

Determinants of RoE using DuPont Analysis - A Study of BSE 500 companies

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Preface

Research Center for Management Studies (RCMS) at SDMIMD has endeavoured to promote research in the field of management education in the Institute, in various ways. The Research Centre has encouraged faculty and students to actively take part in research activities jointly, collate and disseminate findings of the research activities through various types of projects to contribute to the body of knowledge to the academic fraternity in general, and management education in particular.

In this direction, keeping in line with the philosophy of promoting active research in the field of management to capture live situations and issues, the Research Center has taken a unique initiative to sponsor and encourage faculty members to carry out Applied Research Projects in various areas of management.

The duration of these projects is typically between four to twelve months. After completion of each project, after peer review, a publication is taken out, by the institute. The projects help the faculty members, and the students, who work under the supervision of the faculty members for these projects, to identify issues of current importance in the field of management in various sectors. Data is collected mostly through primary research, through interviews and field study.

The institute takes into account the time and resources required by a faculty member to carry out such projects, and, fully sponsors them to cover the various costs of the project work (for data collection, travel, etc), thereby providing a unique opportunity to the two most important institutional stakeholders (faculty and students) to enrich their knowledge by extending their academic activities, outside the classroom learning situation, in the real world.

From the academic viewpoint, these projects provide a unique opportunity to the faculty and the engaging students to get a first-hand experience in knowing problems of targeted organizations or sectors on a face to face basis, thereby, helping in knowledge creation and its transfer, adding to the overall process of learning in a practical manner, with application of knowledge, as the focus of learning pedagogy, which is vital in management education.

Dr. Mousumi SenguptaChairperson, SDM RCMS





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Executive Summary

The study on determinants of RoE (Return on Equity) was undertaken for BSE 500 companies for a period of three years viz., 2015-2018. DuPont model was used for the study. A sample of 371 companies were finally selected for the analysis after filtering the companies for incomplete data. Banking and finance companies were not considered for the study. The dependent variable was return on equity and the independent variables were profit margin (PAT/Sales), equity multiplier (TA/NW) and asset turnover (Sales/Total assets). All the three variables were found to be significantly influencing return on equity. The study further identified top 50 companies for all the three years. This was based on ranking companies according to RoE and arranging companies in descending order. The top consistent performers for all the three years were grouped and the rest was another group. For the top performers, the results based on pooled regression identified all the three variables significantly influencing return on equity. Profit margin being the most significant variable from among the three. Similar analysis for the other group identified only two variables viz., equity multiplier and asset turnover were the significant variables determining return on equity. Profit margin being the variable whose influence was statistically insignificant. The study found that profit margin was the most significant variable which differentiated top performers from the rest of the companies.

Keywords: profit margin, equity multiplier, BSE 500, asset turnover, DuPont

JEL Classification: G0, G1 and G3





1. Introduction-

The analysis of a company's performance is vital to the stakeholders as their decision to invest their funds into company's assets depends on the performance (Penman, 2007). A company's financial performance is assessed by its stakeholders using different methods. One of the methods used by the investing fraternity/practicing managers is ratio analysis- a simple tool which analyses the relationship between any two variables drawn from the financial statements of a company. Different ratios are used for different purposes and the type of ratio to be analysed and interpreted depends upon the category the stakeholder belongs to. One of the ratios widely used by the shareholders of a company to measure the return earned by them is, Return on Equity (RoE). Assessing a company based on the performance of shareholders equity reflects RoE (Fabozzi & Peterson., 2003). What determines RoE is a subject for research among academicians and researchers and lot of studies have gone into to analyse the factors influencing RoE.

One of the most widely used model to estimate RoE is Du Pont analysis. According to Du Pont analysis, RoE is a function of RoA (Return on Assets) and Leverage (The proxy variable being Equity Multiplier) [Narayanaswamy, 2017]. RoE may vary across companies in each period based on a definite set of specifications (De La Bruslerie, 2006). Additionally, RoE may also vary across time periods for the same company based upon the economic context in which the company operates Jaba, Chirianu, Balan & Roman., (2017). The objective of the present study is to select the top 50 companies from samples selected for the study. The top 50 companies from each year is selected based on RoE arranged in descending order. Once the top 50 companies are identified, all those companies which have consistently been in the list is formed as a group. The rest of the companies are formed another group. The study would also like to explore the variable(s) which differentiates between the consistent group and the rest in determining the return on equity.

The paper is structured as follows- Section 2 provides literature review, Section 3 on Data and Methodology, Section 4 on Analysis and Interpretation and Section 5 is the findings and discussion.

