

## Measuring Trend and Growth of Selected Retail Sector

### Companies in India- An Analysis

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#### Abstract

The narrative of retail in India amid the most recent decade has been nothing less than a sea-change formed by world class outlines, quality venture and connecting with partners. Retail has an essential place in the economy of the world as all the monetary exercises closes with retail. The present examination made an endeavor to think about the execution of retail segment by taking yearly time series data from 2001 to 2015 by considering trend and growth analysis. Trend analysis is done with the help of bi-variate regression analysis and Growth analysis is done with the help of semi-log model of the five financial indicators like Profit after tax (here after PAT), Closing Price, Price to Book Ratio, Share Deliverables and Total Return as for all the selected retail sector companies in India. It was found that Future Enterprises Ltd. has achieved maximum growth rate in terms of Profit After Tax, Aditya Birla Fashion & Retail Ltd in terms of Closing Price and Price to Book Ratio, Provogue (India) Ltd. in terms of Shares Deliverables and Cantabil Retail India Ltd. in terms of Total Returns.

**Key Words:** Retail, Trend Analysis, Growth Analysis, Profit After Tax, Closing Price, Total Returns.

## Analysis

Retailing in the organized sector is relied upon to develop to 8-9 percent of the Indian Retail Industry in the following 5 years and FDI in retail is a standout amongst the most discussed subjects now. There is a wild and anxious atmosphere in India as the MNC's are showing their presence in single as well as multi-brand retail with a tremendous change in technology, processes as well as operating activities. All these factors present an enormous open door in this new high development industry. The section covering the retail in India is exceedingly isolated and its organised segment is at a beginning stage in our nation. Indians with an ability to exhaust over USD 30,000 a year on evident usage address 2.8 percent of the entire masses. Still, 1.07 bn people which are our populace, the Indian market comes near to the markets of United States, Japan and China since 30 millions contribute to the Indian market. The demand from buyers is stretching our development in retail.

The present picture of the retail sector is showing a fierce competition between the new as well as existing players in India with the best players worldwide after LPG regime. So far as international trade is concerned, the Indian Retail Industry should work with full endeavor to compete with international players, as only 5% is the organized retail in India and lack of specialized training institutes is one of the shortcomings of this sector. Made known by A.T. Kearney, the retailers included need to scrutinize ahead of times and make hands-on choices to stay in this blasting retail industry's business. With the entry of more and more organizations in the market, the opposition is getting harder step-wise and this creates the requirement of a considerable measure of right choices, including anticipation of interest in order to survive in the market.

The current retail industry in India has been developing at a quick rate of 26.8 percent CAGR and is required to become significantly speedier by 2015. The dispersion of organised retail in India is still low at 6 to 8 percent, particularly when contrasted with developed countries, for example, the US and UK which have retail infiltration of 85 percent and 80 percent, respectively. Nations, for example, Malaysia (55%), Thailand (40%), Philippines (35%), and China (20%) also have significant dispersion of organised retail. In spite of the fact that it is a little lump of the aggregate market, it is gradually making its mark and is required to have substantially higher share in the aggregate retail by the year 2020.

## Review of Literature

**Chawla et al. (2016)** had stated in their study that retail sector had emerged as one of the attractive sectors and attracted foreign players. FDI in retail bears an effect on a number of stakeholders engaged in the process of retailing, from retailers to the consumers. **Goyal & Bansal (2016)** had analysed the trend of FDI inflows overall as well as in retail sector of India from 2006 to 2014. The findings of the study showed Singapore as top contributor of FDI during 2013-2014 while Luxembourg stood at the bottom of the list of contribution. **Kumar & Bansal (2015)** examined the points of interest, negative effect, qualities, shortcomings, openings and dangers of permitting FDI into Indian retail business. FDI will be invaluable for different partners like ranchers (by giving better pay to their creation and reinforced inventory network foundation), clients( lessened costs of the items, subjective items, better sustenance wellbeing guidelines, more decisions, advantage to poor segment of the general public by bringing down costs), little retailers(technology upgradation, more proficient and updated retail outlets), existing enormous retailers and SMEs (advantage of 30% sourcing from SMEs, boosting fabricating division, new assembling openings will likewise open), rustic youth (improved openings for work, aptitude preparing by financial specialists). **Nasir (2015)** examined the base on auxiliary information, the focal points and drawbacks of FDI in retail division. The scientist brought up focal points, for example, economy development, low valued items for clients, upgraded work openings, advantage to agriculturists by contract cultivating, change in framework, change in SCM of FDI strategy in retail. **Chandel (2014)** had investigated the shopping malls in Delhi with respect to quality of services offered by them. The relationship between customer satisfaction and service quality was also measured. To assess the quality offered by the mall management five main dimensions like problem solving, physical aspects, reliability personal interaction, problem solving and policy were used. **Faloye (2014)** had studied the hurdles and the basic determinants of the use of e-commerce in developing countries basically in Small and Medium Scale Enterprises (SMEs). In South Western part of Nigeria, studies related to the implementation of e-commerce in SSEs (Small Scale Enterprises) particularly in retail is quite less. **Segetlija & Dujak (2014)** had anticipated an instrument to measure the retail trade efficiency of an individual economy which will be complementing the customary analysis by taking into account world's 10 largest retail chains. **Sztangret & Bilińska (2014)** studied the present-day customers and their frequent and

