.	CONSUMER GOODS	2



Annexure II Data considered for the analysis and the model proposed for the research

Company	Industry	index	Rol	CR	DE	ATR	Size
3 m India ltd	Diversified	0.277778	0.143614	2.719214	0.005676	1.515401	12152.22
8K Miles Software Services Ltd.	Internet Software & Services	0.055556	0.125945	3.30913	0.165376	1.167585	2173.43
Aarti Industries Ltd.	Commodity Chemicals	0.333333	0.082451	1.068426	1.16	0.900098	4311
Aban Offshore Ltd.	Exploration & Production	0.166667	0.002324	1.160919	2.211011	0.15586	1031.32
ABB India Ltd.	Heavy Electrical Equipment	0.111111	0.048681	1.56295	0.199828	1.127409	27049.04
ACC Ltd.	Cement & Cement Products	0.444444	0.045158	1.004557	0	0.842246	25915.13
Adani Enterprises Ltd.	Trading	0.166667	0.023034	1.034021	0.52415	0.998839	8100.03
Adani Ports and Special Economic Zone Ltd.	Port	0.166667	0.071891	0.838301	1.219882	0.201719	51297.48
Adani Power Ltd.	Power Generation/Distribution	0.111111	0.007042	0.630597	4.838855	0.366646	11552.1
Adani Transmission Ltd.	Power Generation/Distribution	0.055556	0.030261	0.337127	1.917166	0.191801	3772.35
Aditya Birla Fashion and Retail Ltd.	Retailing	0	-0.02255	0.691945	0.717008	1.31473	11048.23
Aditya Birla Nuvo Ltd.	Diversified	0.277778	0.022924	1.009538	1.562615	0.265468	10739.89
Advanced Enzyme Technologies Ltd.	Pharmaceuticals & Drugs	0.555556	0.170352	1.261423	0.136722	0.654919	3208.81
Aegis Logistics Ltd.	Logistics	0.166667	0.14029	1.227721	0.200668	2.470874	3249.82
Ahluwalia Contracts (India) Ltd.	Realty	0	0.072958	1.290426	0.000437	1.09198	1980.15
AIA Engineering Ltd.	Engineering - Industrial Equipments	0	0.15514	5.300848	0.011043	0.789193	8844.4
Ajanta Pharma Ltd.	Pharmaceuticals & Drugs	0.222222	0.292939	2.763955	0.012287	1.15493	12412.4
Akzo Nobel India Ltd.	Paints	0	0.100104	1.094464	0.023457	1.376987	6325
Alembic Pharmaceuticals Ltd.	Pharmaceuticals & Drugs	0.388889	0.292589	1.963124	0.03132	1.282527	11321.31
Alkem Laboratories Ltd.	Pharmaceuticals & Drugs	0	0.125858	1.76602	0.033634	0.948035	16338.56
Allcargo Logistics Ltd.	Logistics	0.055556	0.077886	1.070116	0.117388	1.551379	3862.17
Alok Industries Ltd.	Textile	0	-0.13644	1.042834	-35.8335	0.474822	622.55
Amara Raja Batteries Ltd.	Batteries	0.5	0.168291	2.237326	0.034484	1.628548	15023.81
Ambuja Cements Ltd.	Cement & Construction Materials	0.333333	0.043351	1.079637	0.000986	0.637338	36027.36
Amtek Auto Ltd.	Castings/Forgings	0	-0.0293	0.804376	0.00172	0.278257	682.12
Anant Raj Ltd.	Construction - Real Estate	0.055556	0.010079	0.374705	0.222983	0.074903	972.35
Apar Industries Ltd.	Electric Equipment	0.333333	0.058294	1.249199	0.097408	1.82033	1777.78

APL Apollo Tubes Ltd.	Iron & Steel Products	0.166667	0.060579	1.094171	0.330526	2.544279	1558.17
Apollo Hospitals Enterprise Ltd.	Hospital & Healthcare Services	0.055556	0.04306	1.73142	0.640528	0.795128	18425.75
Apollo Tyres Ltd.	Tyres & Allied	0.222222	0.09843	1.292556	0.098601	1.068304	8907.93
Arvind Ltd.	Textile	0.055556	0.042561	1.082651	0.503164	0.99708	7052.53
Asahi India Glass Ltd.	Glass	0.222222	0.038278	0.874235	1.897444	0.974823	3682.97
Ashok Leyland Ltd.	Automobiles-Trucks/Lcv	0	0.047849	0.991662	1.435278	0.90626	30891.99
Ashoka Buildcon Ltd.	Construction - Real Estate	0	0.003798	1.201669	1.620792	0.174218	3184.34
Asian Paints Ltd.	Paints	0.333333	0.175413	1.535631	0.012698	1.551252	83325.7
Astral Poly Technik Ltd.	Plastic Products	0.277778	0.073296	1.427142	0.550775	1.241523	5023.52
Astrazeneca Pharma India Ltd.	Pharmaceuticals & Drugs	0.611111	0.012962	1.079876	0	1.406151	2891.63
Atul Ltd.	Chemicals	0.388889	0.125726	1.45182	0.019096	1.228943	4570.16
Aurobindo Pharma Ltd.	Pharmaceuticals & Drugs	0.277778	0.126247	1.337832	0.119051	0.895728	43597.4
Avanti Feeds Ltd.	Consumer Food	0	0.252972	1.811728	0.00539	3.268308	1808.66
Bajaj Auto Ltd.	Automobile Two & Three Wheelers	0.055556	0.216876	1.566464	0.012455	1.431325	69625.32
Bajaj Corp Ltd	CONSUMER GOODS	0.166667	0.346978	4.91412	0	1.599253	5688.34
Bajaj Hindusthan Sugar Ltd.	Sugar	0	-0.01799	1.275133	3.205186	0.408746	2238.1
Balkrishna Industries Ltd.	Tyres & Allied	0	0.106845	1.052044	0.298537	0.659243	6084.12
Ballarpur Industries Ltd.	Paper & Paper Products	0.055556	-0.0208	0.684568	1.134092	0.337942	898.04
Balmer Lawrie & Company Ltd.	Diversified	0	0.099733	1.970019	0.008752	1.723681	1633.8
Balrampur Chini Mills Ltd.	Sugar	0.888889	0.026502	0.18	0.55	0.75	2636.35
BASF India Ltd.	Pesticides & Agrochemicals	0.222222	0.001131	1.372465	0.797012	1.20883	3777.7
Bata India Ltd.	Retailing	0.444444	0.124947	2.479077	0	1.403782	6516.99
BEML Ltd.	Engineering - Industrial Equipments	0.277778	0.01226	2.507137	0.171894	0.696634	4315.78
Berger Paints India Ltd.	CONSUMER GOODS	0	0.126673	1.575905	0.144959	1.599322	16956.08
BGR Energy Systems Ltd.	Engineering - Construction	0.222222	0.00408	1.268391	0.289768	0.473319	775.36
Bharat Electronics Ltd.	Engineering - Industrial Equipments	0.111111	0.074846	1.816027	2.84E-05	0.436288	29268
Bharat Forge Ltd.	Forgings	0.166667	0.07256	1.534955	0.576496	0.869124	20318.78
Bharat Heavy Electricals Ltd.	Engineering - Industrial Equipments	0.444444	-0.01289	2.195372	0.073585	0.399319	27841.45
Bharat Petroleum Corporation Ltd.	Refineries	0.277778	0.090245	0.979756	0.929455	2.030017	65192.89
Bharti Airtel Ltd.	Telecommunication - Service Provider	0.388889	0.025866	0.350109	1.804727	0.486069	140268.8