2. Review of Literature

Porter (2005) in his study identified that investment returns are highly correlated with the industry portfolio returns. The author found that the portion of investment returns orthogonal to equity returns was positively associated with changes in profitability. Negative association was also witnessed between investment returns and Leisz&Maranville., (2008) in their study described that a simple calculation is required for The Du Pont model of Profitability analysis. According to them, these calculations can lead to understanding the financial performance and the managers of the firms irrespective of size can take precise actions that will lead to higher profitability and returns. The authors were of the view that the components of ROE also allow even small business managers too taker prudent financial decisions which will in turn provide a positive impact on the return to firms' owners. Circiumaru&Siminica, (2010) studied a select sample of Roman companies to see whether the return on sales (ROS), the asset turnover and the financial leverage have joint impact return on equity (ROE) using regression analysis. It was found that ROS did not impact RoE, though both the variables were correlated. The results of Kim&Kim, (2010) found that there is a significant short-term relationship between equity returns and equity fund flows. They employed dividend yield effect and also found that significant relationship among the three variables. The authors used Granger Causality test to analyse the results. Khare&Rizwi (2011) had analysed the important variables that impacts debt equity ratio of BSE-100 companies and had also examined the applicability of pecking order theories for the companies. The study found that profit margins and ratio of total depreciation to total assets were the most significant factors which determined capital structure decision



of companies. Pecking order theory was found to be applicable to the companies.

Kabajeh, AlNu'aimat&Dahmash., (2012) examined a small sample of companies across five years and concluded that a positive relationship between the ROA, ROE, ROI and share prices. Nunes&Viveiros., (2012) in their study on SMEs found that age is an important factor affecting profitability. In addition to age, they also identified size, liquidity and long-term debt as other factors positively affecting profitability. Petcharabul&Romprasert., (2014) analysed technology stocks listed in Thailand Stock Exchange by considering variables such as current ratio, debtto-equity ratio, inventory turnover, return on equity and price earnings ratios. The results indicate that only ROE and PE were related to stock returns. The study employed OLS regression analysis. In their study, Majed, Ahmed &Dhamash (2012) were of the view that of ROA, ROE and ROI were positively associated with share prices. The authors tried to identify the effect of RoA, RoE and RoI individually on share price and concluded that only RoA and RoI positive relationship with share price. Mohapatra, Acharya & Mahapatra (2013), had analysed the literature on determinants of share price in India. They found that analysing share price behaviour is a complicated issued and according to them, the markets were found to be with imperfections. Because of which identifying factors determining share price were a difficult proposition. Jaba, Chirianu, Balan & Roman., (2017) analysed the financial performance of companies listed in Bucharest Stock Exchange using panel data analysis. The authors provided a theoretical background and applied fixed as well as random effect models to explain variation in RoE. Jahan(2017) had studied the determinants of banks profitability in Bangladesh. The study was conducted on a select set of commercial banks. The study found that profitability of the banks was determined by operational efficiency, asset size and the association were found to be statistically significant. Santosh & Bindu (2018) had studied the determinants of capital structure of passenger car companies and found that none of the factors ciz., profitability, tangibility, size of the firm had effect on the capital structure decision. The F statistic had confirmed the model with the above variables to have more predictive power and explained more than the 'intercept only' model.

3. Data and Methodology-

3.1 About S&P BSE Sensex and Sample Selection-

Bombay Stock Exchange Itd constructed a new index, christened BSE 500 index with effect from 9 August,1999. BSE 500 represents 93% of the total market capitalization on BSE. BSE 500 index covers all the 20 major sectors in the economy. From September 2005, the index is calculated on 'free float market capitalization methodology'. Free float market capitalization methodology is widely followed index construction across major global indices.

A sample of 371 companies were selected for the study. The banking and housing finance companies where not considered for the analysis. This is because banking companies have different reporting requirements and assessment parameters. The name of the companies is included in the appendix.

3.2 Data and Period of Study-

The data have been sourced from www.capitaline.com . It is a digital corporate database of more than 35000 listed and unlisted Indian companies. The database has all the necessary financial details required for the present study. The study is based on secondary data and the period of study is between 2015-2018, 5 years.

3.3 Model Specification

The following is the OLS regression model in the context of panel data. The model is called pooled regression model.

$$Y_{ROE it} = a_1 + b_1 X_{ROAit} + b_2 X_{Emit} + e_{it}$$

Where $_{\rm I\ stands\ for\ ith\ cross-sectional\ unit\ or\ observation}$ (in this case, a company); $_{\rm t\ for}$ the $_{\rm t\ th\ time\ period;\ and}$ $e_{\rm it}$ is the common error term.