customized product demands which are being supplied more efficiently in the market. **Sumathi et.al (2014)** had enumerated the overall picture of Indian retail sector. More than 10 percent of country's GDP and 8 percent of total employment is contributed by retail industry of India. Organised (Hypermarkets, Supermarkets, Malls) and Unorganised sectors (local kirana stores, paan-beedi shops, general stores, hand cart) are the basic components of this industry. **Sharma (2013)** had extensively compared the impact of FDI on the economies of world's most populated countries i.e India and China by taking several macroeconomic indicators like Gross Domestic Product, Employment, Gross Capital Formation, Foreign Exchange Reserves, Exports etc. **Azhar and Marimuthu (2012)** had analysed the impact of FDI in growth of India. They had studied the determinants of FDI, sector-wise and year-wise analysis and reasons as well as sources behind FDI. **Ernst & Young's attractiveness survey (2012)** was done when the business leaders were discussing about the economic emergency and the investors were cautious. Despite of that, FDI projects had shown a strong increase and the global investors viewed India as an attractive destination. **Singh (2011)** had analysed the impact of globalization on the developing countries particularly in East Asia. During the past two decades, an enormous stream of FDI has been there, as far as India is concerned, it has been a latecomer to the FDI sight but it comes out as the most favourable destination due to its liberalized policy and momentous market potential. **Hooda (2011)** had analysed that from the last 30 years, the developing nations had received an enormous amount of FDI and made their presence felt in terms of finance also. **Duperon and Cinar (2010)** had examined the very important factors i.e. domestic interest and worldwide competition. FDI is largely dependent upon the bargaining power of the host country and the danger to domestic market in particular context of pharmaceutical industry. **Chadha et al (2009)** had examined the relationship between FDI and manufacturing sectors and found a powerful relationship between supplier oriented linkages (backward) and customer oriented linkages (forward) with the economy. **Mathiyazhagan and Sahoo (2008)** had studied the Sector-Wise impact of FDI on the Indian economy. They studied nine prominent sectors namely power & fuel, drugs and pharmaceuticals., transport, food processing, textiles, industrial machineries from 1991-92 to 2004-05 by applying co-integration model test with four variables i.e. FDI, Labour productivity, export and gross output.

### Statement of the Problem

As the Indian retail part is developing at a quick pace for over 10 years. The Retail Market of India will reach \$1.3 trillion by 2020 from its present status of 500 billion. The Retail showcase in India is very chaotic (95%) and insignificant 5% is the main offer of organised fragment. Hence, require emerges that an endeavor ought to be made to ponder the monetary execution of recorded multi-mark retail organizations to know how these organizations are developing in this post advancement period.

### Objectives of the Paper

- (1) To study the financial performance of listed retail sector companies in India.
- (2) To find out the outperforming company on the basis of the selected parameters.

### Research Methodology

**Sample Design:** The organised eight retail sector companies have been selected for the study. The selected companies are the listed companies either in BSE or NSE and these companies are multi-brand retail companies whose data is maximum available from 2001 to 2015.

**Table-1.1: Main Retail Companies in India**

**Table 1.1: List of Selected Retail Sector Companies**

Name of the Company	Listed in	Name of Promoters	Year of Incorporation
Aditya Birla Fashion & Retail Ltd.	BSE, NSE	Mr. Kumar Mangalam Birla	2000
Cantabil Retail India Ltd.	BSE, NSE	Mr. Vijay Bansal	1989
Future Enterprises Ltd.	BSE, NSE	Mr. Vijay Kumar Chopra	1987
Future Retail Ltd.	BSE, NSE	Mr. Kishore Biyani	2007
Mandhana Retail Ventures Ltd.	BSE, NSE	Mr. Pradip. V Dubhashi	2011
Provogue (India) Ltd.	BSE, NSE	Mr. Arun Bhargava	1997
Shoppers Stop Ltd.	BSE, NSE	Mr. Chandru Raheja	1997

V 2 Retail Ltd.	BSE, NSE	Mr. Ram Chandra Agarwal	2001
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Source: Centre for Monitoring Indian Economy (CMIE)

**Sources of Data:** The data required for the study were collected from various published secondary sources, that is, the database of CMIE (Centre for Monitoring Indian Economy), FICCI Retail Report, PWC Retail Report, DIPP (Department of Industrial Planning and Promotion), FIPB (Foreign Investment Promotion Board), Indian Retail Association etc. The data were also collected from different web sources, that is, [www.ibef.org](http://www.ibef.org); [www.indiaretailing.com](http://www.indiaretailing.com) etc.

### Hypotheses:

H<sub>01</sub>: There exists significant positive long term trend in selected financial indicator of the firms.

H<sub>02</sub>: There exists significant positive growth rate in selected financial indicator of the firms.

**Tools for Data Analysis:** The statistical tools applied for trend and growth analysis are Bi-Variate Regression Analysis and Semi-Log Model using SPSS 21 and E-views.

**Scope of the Study:** The scope of the present paper is divided into five parts and each part deals with the importance of one parameter towards the analysis of trend and growth of retail sector companies.

### Analysis, Results and Discussion

In order to analyse the performance of retail sector companies in India, the annual time-series data of the selected financial indicators is collected in the research study. The selected financial indicators includes Profit After Tax (here after PAT), Closing Price, Price to Book Ratio, Share

Deliverables and Total Return. Trend and Growth Analysis of the selected performance indicators is discussed below.