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Bharti Infratel Ltd.	Telecommunication - Service Provider	0.388889	0.088488	1.612664	0.058682	0.484871	72490.73
Bhushan Steel Ltd.	Steel & Iron Products	0	-0.06603	0.369927	6.939652	0.218509	813.19
Biocon Ltd.	Pharmaceuticals & Drugs	0.166667	0.114424	2.453428	0.474581	0.420899	9642
Birla Corporation Ltd.	Diversified	0.111111	0.03051	2.608147	0.293096	0.666715	2788.92
Bliss GVS Pharma Ltd.	Pharmaceuticals & Drugs	0	0.131462	1.765539	0.0858	0.749879	1307.31
Blue Dart Express Ltd.	Courier Services	0.111111	0.144531	1.46011	0.919511	1.943392	14394.74
Blue Star Ltd.	CONSUMER GOODS	0.222222	0.041886	1.038269	0.027232	1.462379	3450.93
bombay Burmah Trading Corporation Ltd.	Agriculture	0	0.151557	1.142123	0.106482	1.790761	2567.15
Bombay Dyeing & Manufacturing Company Ltd.	Textile	0.055556	-0.0204	1.004246	0.994337	0.422644	982.07
Bombay Rayon Fashions Ltd.	Textile	0	0.005992	1.344953	0.987357	0.479931	1963.82
Bosch Ltd.	Engineering - Industrial Equipments	0.111111	0.108381	2.114948	0.002307	0.956488	65271.49
Brigade Enterprises Ltd.	Construction - Real Estate	0.444444	0.026414	1.031312	1.020754	0.302791	1654.69
Britannia Industries Ltd.	Consumer Food	0.5	0.233175	1.1	0	2.539362	32106.6
Cadila Healthcare Ltd.	Pharmaceuticals & Drugs	0.277778	0.155007	1.302457	0.163359	0.991554	32447.52
Caplin Point Laboratories Ltd.	Pharmaceuticals & Drugs	0.333333	0.171328	0.947942	0.005691	0.907305	1528
Carborundum Universal Ltd.	Abrasives	1	0.081945	1.9	0.3	1.1	3306.42
Castrol India Ltd.	Lubricants	0.055556	0.357612	1.20672	0	1.803849	18538.63
CCL Products (India) Ltd.	Tea/Coffee	0	0.152409	1.569639	0.086939	1.164837	2595.14
Ceat Ltd.	AUTOMOBILE	0.333333	0.107456	1.264723	0.281365	1.388063	4385.4
Century Plyboards (India) Ltd.	Wood & Wood Products	0.388889	0.142471	1.259542	0.118295	1.415923	3784.72
Century Textiles & Industries Ltd.	Diversified	0	-0.0055	0.623764	1.49366	0.810189	5905.35
Cera Sanitaryware Ltd.	Ceramics/Marble/Granite/Sanitaryware	0.055556	0.103866	1.92604	0.084396	1.174324	2392.43
CESC Ltd.	Power Generation/Distribution	0	0.010698	0.792675	1.440018	0.401446	6274.59
CG Power & Industrial Solutions Ltd.	Electric Equipment	0.555556	-0.03601	0.797586	0.130302	0.518795	3083.59
Chambal Fertilisers & Chemicals Ltd.	Fertilizers	0	0.024738	1.018435	0.298727	1.215983	2282.92
Chennai Petroleum Corporation Ltd.	Refineries	0.166667	0.075579	0.757995	0.293868	2.516759	2968.1
Cipla Ltd.	Pharmaceuticals & Drugs	0	0.072079	1.118005	0.018712	0.664693	41150.1
Coal India Ltd.	Mining & Minerals	0.611111	0.129508	2.305131	0.00776	0.759743	184437.