Description of Dependent and Independent variables of the model are as follows

Dependent Variable	Explanation
RoE	Return on Equity= Profit after tax/Shareholders
	funds for company I at
	time t
Independent	
Variables	
Profit Margin	PAT/Sales = Profit after
	tax/Total sales for
	company I at time t.
EM	Equity Multiplier = Total
	assets/Equity for
	company I at time t. This
	is a proxy variable to
	measure the amount of
	debt used to purchase
	assets of a company
	Sales/total assets for
Assets Turnover	company I at time t.

The top 50 companies which are ranked according to RoE and in descending order for all the three years are shown in appendices. The companies which are consistently been in top 50 for all the three years have been shown in a group separately. Those details are also available in the appendix.

4. Analysis and Interpretation Table I Industry Wise Classification of Companies

Row Labels	No. of Companies
Automobile	24
Chemicals	40
Communication	6
Construction	45
Consumer Durable	13
Diversified	5
Energy	28
Engineering	36
FMCG	43
Healthcare	37
Metals	22
Services	42
Technology	21
Textiles	9
Grand Total	371

Table I shows the industry wise classification of companies selected for the present study. Companies with more than 10% representation in the sample are from Chemicals, Construction, Engineering, FMCG and Healthcare sectors. Around 1% of the sample companies were diversified into various businesses. Other companies include representations from communications, textiles, automobiles and consumer durables.

Figure 1

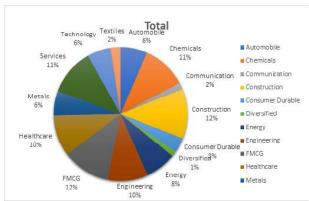


Table II shows the descriptive statistics of the variables considered for the study. The average total assets/networth has been hovering around 2.5 times during 2015-2018. The average profit margins measured by PAT/Sales has gradually increased from 8.2% to 9.6%. The average value of Sales/Total assets (a measure to gauge the efficiency of using the assets) has decreased from 1.12 to .986 respectively. The average RoE (return on equity) has fallen from 16% to 13.6% during the period of study.

Table II Descriptive Statistics

Total Assets/Networth							
Particulars	2015-16	2016-17	2017-18				
Mean	2.570	2.452	2.565				
Median	2.033	1.961	1.859				
Standard	1.684	1.842	4.047				
Deviation	1.064	1.042	4.047				
Minimum	0.024	1.069	1.081				
Maximum	14.168	23.841	67.320				



PAT/Sales							
Particulars	2015-16	2016-17	2017-18				
Mean	0.082	0.086	0.096				
Median	0.077	0.079	0.087				
Standard Deviation	0.130	0.114	0.250				
Minimum	-1.707	-0.958	-2.385				
Maximum	0.486	0.494	2.889				

Sales/Total Assets							
Particulars	2015-16	2016-17	2017-18				
Mean	1.112	1.041	0.988				
Median	0.933	0.917	0.868				
Standard Deviation	1.024	0.781	0.692				
Minimum	0.029	0.014	0.022				
Maximum	14.612	10.036	7.977				

Return on Equity							
Particulars	2015-16	2016-17	2017-18				
Mean	0.160	0.137	0.136				
Median	0.148	0.150	0.149				
Standard	0.229	0.223	0.241				
Deviation	0.229		0.241				
Minimum	-2.341	-2.058	-2.363				
Maximum	1.819	1.133	0.948				

Table III Regression Results I

Variables	Coefficients	Standard	t	P-
Variables	Coefficients	Error	Stat	value
Intercept	-0.53	0.13	-4.02	0.00*
TA/NW	0.13	0.01	9.86	0.00*
PAT/Sales	2.42	0.38	6.42	0.00*
Sales/TA	0.20	0.04	4.98	0.00*

Adj R square 0.58, F value 32.54 (Sig. @1%), *Sign @1%

Table III shows the regression results of factors determining RoE of all the twenty-three companies which have been in top 50 in all the three years considered for the study. The top 50 companies are ranked on the descending order based on the RoE. The results indicate that all the variables significantly influence RoE. The variables also have a positive

influence on return on equity. PAT/Sales, which measures the margin on sales earned by companies has the highest influence on determining return on equity. Sales/TA which measures the efficiency of the total assets is the second most important factor followed by TA/NW. Adj R square measures the strength of the relationship and it shows that 58% of the variation in the dependent variable is jointly explained by the independent variables. It can be seen that the margin on sales is the most significant variable determining the return on equity.