### **Trend Analysis and Growth Rate (EAGR)**

- a) In the research study the long term trend in the Profit After Tax (PAT) of selected firms is calculated. In the selected period of 15 years (2001-2015) the Profit After Tax (PAT) of the companies changes as per their business performance. However in the long run it is expected that the Profit After Tax (PAT) of the company should increase. In the study, the long term trend as well as the compounded annual growth rate of selected firms with respect to their Profit After Tax (PAT) is calculated with the help of Regression Model shown below:

$$PAT = \alpha + \beta * Time + \varepsilon_t \dots\dots\dots (1)$$

$$\log (PAT) = \alpha + \beta * Time + \varepsilon_t \dots\dots\dots (2)$$

In equation (1) the Beta (Slope Coefficient) represents the long term trend behavior of Profit After Tax (PAT) for the selected firms. The slope Coefficient (Beta) is a representation of the rate of change of PAT (Profit After Tax) of the firm in one year. In the regression model, the t-coefficient of the slope of coefficient (Beta) tests the null hypothesis. “In the Profit After Tax of the firms, an inconsiderable/insignificant long term trend has been found to exist” or it can be mentioned that Time has no effect on the PAT (Profit After Tax) of the firm. In the regression model, the p-value of the t-statistic lesser than 5% level of significance results in rejection of the null hypothesis.

Similarly in the equation (2), the Slope Coefficient represents the calculated value EAGR of the Profit After Tax (PAT) of the firm. Equation (2) is also known as Semi Log Model which is used to calculate growth rate of the dependent variable. In the regression model, the t-statistic (eqn no.2) tests the null hypothesis that the rate of growth is inconsiderable statistically. In the regression model, the p-value of the t-statistic lesser than 5% level of significance results in non-acceptance of the null hypothesis with 95% confidence level.

The result of Trend Analysis as well as EAGR is shown below in **Table 1.2** and **Table: 1.3**:

**Table: 1.2 Trend Analysis (Profit After Tax) – Company Wise**

Companies	Regression parameter	Regression estimates	t-statistic (p-value)	F-Statistic (p-value)	R2	Remarks
Aditya Birla Fashion & Retail Ltd.	Intercept	318722.849	2.200 (.059)	4.864 (.058)	.378	As $p > .05$ , there exists a non significant negative relationship.
	Trend Value	-158.854	-2.206 (.058)			
Cantabil Retail India Ltd.	Intercept	11411.502	.539 (.600)	.292 (0.600)	.026	As $p > .05$ , there exists a non significant negative relationship.
	Trend Value	-5.683	-.540 (.600)			
Future Enterprises Ltd.	Intercept	-79129.872	-.796 (.439)	.648 (.434)	.044	As $p > .05$ , there exists a non significant positive relationship.
	Trend Value	39.820	.805 (.434)			
Future Retail Ltd.	Intercept	-4756.964	-.011 (.992)	.000 (.996)	.000	As $p > .05$ , there exists a non significant positive relationship.
	Trend Value	1.278	.006 (.996)			
Mandhana Retail Ventures Ltd.	Intercept	540.485	4.030 (.155)	16.333 (.154)	.942	As $p > .05$ , there exists a non significant negative relationship.
	Trend Value	-.269	-4.041 (.154)			
Provogue (India) Ltd.	Intercept	255160.699	3.126 (.009)	9.787 (.009)	.449	As $p < .05$ , there exists a significant but negative relationship.
	Trend Value	-127.073	-3.128 (.009)			
Shoppers Stop Ltd.	Intercept	-48066.211	-1.474 (.163)	2.194 (.161)	.136	As $p > .05$ , there exists a non significant positive relationship.
	Trend Value	24.054	1.481 (.161)			
V 2 Retail Ltd.	Intercept	-10440.797	-.048 (.963)	.002 (.964)	.000	As $p > .05$ , there exists a non significant positive relationship.
	Trend Value	4.981	.046 (.964)			



Source: Centre for Monitoring Indian Economy, Calculation using SPSS 21.

**Table: 1.3 Growth Analysis (Profit After Tax) –Company Wise**

Companies	Regression parameter	Regression estimates	t-statistic (p-value)	F-Statistic (p-value)	R <sup>2</sup>	Remarks	EAGR
Cantabil Retail India Ltd.	Intercept	-359.426	-1.720 (.124)	3.014 (.121)	.274	As $p > .05$ , there exists a non significant positive relationship.	1.81%
	Trend Value	.181	1.736 (.121)				
Future Enterprises Ltd.	Intercept	-38.153	-.246 (.809)	.081 (.780)	.006	As $p > .05$ , there exists a non significant positive relationship.	2.20%
	Trend Value	.022	.285 (.780)				
Provogue (India) Ltd. (India) Ltd	Intercept	-35.072	-.146 (.887)	.028 (.872)	.003	As $p > .05$ , there exists a non significant positive relationship.	2.00%
	Trend Value	.020	.166 (.872)				
Shoppers Stop Ltd.	Intercept	-360.335	-2.622 (.021)	7.079 (.020)	.353	As $p < .05$ , there exists a positive and significant relationship.	1.82%
	Trend Value	.182	2.661 (.020)				
V 2 Retail Ltd.	Intercept	5.738	.030 (.977)	.000 (.996)	.000	As $p > .05$ , there exists a non significant relationship.	00%
	Trend Value	.000	-.005 (.996)				