Coffee Day Enterprises Ltd.	Hotel, Resort & Restaurants	0	0.00566	1.755313	0.772712	0.737775	4614.44
Colgate-Palmolive (India) Ltd.	Household & Personal Products	0	0.296609	0.925618	0	2.161835	22510.89
Container Corporation Of India Ltd	SERVICES	0.277778	0.082429	1.423482	0.014447	0.699799	24198.7
Coromandel International Ltd.	Fertilizers	0.055556	0.040593	1.132425	0.012599	1.303037	5531.79
Cox & Kings (India) Ltd.	Travel Services	0.111111	-0.0006	1.388127	0.916395	0.254424	3057.07
Credit Analysis And Research Ltd.	Ratings	0.055556	0.237948	2.437795	0	0.573094	2741.21
CRISIL Ltd.	Ratings	0.111111	0.227219	2.04261	0	1.115322	12817.42
Crompton Greaves Consumer	Consumer Durables - Domestic						
Electricals Ltd.	Appliances	0.111111	0.063634	0.856255	2.217602	1.098291	10316.24
Cummins India Ltd.	Diesel Engines	0	0.151414	1.904969	0	1.108679	23344.4
Cyient Ltd.	IT - Software	0.833333	0.119411	2.69	0.04	1.170682	4784.9
Dabur India Ltd.	Diversified	0.111111	0.176315	1.332387	0.081652	1.218071	43827.98
Dalmia Bharat Ltd.	Miscellaneous	0.055556	0.011957	1.491247	1.809808	0.413727	7072.03
DB Corp Ltd.	Printing And Publishing	0.555556	0.148347	1.412808	0.019895	1.040181	5675.73
DB Realty Ltd.	Construction - Real Estate	0	-0.00402	1.787173	0.312619	0.031789	5675.73
DCM Shriram Ltd.	CONSUMER GOODS	0.222222	0.057811	1.237658	0.123429	1.143655	2258.4
Deepak Fertilisers & Petrochemicals Corporation Ltd.	CHEMICALS	0	0.026234	1.14665	0.31879	1.011718	1301.39
Den Networks Ltd.	TV Broadcasting & Software Production	0	-0.0728	0.970674	0.225014	0.419356	1547.67
Dhanuka Agritech Ltd.	Pesticides & Agrochemicals	0.111111	0.163421	3.131345	0	1.28121	2925
Dish TV India Ltd.	TV Broadcasting & Software Production	0	0.175769	0.327554	3.02997	0.793013	9252.01
Divis Laboratories Ltd.	Pharmaceuticals & Drugs	0.277778	0.223782	5.956938	0.000109	0.777145	26149.98
DLF Ltd.	Construction - Real Estate	0	0.008132	2.436369	0.798865	0.145335	20441.2
Dr. Lal Pathlabs Ltd.	Hospital & Healthcare Services	0.111111	0.213088	4.66763	0	1.273689	7618.96
Dr. Reddys Laboratories Ltd.	Pharmaceuticals & Drugs	0.555556	0.107514	1.728894	0.09136	0.79794	51775.39
Dredging Corporation Of India Ltd.	Shipping	0	0.027617	1.889715	0.575959	0.234412	1063.16
Dynamatic Technologies Ltd.	Compressors / Pumps	0.166667	0.010394	0.99579	1.552523	1.268639	1098.5
E.I.D. Parry (India) Ltd.	Sugar	0.777778	0.011338	1.042334	0.320077	1.127446	3833.32
eClerx Services Ltd.	BPO/ITeS	0.055556	0.286857	5.81775	0	1.071078	5292.09
Eicher Motors Ltd.	Automobile Two & Three Wheelers	0.166667	0.150716	1.079251	0	1.863558	51983.83
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EIH Ltd.	Hotel, Resort & Restaurants	0.111111	0.033052	0.948488	0.060962	0.491074	5992.7
Emami Ltd.	Household & Personal Products	0.277778	0.134589	0.552128	0.21318	0.997389	21129.16
Engineers India Ltd.	Engineering	0.333333	0.062901	2.485195	0	0.428105	5736.4
Eros International Media Ltd.	Film Production, Distribution & Entertainment	0.055556	0.062001	0.569339	0.059906	0.442818	1581.67
Escorts Ltd.	Automobiles-Tractors	0	0.022747	0.656808	0.049646	1.062158	1704.47
Essel Propack Ltd.	Plastic Products	0.111111	0.087914	1.973512	0.576164	2.244492	2530.1
Eveready Industries (India) Ltd.	Batteries	0.277778	0.044924	0.990838	0.10151	1.182168	1681.82
Exide Industries Ltd.	Batteries	0.055556	0.046746	1.74761	0.000439	0.627336	11870.25
FAG Bearings India Ltd.	Bearings	0.166667	0.104746	3.5	0	1.013614	6349.59
FDC Ltd.	Pharmaceuticals & Drugs	0	0.126945	3.024513	0.000749	0.841238	3293.75
Finolex Cables Ltd.	Cable	0.277778	0.160469	3.368707	0.032777	1.258758	4287.95
Finolex Industries Ltd.	Plastic Products	0	0.128749	1.046331	0	1.342195	4520.96
Firstsource Solutions Ltd.	Plastic Products	0	0.072833	3.531267	0.065683	0.438027	2269.05
Fortis Healthcare Ltd.	Hospital & Healthcare Services	0	-0.00344	0.971184	0.203157	0.610059	8125.62
Future Consumer Ltd.	Trading	0	-0.07576	0.880465	0.466185	1.196016	3406.06
Future Lifestyle Fashions Ltd.	Miscellaneous	0.444444	0.007402	1.430886	0.7	0.833012	1507.32
Future Retail Ltd.	Retailing	0.111111	0.002605	1.494869	0	1.228227	7518.03
GAIL (India) Ltd.	Industrial Gases & Fuels	0.444444	0.031717	0.85733	0.34188	0.784855	45202.28
Gateway Distriparks Ltd.	Logistics	0.111111	0.06745	2.200986	0.199829	0.658629	3043.3
GATI Ltd.	Logistics	0.277778	0.025228	1.286354	0.445088	1.151902	959.44
Gayatri Projects Ltd.	Engineering - Construction	0.166667	0.000151	1.310632	4.390281	0.201398	1858.82
GE Power India Ltd.	Engineering - Construction	0	-0.02499	1.186179	0	0.586867	4078.84
GE T&D India Ltd.	Electric Equipment	0	0.015805	1.182051	0	0.70353	11386.54
Gillette India Ltd.	Household & Personal Products	0.111111	0.149592	1.729408	0	1.401209	14387.34
Glaxosmithkline Consumer Healthcare Ltd.	Consumer Food	0.277778	0.152688	2.07	0	1.01971	25383.84
Glaxosmithkline Pharmaceuticals Ltd.	Pharmaceuticals & Drugs	0.166667	0.123711	0.907029	0.00094	0.949144	32191.51
Glenmark Pharmaceuticals Ltd.	Pharmaceuticals & Drugs	0.111111	0.073141	1.453332	0.813789	0.769905	22415.15

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GMR Infrastructure Ltd	Infrastructure	0	-0.02534	0.478567	8.5	0.206172	7056
Godfrey Philips India Ltd	Tobacco	0	0.079635	1.886061	0.14	2.086869	6179
Godrej Consumer Products Ltd.	Household & Personal Products	0.166667	0.120207	1.426877	0.04	0.506493	46971
Godrej Industries Ltd.	Chemicals	0.444444	0.031062	1.100644	1.37	0.09538	11909
Godrej Properties Ltd.	Construction - Real Estate	0	0.038116	1.503913	1.31	0.049257	6407
Granules India Ltd.	Pharmaceuticals & Drugs	0.166667	0.089223	14.4961	0.74	1.023501	2599
Grasim Industries Ltd.	Diversified	0.388889	0.054962	0.997494	0.13	0.17214	35857
Greaves Cotton Ltd.	Diesel Engines	0.444444	0.174096	2.906407	0	1.563661	3015
Greenply Industries Ltd.	Wood & Wood Products	0.611111	0.108372	1.433711	0.53	1.454694	2100
Grindwell Norton Ltd.	Abrasives	0.333333	0.109304	2.096915	0	1.25675	3737
Gujarat Fluorochemicals Ltd.	Chemicals	0.277778	0.05968	1.269856	0.21	0.143443	5690
Gujarat Gas Ltd.	Trading	0	0.025086	0.356489	1.36	1.024274	7566
Gujarat Mineral Development Corporation Ltd.	Mining & Minerals	0	0.046779	3.486813	0	0.237793	2078
Gujarat Pipavav Port Ltd.	Port	0	0.107027	1.182349	0	0.277962	8455
Gujarat State Fertilizers & Chemicals Ltd.	Chemicals	0.166667	0.053665	1.79399	0.2	0.879841	2574
Gujarat State Petronet Ltd.	Gas Transmission/Marketing	0	0.086281	1.111253	0.29	0.192577	7805
Gulf Oil Lubricants India Ltd.	Lubricants	0.166667	0.154659	1.341284	0.94	1.586981	2513
GVK Power & Infrastructure Ltd.	Power Generation/Distribution	0	-0.04213	0.328495	0.25	0.129278	1078
Hathway Cable & Datacom Ltd.	Telecommunication - Service Provider	0	-0.03768	0.640103	1.15	0.519131	3218
Havells India Ltd.	Electric Equipment	0.277778	0.269452	1.81456	0.02	1.738625	20127
HCL Infosystems Ltd.	Trading	0	-0.06815	1.269599	0.68	1.005809	965
HCL Technologies Ltd.	IT - Software	0.222222	0.230721	2.446943	0	0.849362	114826
Heidelberg Cement India Ltd.	Cement & Construction Materials	0.277778	0.014135	0.61545	1.35	0.605357	1837
Hero MotoCorp Ltd.	Automobile Two & Three Wheelers	0.777778	0.26151	1.458956	0	2.41584	58823
Hexaware Technologies Ltd.	IT - Software	0.444444	1.619201	2.135379	0	0.19085	6225
Himachal Futuristic Communications Ltd.	Telecommunication - Equipment	0.333333	0.061196	1.997484	0.35	1.283293	2014
Himatsingka Seide Ltd.	Textile	0.277778	0.086009	1.199597	0.78	1.010008	1919