Table IV Regression Results II

Variables	Coefficients	Standard Error	t Stat	P- value
Intercept	0.11885	0.04221	2.81568	0.00618
TA/NW	0.05246	0.01013	5.17897	0.00000*
PAT/Sales	0.11035	0.06472	1.70496	0.09223
Sales/TA	0.06451	0.01264	5.10517	0.00000*

Adj R square 0.373 F value 16.86, sig.@1% *sig.@1%

Table IV shows the regression results of factors determining RoE of all the twenty-seven companies which could not be in top 50 companies consistently for all the three years of study. The top 50 companies are ranked on the descending order based on the RoE. The results indicate that all the variables except for PAT/Sales significantly influence RoE. The variables also have a positive influence on return on equity. PAT/Sales, which measures the margin on sales earned by companies does not determine RoE as the t stat (p>0.05) indicates that the variable is not statistically significant. Sales/TA which measures the efficiency of the total assets is the most important factor followed by TA/NW. Around 6% variation in the dependent variable is explained by Sales/TA and 5.2% variation is explained by TA/NW.Adj R square of 0.373 shows that 37.3% variation in return one equity is jointly influenced by sales/TA and TA/NW.

5. Findings and Discussion

The study employed the widely used model 'Dupont' analysis to measure return on equity of companies selected during the period of study. Based on the analysis, the study found that there were twenty-three companies which were consistently part of top 50



companies ranked according to RoE and in descending order. These companies were formed into a group and the rest of the companies were formed another group. Pooled regression analysis was carried out to identify the variables jointly influencing return on equity. The results indicate that all the three variables viz., profit margin, equity multiplier and asset turnover ratios were significantly influencing return on equity for the twenty-three companies. Profit margin was the most significant factor influencing return on equity. Similar analysis was done for the other group. The results show that only equity multiplier and asset turnover ratio were the most significant factors determining return on equity. The coefficient of profit margin was found to be statistically insignificant. Therefore, the study concludes that it is the profit margin which differentiates consistent top performers for all the three years vis a vis the other companies in determining return on equity.

References

- Circiumaru, D., Siminica, M., Marcu, N. (2010). A Study on the Return on Equity for the Romanian Industrial Companies. *Annals of University of Craiova Economic Sciences Series, 2*(38). **94-103**
- de La Bruslerie, H., (2010), *Financial Analysis-Financial Information and Diagnosis, 4thEdition* Dunod, Paris: **Dunod**
- Fabozzi, F., Peterson, P., (2003), *Financial management and analysis,* 2nd ed., John Wiley & Sons, New Jersey
- Gujarati, D., (2004), *Basic Econometrics*, 4th ed., McGraw-Hill, New York
- Hausman J.A (1978), "Specification Tests in Econometrics", Econometrica, 46(6): 1251-1271.
- Jaba, E., Chirianu, I.A., Balan, C.B., Robu, I.B., Roman, M.,2017, "Panel data analysis applied in financial performance asessement", Romanian Statistical Review, 50(1), pp. 69-84
- JAHAN, Nusrat. Determinants of Bank's Profitability: Evidence from Bangladesh.Indian Journal of Finance, [S.l.], p. 32-38, feb. 2012. ISSN 0973-8711. Available at: http://www.indianjournal.offinance.co.in/index.php/IJF/article/view/72438. Date accessed: 19 Aug. 2018.

- Kabajeh, M.A.M., Al Nu'aimat, S.M.A., Dahmash, F.N. (2012). The Relationship between the ROA, ROE and ROI Ratios with Jordanian Insurance Public Companies Market Share Prices. *International Journal of Humanities and Social Science*, 2(11), 115-120.
- KHARE, Sumi; RIZVI, Saima. Factors Affecting the Capital Structure of BSE-100 Indian Firms: A Panel Data Analysis. Indian Journal of Finance, [S.l.], p. 20-25, jun. 2011. ISSN 0973-8711. Available at: http://www.indianjournaloffinance.co.in/index.php/IJF/article/view/72503. Date accessed: 19 Aug. 2018.
- Kim, S., Kim, Y. (2010). Nonlinear Dynamic Relations between Equity Return and Equity Fund Flow: Korean Market Empirical Evidence. *Asia – Pacific Journal of Financial Studies, 39*(2), 139-170. DOI: 10.1111/j.2041-6156.2010.00007.x.
- Leisz TJ and Maranville SJ (2008), 'Ratio Analysis featuring the DuPont method: An overlooked topic in the Finance Module of Small Business Management and Entrepreneurship Courses', Small Business InstituteJournal, Vol. 1, Issue No.1 pp. 17 34.
- Majed, MA, Ahmed, SM and Dahmash, FN (2012), 'Therelationship of RoA, RoE&RoI Ratios with Jordanian Insurance Public Companies Market Share Price', *International Journal of Humanities* & Social Science, Vol. 2 No. 11, pp. 115 – 120.
- MOHAPATRA, Ananta Prasad; ACHARYA, Pramath Nath; MAHAPATRA, Rudra Prasanna. Determinants of Share Price Behaviour: A Detailed Review of Empirical Studies. Indian Journal of Finance, [S.l.], p. 38-50, nov. 2013. ISSN 0973-8711. Available at: http://www.indianjournaloffinance.co.in/index.php/lJF/article/view/72071>. Date accessed: 19 Aug. 2018.
- Narayanswamy,R, 2017, Financial Accounting- A Business Perspective, 6th edition, **New Delhi?**: PHI
- Nunes, P.M., Viveiros, A., Serrasqueiro, Z. (2012). Are the Determinants of Young SME Profitability Different? Empirical Evidence Using Dynamic Estimators. *Journal of Business Economics and Management*, 13(3), 443-470. DOI: 10.3846/16111699.2011.620148.
- Penman, S.H., 2007, Financial Statement Analysis and Security Valuation, 3rd edition, New Delhi? McGraw Hill