Source: Same as in Table 1.2

The result of Trend Analysis as well as EAGR is shown below in **Table: 1.4**

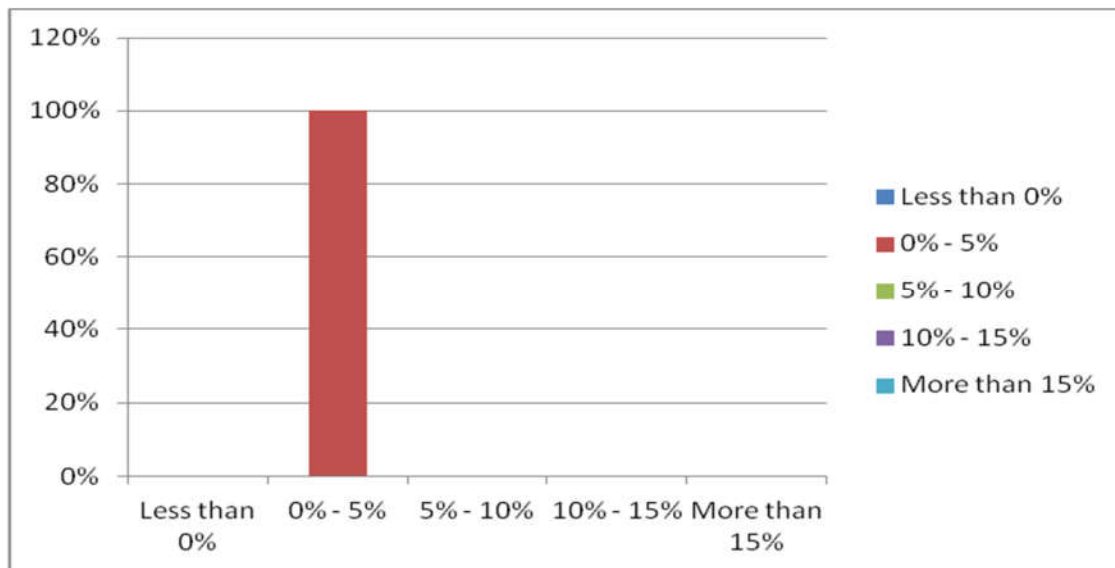
**Table: 1.4 Frequency of Growth Analysis (Profit After Tax) –Company Wise**

EAGR	Frequency	Percent
Less than 0%	0	0%
0% - 5%	5	100%
5% - 10%	0	0%
10% - 15%	0	0%
More than 15%	0	0%

Total	5	100%
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Source: Same as in Table 1.2

The results in **table: 1.4** and **figure: 1.1** indicate that 100 % of the firms have lowest positive growth rate in Profit After Tax. Future Enterprises Ltd. has maximum positive growth rate of 2.2% followed by Provogue (India) Ltd. India Ltd having maximum growth rate of 2% as indicated in **table: 1.3**. V2 Retail Ltd. has the minimum growth rate of 0%. The results are also shown in graphical form below in **Figure: 1.1**.



**Figure: 1.1** Frequency of Growth Analysis (Profit After Tax) –Company Wise

#### b) Trend Analysis and Growth Rate (EAGR)

In the research study the long term trend in the Closing Price (CP) of selected firms is calculated. In the selected period of 15 years (2001-2015) the Closing Price (CP) of the companies changes as per their business performance. However in the long run it is expected that the Closing Price (CP) of the company should increase. In the study, the long term trend as well as the compounded annual growth rate of selected firms with respect to their Closing Price (CP) is calculated with the help of Regression Model shown below:

$$CP = \alpha + \beta * \text{Time} + \varepsilon_t \quad \text{..... (3)}$$

$$\log (CP) = \alpha + \beta * \text{Time} + \varepsilon_t \quad \text{..... (4)}$$

In the above stated equation numbered as (3), the Beta i.e the Slope Coefficient symbolises the long term mannerism/behaviour of the Closing Price for the selected firms. Beta (the Slope Coefficient) can thus be a representation of the rate at which the Closing Price (CP) changes in a firm in the span of one year. In the regression model, the t-coefficient of the slope of coefficient (Beta) tests the null hypothesis. “In the Closing Price (CP) of the firms, an inconsiderable/insignificant long term trend has been found to exist” or it can be mentioned that Time has no effect of the firm’s Closing Price (CP). In the regression model, the p-value of the t-statistic lesser than 5% level of significance results in rejection of the null hypothesis.

Similarly in the equation (4), the Slope Coefficient represents the calculated value EAGR of the Closing Price of the firm. Equation (4) is also known as Semi Log Model which is used to calculate rate of growth of the dependent variable. In the regression model, the t-statistic (eqn.no.4) test the null hypothesis that the rate of growth is inconsiderable statistically. In the regression model, the p-value of the t-statistic lesser than 5% level of significance results in rejection of the null hypothesis with 95% confidence level.

The result of Trend Analysis as well as EAGR is shown below in **Table 1.5** and **Table: 1.6**:

**Table: 1.5 Trend Analysis (Closing Price) –Company Wise**

Companies	Regression parameter	Regression estimates	t-statistic (p-value)	F-Statistic (p-value)	R2	Remarks
Aditya Birla Fashion & Retail Ltd.	Intercept	-51496.920	-.910 (.459)	.833 (.458)	.294	As $p > .05$ , there exists a non significant positive relationship.
	Trend Value	25.635	.913 (.458)			
Cantabil Retail India Ltd.	Intercept	-8876.007	-1.083 (.328)	1.183 (.326)	.191	As $p > .05$ , there exists a non significant positive relationship.
	Trend Value	4.429	1.088 (.326)			
Future Enterprises Ltd.	Intercept	3104.506	.130 (.899)	.015 (.906)	.001	As $p > .05$ , there exist a non significant negative relationship.
	Trend Value	-1.439	-.121 (.906)			
Provogue (India) Ltd.	Intercept	22804.877	2.279 (.046)	5.170 (.046)	.341	As $p < .05$ , there exists a significant

	Trend Value	-11.317	-2.274 (.046)			but negative relationship.
Shoppers Stop Ltd.	Intercept	-37156.794	-2.086 (.064)	4.427 (.062)	.307	As $p > .05$ , there exists a non significant positive relationship.
	Trend Value	18.640	2.104 (.062)			
V 2 Retail Ltd.	Intercept	99802.992	1.671 (.133)	2.785 (.134)	.258	As $p > .05$ , there exists a non significant negative relationship.
	Trend Value	-49.545	-1.669 (.134)			