Hindalco Industries Ltd.	Metal - Non Ferrous	0.444444	-0.00503	1.423329	0.78	0.714842	18183
Hindustan Construction Company Ltd.	Construction - Real Estate	0.277778	-0.02099	0.876283	3.15	0.470642	1519.36
Hindustan Copper Ltd.	Metal - Non Ferrous	0	0.015988	3.181552	0.06	0.407926	4695
Hindustan Media Ventures Ltd.	Printing And Publishing	0.222222	0.156661	1.225554	0.16	0.796955	1835
Hindustan Petroleum Corporation Ltd.	Refineries	0.388889	0.055894	0.955583	1.22	2.176491	26601
Hindustan Unilever Ltd.	Household & Personal Products	0.555556	0.275888	1.07422	0	2.270067	188154
Hindustan Zinc Ltd.	Metal - Non Ferrous	0.277778	0.156694	2.44402	0	0.325336	77534
Honeywell Automation India Ltd.	Consumer Durables - Electronics	0	0.084893	1.9132	0	1.355089	7646
Housing Development & Infrastructure Ltd.	Construction - Real Estate	0.111111	0.015092	3.105278	0.2	0.067625	3065
HSIL Ltd.	Ceramics/Marble/Granite/Sanitaryware	0.722222	0.034162	1.097896	0.49	0.790206	2012
HT Media Ltd.	Printing And Publishing	0.111111	0.055577	0.935288	0.38	0.68886	1779
ICRA Ltd.	Ratings	0.222222	0.126261	2.327712	0	0.608388	3894
Idea Cellular Ltd.	Telecommunication - Service Provider	0.277778	0.04304	0.348296	1.42	0.505992	39667
Igarashi Motors India Ltd.	Electric Equipment	0.277778	0.139574	1.968737	0.19	1.007281	1682.55
IL&FS Transportation Networks Ltd.	Engineering - Construction	0.222222	0.00772	0.73513	2.72	0.25042	2357
Indiabulls Real Estate Ltd.	Construction - Real Estate	0	0.035313	4.723565	0.49	0.324087	2590
Indian Oil Corporation Ltd.	Refineries	0.388889	0.051151	0.907564	0.69	1.454707	95527
Indo Count Industries Ltd.	Textile	0.222222	0.198517	1.404928	0.72	1.659349	3835
Indoco Remedies Ltd.	Pharmaceuticals & Drugs	0.388889	0.091726	1.604219	0.21	1.110777	2677
Indraprastha Gas Ltd.	Industrial Gases & Fuels	0	0.125353	1.019815	0.03	1.144726	7972
Infibeam Incorporation Ltd.	IT - Software	0	0.017189	7.261504	0	0.679707	6300
Info Edge (India) Ltd.	BPO/ITeS	0.111111	-0.2293	3.634733	0	0.420344	9303
Infosys Ltd.	IT - Software	0.277778	0.193424	3.010821	0	0.927229	279837
Ingersoll-Rand (India) Ltd.	Compressors / Pumps	0.388889	0.054278	5.323857	0	0.622278	2039.6
Inox Leisure Ltd.	Film Production, Distribution & Entertainment	0.222222	0.072108	0.564702	0.4	1.244153	1849
Inox Wind Ltd.	Electric Equipment	0.277778	0.11323	1.398514	0.7	1.122754	5774
Intellect Design Arena Ltd.	IT - Software	0.222222	-0.01871	1.464671	0.01	0.843203	2273