- Porter, R.B. (2005). Connecting Optimal Capital Investment and Equity Returns. *Financial Management*, *34*(2), 63-98. DOI: 10.1111/j.1755-053X.2005.tb00100.x.
- Petcharabul P., &Romprasert S. (2014). Technology Industry on Financial Ratios and Stock Returns. Journal of Business and Economics, 5(5), 739-746.
- SANTHOSH KUMAR, S.; BINDU, C.. Determinants of Capital Structure : An Exclusive Study of
- Passenger Car Companies in India. Indian Journal of Finance, [S.l.], p. 43-53, may. 2018. ISSN 0973-8711. Available at: http://www.indianjournaloffinance.co.in/index.php/JF/article/view/123695. Date accessed: 19 Aug. 2018. doi:10.17010/ijf/2018/v12i5/123695.
- Sevestre, P., 2002, *Econometrics of Panel Data*, 2nd edition Dunod, Paris -
- Srinivasan, P. (2012). 'Determinants of Equity Share Prices in India- A Panel Data Approach', The Romanian Economic Journal, XV(46),206-228.



	2015-16							
	COMPANY	ROE	Total Assets/	PAT/	Sales/			
			Networth	Sales	Total Assets			
1	Dish TV India Ltd	1.81876	10.347	22.16%	0.793			
2	Johnson Controls -Hitachi Air Conditioning India Ltd	137.30%	3.088	3.04%	14.612			
3	Tata Metaliks Ltd.	113.05%	8.675	8.05%	1.620			
4	InterGlobe Aviation Ltd	108.47%	7.098	11.99%	1.275			
5	Castrol India Ltd	106.89%	2.887	18.36%	2.016			
6	Hindustan Unilever Ltd	62.96%	2.244	11.85%	2.368			
7	Colgate-Palmolive India Ltd	56.55%	1.907	13.72%	2.162			
8	Blue Dart Express Ltd	51.54%	3.322	7.58%	2.047			
9	Torrent Pharmaceuticals Ltd	49.60%	2.592	25.07%	0.763			
10	Cadila Healthcare Ltd	48.02%	2.579	20.18%	0.922			
11	Crompton Greaves Consumer Electricals Ltd	45.99%	7.227	5.79%	1.098			
12	Alembic Pharmaceuticals Ltd	45.65%	1.425	23.17%	1.382			
13	TVS Srichakra Ltd	45.12%	2.351	7.79%	2.462			
14	Wockhardt Ltd	44.00%	14.168	5.58%	0.557			
15	Page Industries Ltd	43.69%	1.785	12.82%	1.909			
16	Havells India Ltd	42.74%	1.442	16.05%	1.846			
17	VST Industries Ltd.	41.33%	2.233	16.95%	1.092			
18	Bajaj Corp Ltd	40.83%	1.177	23.71%	1.463			
19	Gulf Oil Lubricants India Ltd	40.36%	2.610	9.75%	1.587			
20	Tata Elxsi Ltd	40.14%	1.555	14.24%	1.813			
21	Britannia Industries Ltd.	39.38%	1.668	9.42%	2.505			
22	Larsen & Toubro Infotech Ltd	39.36%	1.488	13.86%	1.909			
23	Indo Count Industries Ltd	39.35%	2.179	11.91%	1.517			
24	L&T Technology Services Ltd	39.28%	1.823	13.29%	1.622			
25	Inox Wind Ltd	38.86%	4.026	10.25%	0.942			
26	Triveni Turbine Limited	37.74%	1.930	14.85%	1.317			
27	Avanti Feeds Ltd	37.25%	1.473	7.74%	3.268			
28	Symphony Ltd	37.15%	1.326	25.38%	1.104			
29	Eris Lifesciences Ltd	37.14%	1.313	18.53%	1.526			
30	Welspun India Ltd.	36.92%	3.256	12.35%	0.918			
31	Kansai Nerolac Paints Ltd.	35.86%	1.288	20.97%	1.327			
32	Caplin Point Laboratories Ltd	35.72%	2.085	18.88%	0.907			
33	Marico Ltd	35.60%	1.664	11.82%	1.809			
34	Hero MotoCorp Ltd	35.23%	1.460	10.00%	2.414			
35	Ajanta Pharma Ltd	34.89%	1.249	23.47%	1.190			
36	MRF Ltd	34.74%	1.835	11.00%	1.721			
37	Tata Consultancy Services Ltd	34.45%	1.247	22.02%	1.254			
38	DCM Shriram Ltd	34.41%	2.395	5.16%	2.784			
39	Eveready Industries India Ltd	33.46%	3.245	4.92%	2.094			
40	Eicher Motors Ltd	32.58%	1.352	16.65%	1.448			
41	ITI Ltd	31.99%	7.431	15.00%	0.287			
42	Century Plyboards India Ltd	31.56%	2.185	9.53%	1.516			
43	eClerx Services Ltd	31.28%	1.180	25.29%	1.048			
44	Chennai Petroleum Corp Ltd	31.27%	4.195	2.22%	3.353			
45	Sheela Foam Ltd	30.94%	2.329	6.68%	1.987			
46	Pidilite Industries Ltd	30.11%	1.387	13.97%	1.554			
47	Motherson Sumi Systems Ltd	30.01%	3.368	4.68%	1.904			
48	Bajaj Auto Ltd	28.97%	1.230	16.33%	1.442			
49	Hindustan Petroleum Corp Ltd	28.05%	4.174	2.35%	2.862			
50	Aurobindo Pharma Ltd	27.78%	2.184	14.30%	0.889			