Source: Same as in Table 1.2

**Table: 1.6 Growth Analysis (Closing Price) –Company Wise**

Companies	Regression parameter	Regression estimates	t-statistic (p-value)	F-Statistic (p-value)	R2	Remarks	EAGR
Aditya Birla Fashion & Retail Ltd.	Intercept	-387.930	-1.149 (.370)	1.353 (.365)	.403	As $p > .05$ , there exist a non significant relationship	19.5%
	Trend Value	.195	1.163 (.365)				
Cantabil Retail India Ltd.	Intercept	-264.749	-1.111 (.317)	1.267 (.311)	.202	As $p > .05$ , there exist a non significant relationship	13.3%
	Trend Value	.133	1.126 (.311)				
Future Enterprises Ltd.	Intercept	-139.218	-.882 (.393)	.832 (.377)	.056	As $p > .05$ , there exist a non significant relationship	7.2%
	Trend Value	.072	.912 (.377)				
Provogue (India) Ltd.	Intercept	606.509	5.776 (.000)	33.009 (.0000)	.767	As $p > .05$ , there exist a non significant relationship	-30%
	Trend Value	-.300	-5.745 (.000)				
	Intercept	-128.379	-1.728	3.256	.246		6.7%

Shoppers Stop Ltd.			(.115)	(.101)		As $p > .05$ , there exist a non significant relationship	
	Trend Value	.067	1.805 (.101)				
V 2 Retail Ltd.	Intercept	354.874	1.172 (.275)	1.343 (.280)	.144	As $p > .05$ , there exist a non significant relationship	-17.4%
	Trend Value	-.174	-1.159 (.280)				

Source: Same as in Table 1.2

The result of Trend Analysis as well as EAGR is shown below in **Table: 1.7**

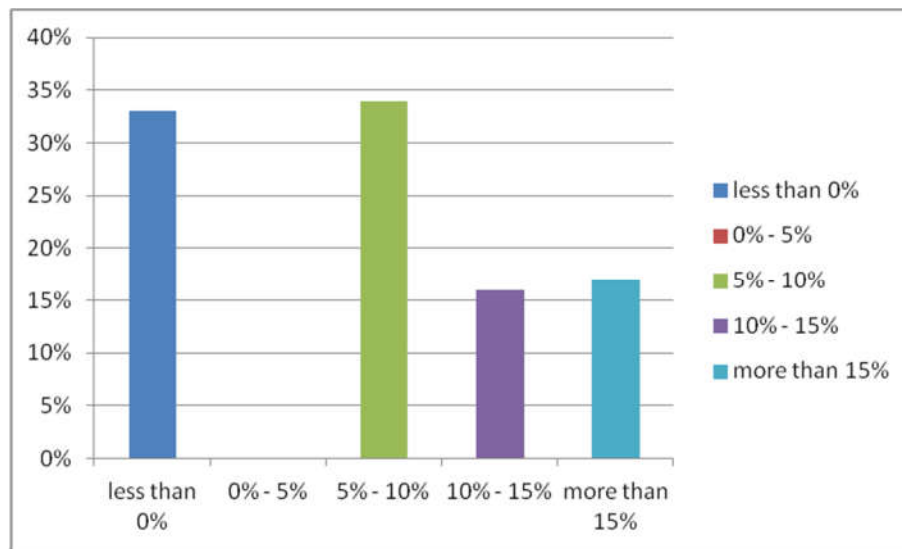
**Table: 1.7 Frequency of Growth Analysis (Closing Price) –Company Wise**

EAGR	Frequency	Percent
less than 0%	2	33%
0% - 5%	0	0%
5% - 10%	2	34%
10% - 15%	1	16%
more than 15%	1	17%
Total	6	100%

Source: Same as in Table 1.2

The results in **table: 1.7** and **figure: 1.2** indicate that 33% of the firms have negative growth rate in the Closing price for the selected firms. 34% firms have positive growth rate of Closing Price ranging between 5-10%, 33% of the firms have highest positive growth rate of Closing Price as indicated in **table: 1.6** more than 10% i.e Aditya Birla Fashion & Retail Ltd.and Cantabil Retail India Ltd. The results are also shown in graphical form below in

**Figure: 1.2.**



**Figure: 1.2 Frequency of Growth Analysis (Closing Price) –Company Wise**

### c) Trend Analysis and Growth Rate (EAGR)

In the research study the long term trend in the Price to Book Ratio of selected firms is calculated. In the selected period of 15 years (2001-2015) the Price to Book Ratio of the companies changes as per their business performance. However in the long run it is expected that the Price to Book Ratio of the company should increase. In the study, the long term trend as well as the exponential annual growth rate of selected firms with respect to their Price to Book Ratio is calculated with the help of Regression Model shown below:

$$PB = \alpha + \beta * Time + \varepsilon_t \dots \dots \dots (5)$$

$$\log(PB) = \alpha + \beta * Time + \varepsilon_t \dots \dots \dots (6)$$

In the above stated equation numbered as (5) the Beta i.e the Slope Coefficient symbolises the long term mannerism/behaviour of the Price to Book Ratio for the selected firms. Beta (the Slope Coefficient) can thus be a representation of the rate at which the Price to Book Ratio changes in a firm in the span of a year. In the regression model, the t-coefficient of the slope of coefficient (Beta) tests the null hypothesis. “In the Price to Book Ratio of the firms, an inconsiderable/insignificant long term trend has been found to exist” or it can be mentioned that Time has no effect on the firm’s Price to Book Ratio. In the regression model, the p-value of the t-statistic lesser than 5% level of significance results in the rejection of the null hypothesis.