Interglobe Aviation Ltd.	Airlines	0.333333	0.167253	1.405161	2.28	1.356701	31459
International Paper APPM Ltd.	Paper & Paper Products	0.277778	0.029351	0.877558	1.13	0.922773	1168
Ipca Laboratories Ltd.	Pharmaceuticals & Drugs	0	0.025332	1.812573	0.4	0.759722	7346
IRB Infrastructure Developers Ltd.	Engineering - Construction	0.166667	0.01568	0.790788	1.21	0.125727	8165
ITC Ltd.	Cigarettes/Tobacco	0.222222	0.195208	1.726589	0	0.805967	263988
ITD Cementation India Ltd.	Engineering - Construction	0.444444	0.020906	0.923933	0.8	1.342546	2306
J Kumar Infraproject Ltd.	Engineering - Construction	0	0.050918	1.738138	0.25	0.824632	1715
Jagran Prakashan Ltd.	Printing And Publishing	0.333333	0.184266	1.560159	0.2	0.872913	5240
Jai Corp Ltd.	Steel & Iron Products	0.277778	0.031011	9.942328	0.3	0.284878	1227
Jain Irrigation Systems Ltd.	Plastic Products	0.444444	0.008186	1.256713	1.27	0.577506	2831
Jaiprakash Associates Ltd.	Cement & Construction Materials	0	-0.03099	0.857186	1.81	0.165742	1858
Jaiprakash Power Ventures Ltd.	Power Generation/Distribution	0	-0.00585	0.280112	2.67	0.099469	1374
Jaypee Infratech Ltd.	Construction - Real Estate	0	-0.01221	1.961379	1.46	0.14121	1166
JB Chemicals & Pharmaceuticals Ltd.	Pharmaceuticals & Drugs	0.277778	0.115637	1.786207	0.13	0.764783	2115
JBF Industries Ltd.	Textile - Manmade Fibres	0.388889	0.004542	0.945297	1.23	0.275252	1496
Jet Airways (India) Ltd.	Airlines	0	0.06821	0.424995	0	1.281328	6213
Jindal Poly Films Ltd.	Plastic Products	0	0.028528	1.341594	0.4	0.424402	1779
Jindal Steel & Power Ltd.	Steel/Sponge Iron/Pig Iron	0.333333	-0.01366	0.763115	2.18	0.185974	5494
JK Cement Ltd.	Cement & Construction Materials	0	0.016661	1.207763	1.57	0.66823	4696
JK Lakshmi Cement Ltd.	Cement & Construction Materials	0.388889	-0.00153	0.675325	1.45	0.683488	3979
JK Tyre & Industries Ltd.	Tyres & Allied	0.333333	0.059521	0.953047	2.06	0.913877	1909
JMT Auto Ltd.	Auto Ancillary	0.222222	0.002386	0.547194	1.02	0.182131	1190
Johnson Controls - Hitachi Air Conditioning India Ltd.	Air Conditioners	0.444444	0.045706	1.128134	0.45	1.644262	3295
JSW Energy Ltd.	Power Generation/Distribution	0.277778	0.049709	0.673159	0.57	0.246525	11398
JSW Steel Ltd.	Steel & Iron Products	0.277778	-0.04196	0.586577	1.38	0.485789	30953
Jubilant FoodWorks Ltd.	Consumer Food	0.111111	0.092254	0.535627	0	2.097476	8378
Jubilant Life Sciences Ltd.	Chemicals	0.111111	0.008305	1.153938	1.03	0.317424	6632
Just Dial Ltd.	Miscellaneous	0.222222	0.146799	2.683274	0	0.718376	5340
Jyothy Laboratories Ltd.	Household & Personal Products	0.5	0.041864	0.524306	0.64	0.897572	5245
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Kajaria Ceramics Ltd.	Ceramics/Marble/Granite/Sanitaryware	0.388889	0.136324	1.147147	0.07	1.500719	7572
Kalpataru Power Transmission Ltd.	Transmission Towers / Equipments	0.277778	0.021189	1.360825	0.37	0.486454	3141
Kansai Nerolac Paints Ltd.	Paints	0	0.316755	2.550808	0.02	1.623986	15170
Kaveri Seed Company Ltd.	Agriculture	0.722222	0.139645	2.712159	0	0.669034	2598
KEC International Ltd.	Engineering - Construction	0.444444	0.024558	1.072163	1.65	0.992633	3139
Kesoram Industries Ltd.	Diversified	0.222222	0.03428	0.808645	21.43	1.1385	1203
Kitex Garments Ltd.	Textile	0.277778	0.194613	1.990826	0.43	0.981755	2071
Kolte Patil Developers Ltd.	Construction - Real Estate	0.222222	0.032548	2.230601	0.37	0.302593	783
KPIT Technologies Ltd.	IT - Software	0.333333	0.126084	2.145172	0.31	1.444157	2911
KPR Mill Ltd.	Textile	0	0.090804	1.105986	0.67	1.129722	3135
KRBL Ltd.	Consumer Food	0.388889	0.131097	1.780092	0.88	1.125191	5239
KSB Pumps Ltd.	Engineering - Industrial Equipments	0.222222	0.061418	1.966049	0.01	0.867692	2189
Kwality Ltd.	Consumer Food	0.666667	0.075209	1.464144	1.76	2.778753	2530
La Opala RG Ltd.	Glass	0.333333	0.229	4.152909	0.03	0.972404	3308
Lakshmi Machine Works Ltd.	Textile - Machinery	0	0.098141	2.192819	0	1.183785	3757
Lanco Infratech Ltd.	Engineering - Construction	0	0.000379	0.860064	3.89	0.150364	1366
Larsen & Toubro Ltd.	Engineering - Construction	0.444444	0.023711	1.180169	0.34	0.302636	113286
Linde India Ltd.	Industrial Gases & Fuels	0	0.004001	0.772926	1.02	0.488934	3022
Lupin Ltd.	Pharmaceuticals & Drugs	0.388889	0.128145	1.815229	0.02	0.809329	66978
Mahanagar Gas Ltd.	Gas Transmission/Marketing	0	0.137597	1.03387	0.01	0.919217	6436.36
Mahanagar Telephone Nigam Ltd.	Telecommunication - Service Provider	0	-0.07601	0.16608	16.6	0.124829	1115
Mahindra & Mahindra Ltd.	Automobiles - Passenger Cars	0.444444	0.026671	1.161944	0.16	0.746963	75130
Mahindra CIE Automotive Ltd.	Forgings	0.444444	0.028034	0.748436	0.03	0.916314	6937
Mahindra Holidays & Resorts India Ltd.	Hotel, Resort & Restaurants	0.444444	0.035274	2.42819	0	0.473201	3434
Mahindra Lifespace Developers Ltd.	Construction - Real Estate	0.111111	0.024332	2.924941	0.43	0.219744	1729
Mangalore Refinery & Petrochemicals Ltd.	Refineries	0.111111	0.011856	0.708039	1.46	0.935008	11751
Manpasand Beverages Ltd.	Consumer Food	0	0.09998	4.023593	0.15	1.118904	2338
Marico Ltd.	Solvent Extraction	0.611111	0.224511	1.626154	0.1	1.897412	31610