	2016-17					
	COMPANY	ROE	Total Assets/	PAT/	Sales/	
	COMPANT	KOE	Networth	Sales	Total Assets	
1	Castrol India Ltd	113.3%	3.168	19.82%	1.804	
2	Hindustan Unilever Ltd	66.4%	2.321	12.43%	2.300	
3	Tata Metaliks Ltd.	55.1%	5.144	8.09%	1.325	
4	Crompton Greaves Consumer Electricals Ltd	54.7%	4.082	7.22%	1.855	
5	DCM Shriram Ltd	48.1%	2.205	9.45%	2.308	
6	Colgate-Palmolive India Ltd	45.3%	1.814	14.35%	1.741	
7	Bajaj Corp Ltd	44.2%	1.193	26.10%	1.418	
8	InterGlobe Aviation Ltd	43.9%	4.025	8.57%	1.273	
9	Caplin Point Laboratories Ltd	42.8%	1.598	23.34%	1.148	
10	Siemens India Ltd (oct- sept)	42.5%	1.762	25.28%	0.953	
11	Eris Lifesciences Ltd	41.7%	1.230	31.84%	1.066	
12	Balrampur Chini Mills Ltd	41.3%	2.581	16.17%	0.991	
13	Page Industries Ltd	40.0%	1.733	12.36%	1.867	
14	Hindustan Petroleum Corp Ltd	39.1%	3.812	3.82%	2.685	
15	Hatsun Agro Products Ltd	38.6%	4.675	3.19%	2.592	
16	Oracle Financial Services Software Ltd	36.3%	1.844	25.87%	0.761	
17	Symphony Ltd	36.2%	1.301	20.81%	1.335	
18	Marico Ltd	34.7%	1.553	12.64%	1.767	
19	L&T Technology Services Ltd	34.3%	1.503	15.40%	1.481	
20	Hero MotoCorp Ltd	34.2%	1.475	11.26%	2.058	
21	Mangalore Refinery & Petrochemicals Ltd	33.3%	3.325	5.45%	1.839	
22	Gulf Oil Lubricants India Ltd	33.2%	2.085	9.18%	1.734	
23	Zee Entertainment Enterprises Ltd	33.2%	1.533	33.34%	0.649	
24	Britannia Industries Ltd.	32.8%	1.522	9.34%	2.306	
25	Ajanta Pharma Ltd	32.3%	1.163	25.02%	1.111	
26	Eveready Industries India Ltd	32.3%	2.782	6.54%	1.776	
27	Jindal Stainless (Hisar) Ltd	31.8%	7.310	3.38%	1.286	
28	Jamna Auto Industries Ltd	31.5%	1.686	7.42%	2.522	
29	Tata Elxsi Ltd	30.9%	1.283	13.99%	1.722	
30	Larsen & Toubro Infotech Ltd	30.9%	1.410	14.52%	1.508	
31	Supreme Petrochem Ltd.	30.7%	1.941	5.55%	2.854	
32	8K Miles Software Services Ltd	30.7%	1.459	19.48%	1.081	
33	Chennai Petroleum Corp Ltd	30.5%	1.590	15.55%	1.238	
34	Nestle India Ltd	30.5%	3.378	2.59%	3.497	
35	Tata Consultancy Services Ltd	30.4%	2.075	10.40%	1.413	
36	Triveni Turbine Limited	30.2%	1.193	21.57%	1.183	
37	Natco Pharma Ltd	29.3%	1.402	23.32%	0.897	
38	eClerx Services Ltd	29.1%	1.150	26.07%	0.971	
39	Bharat Petroleum Corp Ltd	29.0%	3.328	3.87%	2.251	
40	Avanti Feeds Ltd	29.0%	1.429	7.78%	2.607	
41	Monsanto India Ltd	28.4%	1.309	22.99%	0.943	
42	PI Industries Ltd	28.2%	1.414	18.99%	1.052	
43	GHCL Ltd	28.2%	2.602	12.62%	0.860	
44	VST Industries Ltd.	27.9%	1.480	6.59%	2.860	
45	Eicher Motors Ltd	27.6%	1.311	20.35%	1.036	
46	Coal India Ltd	27.5%	4.738	8.45%	0.688	
47	Sundaram Fastners	27.5%	2.036	9.62%	1.402	
48	Indo Count Industries Ltd	27.2%	1.784	10.28%	1.482	
49	Hindustan Zinc Ltd	27.0%	1.681	39.09%	0.411	
50	Sheela Foam Ltd	27.0%	1.981	6.52%	2.088	