Similarly in the equation (6), the Slope Coefficient represents the calculated value EAGR of the Price to Book Ratio of the firm. Equation (6) is also known as Semi Log Model which is used to calculate rate of growth of the dependent variable. In the regression model, the t-statistic (eqn.no.6) tests the null hypothesis that the rate of growth is inconsiderable statistically. In the regression model, the p-value of the t-statistic lesser than 5% level of significance results in the rejection of the null hypothesis with 95% confidence level.

The result of Trend Analysis as well as EAGR is shown below in **Table: 1.8** and **Table: 1.9**:

**Table: 1.8 Trend Analysis (Price to Book Ratio) –Company Wise**

Companies	Regression parameter	Regression estimates	t-statistic (p-value)	F-Statistic (p-value)	R2	Remarks
Aditya Birla Fashion & Retail Ltd.	Intercept	-6461.295	-6.343 (.024)	40.299 (.024)	.953	As $p < .05$ , there exists a positive and significant relationship.
	Trend Value	3.210	6.348 (.024)			
Cantabil Retail India Ltd.	Intercept	-337.185	-2.932 (.033)	8.632 (.032)	.633	As $p < .05$ , there exists a positive and significant relationship.
	Trend Value	.168	2.938 (.032)			
Future Enterprises Ltd.	Intercept	645.683	1.636 (.124)	2.648 (.126)	.159	As $p > .05$ , there exists a non significant negative relationship.
	Trend Value	-.320	-1.627 (.126)			
Provogue (India) Ltd.	Intercept	1041.195	2.867 (.017)	8.190 (.017)	.450	As $p < .05$ , there exists a significant but negative relationship.
	Trend Value	-.517	-2.862 (.017)			
Shoppers Stop Ltd.	Intercept	413.962	1.609 (.139)	2.525 (.143)	.202	As $p > .05$ , there exists a non significant negative relationship.
	Trend Value	-.203	-1.589 (.143)			

V 2 Retail Ltd.	Intercept	1513.216	1.994 (.103)	3.968 (.103)	.442	As $p > .05$ , there exists a non significant negative relationship.
	Trend Value	-.752	-1.992 (.103)			

Source: Same as in Table 1.2

**Table: 1.9 Growth Analysis (Price to Book Ratio) –Company Wise**

Companies	Regression parameter	Regression estimates	t-statistic (p-value)	F-Statistic (p-value)	R2	Remarks	EAGR
Aditya Birla Fashion & Retail Ltd.	Intercept	-1456.712	-17.670 (.003)	312.822 (.003)	.994	As $p < .05$ , there exists a significant positive relationship.	72.4%
	Trend Value	.724	17.687 (.003)				
Cantabil Retail India Ltd.	Intercept	-510.357	-2.324 (.068)	5.390 (.068)	.519	As $p > .05$ , there exists a non significant positive relationship.	25.3%
	Trend Value	.253	2.322 (.068)				
Future Enterprises Ltd.	Intercept	178.293	1.314 (.210)	1.716 (.211)	.109	As $p > .05$ , there exists a non significant negative relationship.	-8.9%
	Trend Value	-.089	-1.310 (.211)				
Provogue (India) Ltd.	Intercept	665.948	5.523 (.000)	30.534 (.000)	.753	As $p < .05$ , there exists a significant but negative relationship.	-33.1%
	Trend Value	-.331	-5.526 (.000)				
Shoppers Stop Ltd.	Intercept	73.099	1.276 (.231)	1.558 (.240)	.135	As $p > .05$ , there exists a	-3.6%



	Trend Value	-.036	-1.248 (.240)			non significant negative relationship.	
V 2 Retail Ltd.	Intercept	681.440	1.667 (.156)	2.787 (.156)	.358	As $p > .05$ , there exists a non significant negative relationship.	-33.9%
	Trend Value	-.339	-1.669 (.156)				

Source: Same as in Table 1.2

The result of Trend Analysis as well as EAGR is shown below in **Table 1.10**:

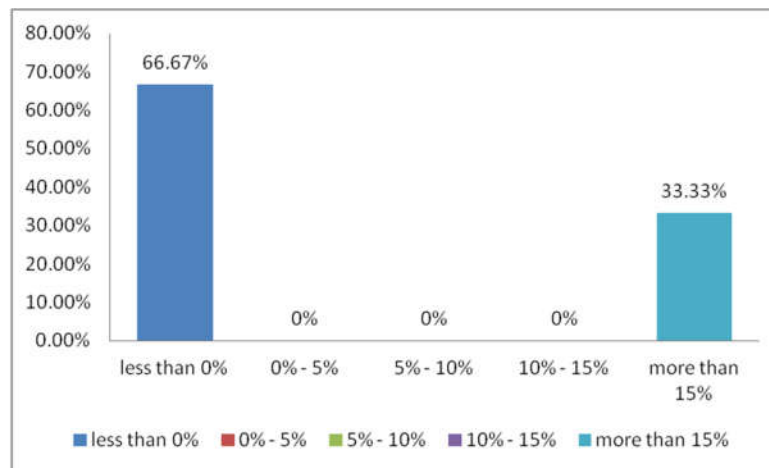
**Table: 1.10 Frequency of Growth Analysis (Price to Book Ratio) –Company Wise**

EAGR	Frequency	Percent
less than 0%	4	67
0% - 5%	0	0
5% - 10%	0	0
10% - 15%	0	0
more than 15%	2	33
Total	6	100

Source: Same as in Table 1.2

The results in **table: 1.10 and figure: 1.3** indicate that 66.67 % of the firms have negative growth rate in the Price to Book Ratio for the selected firms, more than 33% of the firms are having growth rate more than 15% per year. The firms with the highest growth rate of Price to Book Ratio as indicated in **table: 1.9** are found to be Aditya Birla Fashion & Retail Ltd.(72.4%) and Cantabil Retail India Ltd. (25.30%).