Marksans Pharma Ltd.	Pharmaceuticals & Drugs	0.333333	0.117394	1.698842	0.12	1.291339	1891
Maruti Suzuki India Ltd.	Automobiles - Passenger Cars	0.555556	0.123888	6.460733	0.01	1.580922	112253
Max India Ltd.	Diversified	0.388889	-0.04025	0.91654	0	0.501021	63433
Mayur Uniquoters Ltd.	Miscellaneous	0.333333	0.177285	3.419204	0.11	1.136886	1793
Mcleod Russel India Ltd.	Tea/Coffee	0	0.010868	1.115925	0.39	0.598044	2031
Merck Ltd.	Pharmaceuticals & Drugs	0.388889	0.091291	3.076923	0	1.196396	1655
Mindtree Ltd.	IT - Software	0.388889	0.201201	2.172455	0.01	1.591592	10960
MMTC Ltd.	Trading	0	-0.02041	1.278842	0.2	3.721661	3740
MOIL Ltd.	Mining & Minerals	0.166667	0.046575	12.57692	0	0.238543	3652
Monsanto India Ltd.	Agriculture	0.611111	0.179715	3.900526	0	0.964413	2863
Motherson Sumi Systems Ltd.	Auto Ancillary	0.277778	0.066487	1.14401	0.22	2.022093	35307
Mphasis Ltd.	IT - Software	0.111111	0.094486	3.252336	0.03	0.819967	10300
MRF Ltd.	Tyres & Allied	0.388889	0.130793	2.092605	0.34	1.179862	16268
Narayana Hrudayalaya Ltd.	Hospital & Healthcare Services	0.166667	0.028907	0.901587	0.25	1.147857	5838
Natco Pharma Ltd.	Pharmaceuticals & Drugs	0.222222	0.095416	1.691057	0.19	0.711568	7176
National Aluminium Company Ltd.	Metal - Non Ferrous	0.333333	0.044701	3.256341	0	0.449581	10218
Navin Fluorine International Ltd.	Chemicals	0.388889	0.092521	1.774359	0.06	0.780055	1655
Navkar Corporation Ltd.	Logistics	0.111111	0.056625	1.723502	0.53	0.220238	2572
NBCC (India) Ltd.	Construction - Real Estate	0	0.060341	1.35093	0	1.132712	11289
NCC Ltd.	Engineering - Construction	0.222222	0.007124	1.276055	0.6	0.758618	4216
Network 18 Media & Investment Ltd.	TV Broadcasting & Software Production	0	0.006597	0.802453	0.22	0.58156	4601
NHPC Ltd.	Power Generation/Distribution	0	0.046543	2.08703	0.69	0.133432	26680
NIIT Technologies Ltd.	IT - Software	0.111111	0.140118	2.543825	0.02	1.269586	3041
Nilkamal Ltd.	Plastic Products	0.5	0.116456	2.207237	0.29	2.028354	1648
Nitin Fire Protection Industries Ltd.	Engineering - Industrial Equipments	0.055556	0.081758	1.314873	1.94	1.226368	976
NLC India Ltd.	Power Generation/Distribution	0.333333	0.037679	2.60184	0.22	0.284936	11894
NMDC Ltd.	Mining & Minerals	0	0.079838	6.342079	0.02	0.19066	38834
NTPC Ltd.	Power Generation/Distribution	0.222222	0.046254	0.861961	1.04	0.319226	106201
Oberoi Realty Ltd.	Construction - Real Estate	0.222222	0.057131	2.691371	0.04	0.189273	8202
Oil & Natural Gas Corporation Ltd.	Oil Exploration	0.277778	0.035265	0.920118	0	0.391023	183279



Oil India Ltd.	Power Generation/Distribution	0	0.050836	3.826341	0.4	0.25976	18842
Omaxe Ltd.	Construction - Real Estate	0	0.010981	1.662726	0.53	0.23469	2644
Oracle Fiancial Services Software limited	IT-Software	0.111111	0.205352	2.188832	0.031071	0.720948	32445.65
Orient Cement Limited	Cement and construction materials	0.111111	0.021737	1.103736	0.014739	0.607135	2691.36
Orissa Minerals Development Company	Mining and minerals	0	0.074764	12.33019	0.007757	0.074764	1247.37
Page industries	Textile	0.111111	0.246276	0.631968	0.042189	1.888518	13559.24
PC Jewellers Limited	Diamond and jewellery	0	0.06974	1.6277	0.026871	1.262839	6536.25
Persistent Systems Ltd.	IT - Software	0.111111	0.141161	2.905374	0.001568	1.09769	6093.2
Petronet LNG Ltd.	Industrial Gases & Fuels	0.055556	0.072955	1.951562	0.344204	2.13892	18806.25
Pfizer Ltd	Pharmaceutical and drugs	0.166667	0.076457	0.559372	0.001181	0.712589	8173.06
Phoenix Mills Ltd	Construction-Real Estate	0.111111	0.045347	1.053384	0.022825	0.010692	4590.77
PI Industries Ltd	Pesticides and agrochemicals	0.277778	0.159627	1.611583	0.106458	1.085544	7779.05
Pidilite industries	Chemicals	0.5	0.193174	2.308588	0.007805	1.392124	35826.27
PNC Infratech Limited	IT-Software	0.277778	0.128417	2.674641	0.004427	1.065555	2704.55
Power Grid Corporation of India	Power generation/Distribution	0.222222	0.337819	0.395267	2.345669	0.116585	72771.42
Praj Industries Limited	Engineering-Electrical equipments	0.055556	0.062839	1.660023	0.188784	0.807929	1588.2
Prestige Estate projects Ltd	Construction-Real Estate	0.222222	0.360268	1.139133	0.24714	2.644661	6463.13
Prism Cement Ltd.	Diversified	0	0.001921	0.913643	1.349244	1.365277	4930.41
Procter & Gamble Hygiene & Health Care Ltd.	Household & Personal Products	0.055556	0.1955	1.097888	0.326734	1.188183	20384.04
PTC India Ltd.	Power Generation/Distribution	0.055556	0.047104	1.856295	0.001782	2.580652	1888.54
Punj Lloyd Ltd.	Engineering - Construction	0.055556	0.1317	1.086707	0.988835	0.267295	745.56
PVR Ltd.	Film Production, Distribution & Entertainment	0.055556	0.062233	1.050236	0.672189	0.948503	3408.78
Radico Khaitan Ltd.	Breweries & Distilleries	0.166667	0.035837	1.345032	0.218454	1.679739	1272.62
Rain Industries Ltd.	Petrochemicals	0.111111	0.022186	0.803086	0.368645	0.031746	1005.69
Rajesh Exports Ltd.	Jewellery manufacturer	0.055556	0.024908	1.042531	0.000126	2.023905	17889.27
Rallis India Ltd.	Pesticides & Agrochemicals	0.055556	0.099596	1.399375	0.024347	1.109853	5077.58
Ramco Systems Ltd.	IT - Software	0	0.034997	4.037252	0	0.382809	2135.14