	2017-18						
	COMPANY	ROE	Total Assets/	PAT/	Sales/		
	COMPANT	NOE	Networth	Sales	Total Assets		
1	Unichem Laboratories Ltd	94.8%	1.190	288.87%	0.276		
2	Hindustan Unilever Ltd	71.6%	2.447	14.27%	2.050		
3	Thomas Cook (India) Ltd	70.6%	1.405	53.72%	0.935		
4	Castrol India Ltd	67.8%	1.938	17.58%	1.991		
5	HEG Ltd	57.6%	1.434	39.68%	1.013		
6	Avanti Feeds Ltd	45.2%	1.143	13.26%	2.984		
7	Tata Metaliks Ltd.	44.4%	3.137	8.31%	1.702		
8	Colgate-Palmolive India Ltd	44.2%	1.682	15.93%	1.649		
9	Bajaj Corp Ltd	42.9%	1.234	24.75%	1.404		
10	Crompton Greaves Consumer Electricals Ltd	41.0%	3.072	7.88%	1.695		
11	Page Industries Ltd	41.0%	1.667	13.48%	1.822		
12	DCM Shriram Ltd	40.9%	1.859	9.61%	2.289		
13	Tata Motors Ltd	40.3%	3.453	13.05%	0.894		
14	Caplin Point Laboratories Ltd	39.7%	1.375	26.18%	1.104		
15	Jindal Stainless (Hisar) Ltd	39.0%	4.492	5.50%	1.579		
16	Graphite India Ltd.	37.8%	1.384	30.53%	0.894		
17	Nestle India Ltd	35.8%	2.152	11.82%	1.408		
18	Coal India Ltd	34.4%	6.309	8.36%	0.652		
19	Gulf Oil Lubricants India Ltd	33.9%	2.201	11.29%	1.365		
20	Eris Lifesciences Ltd	33.3%	1.648	33.44%	0.604		
21	Tata Elxsi Ltd	32.6%	1.285	16.83%	1.507		
22	Marico Ltd	32.4%	1.597	13.71%	1.478		
23	8K Miles Software Services Ltd	32.2%	1.283	23.95%	1.047		
24	InterGlobe Aviation Ltd	31.7%	2.985	9.36%	1.134		
25	VST Industries Ltd.	31.4%	1.828	13.20%	1.299		
26	Symphony Ltd	31.0%	1.237	22.26%	1.127		
27	Akzo Nobel India Ltd	31.0%	1.729	14.10%	1.271		
28	Hero MotoCorp Ltd	30.9%	1.442	11.07%	1.933		
29	Tata Consultancy Services Ltd	30.3%	1.243	20.42%	1.192		
30	Jamna Auto Industries Ltd	29.6%	1.862	7.10%	2.236		
31	Britannia Industries Ltd.	29.4%	1.517	9.88%	1.958		
32	Larsen & Toubro Infotech Ltd	28.8%	1.394	14.39%	1.437		
33	Hindustan Petroleum Corp Ltd	28.3%	3.512	2.94%	2.741		
34	Indiabulls Real Estate Ltd	27.9%	2.371	32.17%	0.366		
35	Tata Chemicals Ltd	27.6%	1.873	36.28%	0.406		
36	Dilip Buildcon Ltd	27.6%	4.891	7.95%	0.709		
37	L&T Technology Services Ltd	27.3%	1.397	13.42%	1.457		
38	Blue Dart Express Ltd	27.2%	2.825	5.13%	1.877		
39	TTK Prestige Ltd	26.9%	1.539	14.59%	1.200		
40	Sundaram Fastners	26.9%	1.942	10.59%	1.309		
41	Oracle Financial Services Software Ltd	26.3%	1.260	26.79%	0.778		
42	Godrej Consumer Products Ltd	26.1%	2.231	16.27%	0.719		
43	Sterlite Technologies Ltd.	25.9%	2.952	10.07%	0.871		
44	Hindustan Zinc Ltd	25.8%	1.195	38.22%	0.565		
45	Pidilite Industries Ltd	25.8%	1.388	15.17%	1.223		
46	Monsanto India Ltd	25.7%	1.312	23.87%	0.821		
47	VIP Industries Ltd	25.6%	1.580	8.77%	1.845		
48	Bharat Petroleum Corp Ltd	25.4%	3.126	3.48%	2.334		
49	Abbott India Ltd	25.2%	1.427	11.69%	1.511		
50	Vakrangee Ltd	25.0%	1.154	9.93%	2.184		