Similarly the results also indicate the firms with highest negative growth rate of Price to Book Ratio are V2 retail Ltd (-33.90%), Provogue (India) Ltd. India Ltd.(-33.10%) and Future Enterprises Ltd.(-8.9%). The results are also shown in graphical form below in **Figure: 1.3**.



**Figure: 1.3 Frequency of Growth Analysis (Price to Book Ratio) –Company Wise**

#### **d) Trend Analysis and Growth Rate (EAGR)**

In the research study the long term trend in the Shares Deliverables of selected firms is calculated. In the selected period of 15 years (2001-2015) the Shares Deliverables of the companies changes as per their business performance. However in the long run it is expected that the Shares Deliverables of the company should increase. In the study, the long term trend as well as the exponential annual growth rate of selected firms with respect to their Shares Deliverables is calculated with the help of Regression Model shown below

$$SD = \alpha + \beta * Time + \varepsilon_t \dots\dots\dots (7)$$

$$\log(SD) = \alpha + \beta * Time + \varepsilon_t \dots\dots\dots (8)$$

In the above stated equation numbered as (7), the Beta i.e the Slope Coefficient symbolises the long term mannerism/behaviour of the Shares Deliverables for the selected firms. Beta (the Slope Coefficient) can thus be a representation of the rate at which the Shares Deliverables changes in a firm in the span of an year. In the regression model, the t-coefficient of the slope of coefficient (Beta) tests the null hypothesis. “In the Shares Deliverables of the firms, an inconsiderable/insignificant long term trend has been found to exist” or it can be mentioned that Time has no effect of the firm’s Shares Deliverables. In the regression model, the p-value of the t-statistic lesser than 5% level of significance results in rejection of the null hypothesis.

Similarly in the equation (8), the Slope Coefficient represents the calculated value EAGR of the Shares Deliverables of the firm. Equation (8) is also known as Semi Log Model which is used to calculate rate of growth of the dependent variable. In the regression model, the t-statistic

(eqn.no.8) tests the null hypothesis that the rate of growth is inconsiderable statistically. In the regression model, the p-value of the t-statistic lesser than 5% level of significance results in rejection of the null hypothesis with 95% confidence level.

The result of Trend Analysis as well as EAGR is shown below in **Table: 1.11** and **Table: 1.12**:

**Table: 1.11 Trend Analysis (Shares Deliverables) –Company Wise**

Companies	Regression parameter	Regression estimates	t-statistic (p-value)	F-Statistic (p-value)	R2	Remarks
Aditya Birla Fashion & Retail Ltd.	Intercept	16431.560	1.769 (.219)	3.101 (.220)	.608	As $p > .05$ , there exists a non significant negative relationship.
	Trend Value	-8.120	-1.761 (.220)			
Cantabil Retail India Ltd.	Intercept	-4.023	-.001 (.999)	.000 (.989)	.000	As $p > .05$ , there exists a non significant positive relationship.
	Trend Value	.036	.014 (.989)			
Future Enterprises Ltd.	Intercept	3309.633	1.077 (.300)	1.129 (.306)	.075	As $p > .05$ , there exists a non significant negative relationship.
	Trend Value	-1.625	-1.063 (.306)			
Provogue (India) Ltd.	Intercept	-4974.511	-2.567 (.028)	6.735 (.027)	.402	As $p < .05$ , there exists a positive and significant relationship.
	Trend Value	2.501	2.595 (.027)			
Shoppers Stop Ltd.	Intercept	6452.537	1.890 (.088)	3.499 (.091)	.259	As $p > .05$ , there exists a non significant negative relationship.
	Trend Value	-3.176	-1.871 (.091)			
V 2 Retail Ltd.	Intercept	3607.542	.495 (.634)	.241 (.637)	.029	As $p > .05$ , there exists a non significant negative relationship.
	Trend Value	-1.779	-.491 (.637)			

Source: Same as in Table 1.2

**Table: 1.12 Growth Analysis (Shares Deliverables) –Company Wise**

Companies	Regression parameter	Regression estimates	t-statistic (p-value)	F-Statistic (p-value)	R2	Remarks	EAGR
Aditya Birla Fashion & Retail Ltd.	Intercept	250.845	1.789 (.216)	3.092 (.221)	.607	As $p > .05$ , there exists a non significant negative relationship.	-12.2%
	Trend Value	-.122	-1.758 (.221)				
Cantabil Retail India Ltd.	Intercept	6.501	.079 (.940)	.001 (.979)	.000	As $p > .05$ , there exists a non significant negative relationship.	-0.1%
	Trend Value	-.001	-.028 (.979)				
Future Enterprises Ltd.	Intercept	162.616	2.255 (.042)	4.857 (.046)	.272	As $p < .05$ , there exists a significant but negative relationship.	-7.9%
	Trend Value	-.079	-2.204 (.046)				
Provogue (India) Ltd.	Intercept	-97.783	-2.374 (.039)	6.102 (.033)	.379	As $p < .05$ , there exists a positive and significant relationship.	5.1%
	Trend Value	.051	2.470 (.033)				
Shoppers Stop Ltd.	Intercept	107.899	1.436 (.182)	1.907 (.197)	.160	As $p > .05$ , there exists a non significant negative relationship.	-5.2%
	Trend Value	-.052	-1.381 (.197)				
V 2 Retail Ltd.	Intercept	37.670	1.129 (.341)	1.014 (.388)	.253	As $p > .05$ , there exists a	-1.7%