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Ramkrishna Forgings Ltd.	Forgings	0.222222	0.03359	0.97853	1.075719	0.584666	976.79	ss Ai
Rashtriya Chemicals & Fertilizers Ltd.	Fertilizers	0.055556	0.02488	1.352401	0.054038	1.143846	2140.56	&P C
RattanIndia Power Ltd.	Power Generation/Distribution	0.055556	-0.00582	0.343924	1.050854	0.004407	2409.59	ŇX
Raymond Ltd.	Textile - Weaving	0.055556	0.007384	1.004581	0.387214	0.782592	2493.9	500
Redington (India) Ltd.	Trading	0.444444	0.042966	1.367266	0	3.423133	4557.72) co
Relaxo Footwears Ltd.	Household & Personal Products	0.166667	0.120669	1.158257	0.235403	1.7401	4368	mpa
Reliance Communications Ltd.	Telecommunication - Service Provider	0.055556	0.006672	0.552467	0.82814	0.210648	12444.9	anie
Reliance Defence and Engineering Ltd.	Shipping	0	-0.049	0.410001	3.345201	0.028492	5002.55	S
Reliance Industrial Infrastructure Ltd.	Engineering - Construction	0.055556	0.04617	3.259683	0	0.305918	654.28	by S&P CNX 500 companies
Reliance Industries Ltd.	Refineries	0.277778	0.045578	0.681051	0.58282	0.472731	338700.1	
Reliance Infrastructure Ltd.	Power Generation/Distribution	0	0.038813	1.353388	0.48549	0.194683	14033.15	
Reliance Power Ltd.	Power Generation/Distribution	0.055556	0.018856	0.755412	0.050205	0.003998	13843.3	
Rolta India Ltd.	IT - Software	0.166667	0.020429	1.836266	1.996679	0.410463	1229.2	
Ruchi Soya Industries Ltd.	Consumer Food	0.055556	-0.0652	0.927118	0.350474	2.06296	1092.51	
Sadbhav Engineering Ltd.	Engineering - Construction	0.166667	0.369551	1.137877	0.332403	0.880519	5033.53	4
Sanofi India Ltd.	Pharmaceuticals & Drugs	0.166667	0.116929	2.34696	0.006856	0.952638	9211.77	0 2
Schneider Electric Infrastructure Ltd.	Electric Equipment	0.111111	-0.0141	1.117073	0.383095	1.204717	3494.45	
Sequent Scientific Ltd.	Pharmaceuticals & Drugs	0.055556	0.006478	2.830439	0.02542	0.375839	3487.98	c c
SH Kelkar & Co Ltd.	Chemicals	0.166667	0.075436	2.749942	0.038829	0.939818	3275.66	
Sharda Cropchem Ltd.	Trading	0.277778	0.144008	1.904338	0	0.787524	2105.75	
Shilpa Medicare Ltd.	Pharmaceuticals & Drugs	0.166667	0.09773	1.373643	0.150777	0.605794	3300.73	
Shipping Corporation Of India Ltd.	Shipping	0.111111	0.026018	0.845315	0.665376	0.281243	3030.03	
Shoppers Stop Ltd.	Consumer goods	0.888889	-2.6E-07	1.883392	0	0.076641	3042.95	
Shree Cement Ltd.	Cement & Construction Materials	0.5	0.013194	0.598338	0.411515	1.788732	43274.42	S
Shree Renuka Sugars Ltd.	Sugar	0	-0.13336	0.436283	-2.24254	0.745167	1360.71	d
Siemens Ltd.	Electric Equipment	0.055556	0.245965	1.85495	0	0.956343	39126.23	Ч
Simplex Infrastructures Ltd.	Engineering - Construction	0	0.008234	1.181034	0.403448	0.722122	1236.74	dmim
Sintex Industries Ltd.	Plastic Products	0.111111	0.045018	1.72513	0.93473	0.553988	3442.91	ы С

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Siti Networks Ltd.	TV Broadcasting & Software Production	0	-0.00933	0.98874	1.146396	0.352794	2795.23
SJVN Ltd.	Power Generation/Distribution	0.166667	0.091581	6.090018	0.222713	0.162452	11851.44
SKF India Ltd.	Bearings	0.333333	0.048662	2.488618	0.851648	0.953144	6569.37
SML Isuzu Ltd.	Automobiles-Trucks/Lcv	0	0.070407	1.849191	0	1.782319	1129.96
Snowman Logistics Ltd.	Logistics	0.222222	0.033201	0.468425	0.246401	0.386818	889.74
Sobha Ltd.	Construction - Real Estate	0.666667	0.023252	1.687096	0.198349	0.283362	2678.51
Solar Industries (India) Ltd.	Chemicals	0.333333	0.107496	1.473438	0.155273	1.076355	6283.78
Somany Ceramics Ltd.	Ceramics	0.166667	0.062818	1.470301	0.279301	1.64604	1665.94
Sonata Software Ltd.	IT - Software	0.222222	0.159888	1.752442	0.110887	1.956376	1526.98
SRF Ltd.	Diversified	0.055556	0.064595	1.409232	0.716234	0.738649	7498.19
State Trading Corporation Of India Ltd.	Trading	0	-0.09515	0.460485	-0.49792	2.182242	539.1
Steel Authority Of India Ltd.	Steel & Iron Products	0.611111	-0.43897	0.589697	0.418227	4.418861	17761.26
Strides Shasun Ltd.	Pharmaceuticals & Drugs	0.055556	0.027279	1.852898	9.593288	0.419651	9725.75
Sun Pharma Advanced Research		0.000000	0.02/2/3	1.052050	51050200	01110001	5725075
Company Ltd.	Miscellaneous	0	-0.4303	0.53343	0.091166	0.99153	7109.69
Sun Pharmaceutical Industries Ltd.	Pharmaceuticals & Drugs	0	0.086978	2.329828	0.099246	5.259671	197217
Sundram Fasteners Ltd.	Trading	0.388889	0.055577	1.114079	0.195507	1.473761	3589.56
Sunteck Realty Ltd.	Construction - Real Estate	0.055556	0.036518	1.593179	0.63092	0.176458	1419.21
Suprajit Engineering Ltd.	Auto Ancillary	0.388889	0.083843	1.620542	0.16914	1.080221	1733.67
Supreme Industries Ltd.	Plastic Products	0.277778	0.084608	1.05128	0.049291	1.230734	9380.1
Suven Life Sciences Ltd.	Pharmaceuticals & Drugs	0.222222	0.084949	4.243994	0.072594	0.636787	2454.01
Suzlon Energy Ltd.	Electric Equipment	0.055556	0.048421	0.949297	-1.30263	0.954039	7104.01
Swan Energy Ltd.	Textile	0	-0.0001	1.348789	0.749164	0.185885	1331.62
Symphony Ltd.	Consumer Durables - Domestic Appliances	0.055556	0.280226	1.876575	0	10.52015	8318.98
Syngene International Ltd.	Miscellaneous	0.055556	0.092572	2.515672	0.68883	0.463277	7685
Take Solutions Ltd.	IT - Software	0.055556	0.098523	1.413645	0.107934	0.848207	1742.36
Tamil Nadu Newsprint & Papers Ltd.	Paper & Paper Products	0.111111	0.046268	0.698158	1.34117	0.461266	1513.62
Tata Chemicals Ltd.	Fertilizers	0.222222	0.036987	1.446604	1.072371	0.856356	9508.92