Data of Companies which are consistent in Top 50

Compan	ites wii	ich are con	iststerrt
RoE	TA/NW	PAT/Sales	Sales/TA
1.130533	8.675	0.080451173	1.620
1.084743	7.098	0.11985325	1.275
1.068883	2.887	0.183626265	2.016
0.629607	2.244	0.118467993	2.368
0.5655	1.907	0.137202545	2.162
0.459907	7.227	0.057939004	1.098
0.436935	1.785	0.128190164	1.909
0.413332	2.233	0.169494374	1.092
0.408342	1.177	0.2371208	1.463
0.40362	2.610	0.097460482	1.587
0.401382	1.555	0.142411053	1.813
0.393756	1.668	0.09423233	2.505
0.393647	1.488	0.13858286	1.909
0.39283	1.823	0.132859365	1.622
0.37252	1.473	0.077401625	3.268
0.371489	1.326	0.253766728	1.104
0.371386	1.313	0.185334362	1.526
0.357188	2.085	0.188831399	0.907
0.356026	1.664	0.118234065	1.809
0.352303	1.460	0.099983102	2.414
0.344506	1.247	0.220236284	1.254
0.344076	2.395	0.051610077	2.784
0.28053	4.174	0.023485365	2.862
0.551338	5.144	0.080922268	1.325
0.439023	4.025	0.0856574	1.273
1.132875	3.168	0.198249299	1.804
0.663612	2.321	0.124280337	2.300
0.453313	1.814	0.143534331	1.741
0.546924	4.082	0.072230243	1.855
0.399954	1.733	0.123576202	1.867
0.278754	1.480	0.065855166	2.860
0.44162	1.193	0.260964025	1.418
0.331956	2.085	0.091831879	1.734
0.309128	1.283	0.139939282	1.722
0.327752	1.522		
0.327732	1.410	0.093365982 0.145179138	2.306 1.508
0.308702	1.503	0.145179138	
0.342917	1.429	0.134029941	1.481 2.607
0.361531	1.301	0.208073958 0.3183632	1.335
0.417321	1.230		1.066
0.428413	1.598	0.233421381 0.126364192	1.148
0.346714	1.553		1.767
0.341552	1.475 1.193	0.112560906	2.058
0.304424		0.215710346	1.183
0.481264	2.205	0.094542974	2.308
0.390852	3.812	0.038186068	2.685
0.443793	3.137	0.083147387	1.702
0.316831	2.985	0.09355591	1.134
0.678169	1.938	0.175800021	1.991
0.715929	2.447	0.142728415	2.050
0.441667	1.682	0.159309643	1.649
0.41012	3.072	0.078773164	1.695
0.409508	1.667	0.134826606	1.822