Tata Coffee Ltd.	Tea/Coffee	0.055556	0.061882	1.502732	0.764168	0.691089	1667.46
Tata Communications Ltd.	Telecommunication - Service Provider	0.055556	-0.00829	0.616851	-24.0372	0.813578	10857.08
Tata Consultancy Services Ltd.	IT - Software	0.333333	0.271768	2.869894	0.001263	1.215494	495769.5
Tata Elxsi Ltd.	IT - Software	0.166667	0.258167	2.318475	0	1.793053	5856.03
Tata Global Beverages	Tea/Coffee	0.111111	0.033888	1.824905	0.052562	0.843304	7636.37
Tata Motors Ltd.	Automobiles-Trucks/Lcv	0.277778	0.040935	1.040558	0.642171	1.040101	126210.4
Tata Power Company Ltd.	Power Generation/Distribution	0.166667	0.011239	0.769791	2.615298	0.482415	17485.24
Tata Sponge Iron Ltd.	Steel/Sponge Iron/Pig Iron	0.055556	0.031269	4.029867	0	0.641085	722.34
Tata Steel Ltd.	Steel & Iron Products	0.722222	-0.01947	0.939346	2.40017	0.744983	31030.48
Tech Mahindra Ltd.	IT - Software	0.222222	0.132641	0.002149	0.013692	1.127077	46015
Techno Electric & Engineering Company Ltd.	Engineering - Construction	0.055556	0.075923	1.820114	0.302431	0.591915	3062.56
Texmaco Rail & Engineering Ltd.	Railways Wagons	0.055556	0.006696	1.560051	0.008374	0.454736	2194.48
The Great Eastern Shipping Company Ltd.	Shipping	0.166667	0.066494	1.740397	0.595156	0.243384	4677.1
The India Cements Ltd.	Cement & Construction Materials	0	0.015633	0.710294	0.605086	0.566002	2647.89
The Indian Hotels Company Ltd.	Hotel, Resort & Restaurants	0.055556	-0.00347	0.486981	1.158025	0.41947	9553.78
The Ramco Cements Ltd.	Cements	0.111111	0.079499	0.875226	0.348482	0.513074	9533.78
Thermax Ltd.	Engineering - Industrial Equipments	0.055556	0.044157	1.155655	0.014267	0.902056	8979.02
Thomas Cook (India) Ltd.	Travel Services	0	-0.00805	1.062009	0.376601	0.899433	6871.6
Tide Water Oil Company (India) Ltd.	Lubricants	0.111111	0.10826	2.481801	0	1.459036	2281.14
Timken India Ltd.	Bearings	0.111111	0.202325	2.659598	0.230214	1.523321	2971.6
Titan Company Ltd.	Diamond & Jewellery	0.333333	0.108302	1.868399	0	1.777113	30078.66
Torrent Pharmaceuticals Ltd.	Pharmaceuticals & Drugs	0.166667	0.191087	1.419625	0.549917	0.725512	22670.4
Torrent Power Ltd.	Power Generation/Distribution	0.333333	0.044255	1.947847	1.094035	0.598225	11061.4
Trent Ltd.	Retailing	0	0.027378	0.967794	0.060845	1.042857	5270.44
Trident Ltd.	Textile - Spinning	0.277778	0.040622	0.961553	1.226703	0.663084	2615.61
Triveni Turbine Ltd.	Engineering - Industrial Equipments	0.333333	0.162824	1.267264	0.001418	1.245206	3157.83
TTK Prestige Ltd.	Consumer Durables - Domestic Appliances	0	0.114497	2.662763	0	1.554976	5053.39

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Tube Investments Of India Ltd.	Cycles	0.555556	0.107024	0.76942	0.121808	0.458541	7250.45
TV Today Network Ltd.	TV Broadcasting & Software Production	0.055556	0.140392	2.94862	0	0.812836	1844.49
TV18 Broadcast Ltd.	TV Broadcasting	0	0.035284	1.604324	0	0.500745	7234.6
TVS Motor Company Ltd.	Automobile Two & Three Wheelers	0.222222	0.08708	0.870866	0.255179	2.464876	15329.1
TVS Srichakra Ltd.	Tyres & Allied	0.333333	0.19363	1.119398	0.076382	2.432242	1769.04
Uflex Ltd.	Plastic Products	0	0.005692	1.304286	0.30045	1.144531	1258.26
Ultratech Cement Ltd.	Cement & Construction Materials	0.388889	0.056089	0.865287	0.224117	0.699428	88588.56
Unichem Laboratories Ltd.	Pharmaceuticals & Drugs	0.166667	0.084121	2.458666	0.024126	1.051334	2016.42
Unitech Ltd.	Construction - Real Estate	0	-0.01344	1.831205	15.52483	0.052477	1289.84
United Breweries Ltd.	Breweries & Distilleries	0	0.071376	1.148773	0.093991	2.217912	21786.56
United Spirits Ltd.	Breweries & Distilleries	0	0.113052	0.931435	0.410729	2.649383	36324.67
UPL Ltd.	Pesticides & Agrochemicals	0.055556	0.071324	1.147004	0.09405	2.219779	20469.94
VA Tech Wabag Ltd.	Miscellaneous	0.055556	0.022916	1.398015	0.050538	0.847658	2834
Vakrangee Ltd.	Miscellaneous	0	0.187079	3.450514	0.008218	1.512141	10470.22
Vardhman Textiles Ltd.	Textile	0	0.082895	3.980677	0.049664	1.239444	4922.37
Vedanta Ltd.	Metal - Non Ferrous	0.166667	-0.0496	1.263059	1.530521	0.362621	26652.65
V-Guard Industries Ltd.	Electric Equipment	0.611111	0.155868	2.488528	0.011895	2.6198	2612.56
Vinati Organics Ltd.	Chemicals	0	0.191528	3.139321	0.024505	0.918471	2001.22
VIP Industries Ltd.	Household & Personal Products	0.444444	0.113278	2.025372	0	2.103716	1483.65
Voltas Ltd.	Air Conditioners	0.111111	0.06887	1.362769	0	0.004795	9164.28
VRL Logistics Ltd.	Logistics	0.166667	0.10843	0.072342	0.225278	1.825494	3383.31
VST Industries Ltd.	Cigarettes/Tobacco	0.111111	0.185125	1.305897	0.024799	2.489233	2501.13

Wabco India Ltd.	Auto Ancillary	0.055556	0.134257	2.527577	0	1.315797	11848.58
Welspun Corp Ltd.	Castings/Forgings	0.166667	0.023139	1.57231	0.782851	0.861061	2608.5
Welspun India Ltd.	Textile	0.444444	0.113909	1.124188	0.846137	0.928928	9981.94
Whirlpool Of India Ltd.	Consumer Durables - Domestic Appliances	0	0.109806	1.798893	0	1.711483	8908.81
Wipro Ltd.	IT - Software	0.111111	0.126651	2.146012	0.038849	0.724422	139186.9
Wockhardt Ltd.	Pharma	0.222222	0.040952	2.166045	0.427166	0.562225	10753.31
Wonderla Holidays Ltd.	Amusement Parks/Recreation/Club	0.166667	0.132225	2.99744	0.012799	0.39003	2196.18
Zee Entertainment Enterprises Ltd.	TV Broadcasting & Software Production	0.388889	0.130059	3.436025	0.000144	0.74125	37109.86
Zee Learn Ltd.	Educational Institutions	0	0.021392	0.826113	1.381351	0.214625	981.04
Zensar Technologies Ltd.	IT - Software	0.055556	0.152829	2.531142	0.000543	1.341821	4150.14
Zydus Wellness Ltd.	CONSUMER GOODS	0.111111	0.179553	5.719528	0	0.806886	2903.49