	Trend Value	-.017	-1.007 (.388)			non significant negative relationship.	
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Source: Same as in Table 1.2

The result of Trend Analysis as well as EAGR is shown below in **Table 1.13**:

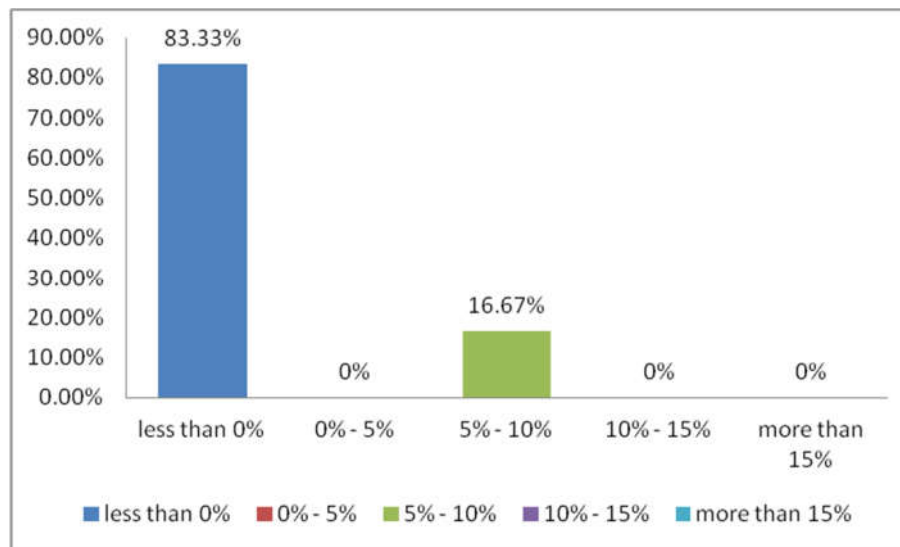
**Table: 1.13 Frequency of Growth Analysis (Shares Deliverables) –Company Wise**

EAGR	Frequency	Percent
less than 0%	5	83.33%
0% - 5%	0	0%
5% - 10%	1	16.67%
10% - 15%	0	0%
more than 15%	0	0%
Total	6	100.00%

Source: Same as in Table 1.2

The results in **table: 1.13** and **figure: 1.4** indicate that 83.33% of the firms have negative growth rate in the Shares Deliverables for the selected firms, more than 16% of the firms are having growth rate more than 5% per year. The firms with the highest growth rate of Shares Deliverables as indicated in **table: 1.12** are found to be Provogue (India) Ltd. (5.10%).

Similarly the results also indicate the firms with highest negative growth rate of Shares deliverables are Aditya Birla Fashion & Retail Ltd. Ltd( -12.20%) , Future Enterprises Ltd.(- 7.9%), Shoppers Stop Ltd. (-5.20%) and V2 Retail(-1.7%).The results are also shown in graphical form below in **Figure 1.4**.



**Figure: 1.4- Frequency of Growth Analysis (Shares Deliverables) –Company Wise**

#### e) Trend Analysis and Growth Rate (EAGR)

In the research study the long term trend in the Total Return of selected firms is calculated. In the selected period of 15 years (2001-2015) the Total Return of the companies changes as per their business performance. However in the long run it is expected that the Total Return of the company should increase. In the study, the long term trend as well as the exponential annual growth rate of selected firms with respect to their Total Return is calculated with the help of Regression Model shown below

$$TR = \alpha + \beta * Time + \varepsilon_t \dots\dots\dots(9)$$

$$\log(TR) = \alpha + \beta * Time + \varepsilon_t \dots\dots\dots(10)$$

In the above stated equation numbered as (9), the Beta i.e the Slope Coefficient symbolises the long term mannerism/behaviour of the Total Return for the selected firms. Beta (the Slope Coefficient) can thus be a representation of the rate at which the Total Return changes in a firm in the span of an year. In the regression model, the t-coefficient of the slope of coefficient (Beta) tests the null hypothesis. “In the Total Return of the firms, an inconsiderable/insignificant long term trend has been found to exist” or it can be mentioned that Time has no effect on the firm’s Total Return. In the regression model, the p-value of the t-statistic lesser than 5% level of significance results in rejection of the null hypothesis.

Similarly in the equation (10), the Slope Coefficient represents the calculated value EAGR of the Total Return of the firm. Equation (10) is also known as Semi Log Model which is used to calculate rate of growth of the dependent variable. In the regression model, the t-statistic (eqn.no.10) test the null hypothesis that the rate of growth is inconsiderable statistically. In the regression model, the p-value of the t-statistic lesser than 5% level of significance results in rejection of the null hypothesis with 95% confidence level.

The result of Trend Analysis as well as EAGR is shown below in **Table: 1.14** and **Table: 1.15**:

**Table: 1.14 Trend Analysis (Total Return) –Company Wise**

Companies	Regression parameter	Regression estimates	t-statistic (p-value)	F-Statistic (p-value)	R2	Remarks
Aditya Birla Fashion & Retail Ltd.	Intercept	2578.808	.747 (.533)	.558 (.533)	.218	As $p > .05$ , there exists a non significant negative relationship.
	Trend Value	-1.279	-.747 (.533)			
Cantabil Retail India Ltd.	Intercept	191.801	.233 (.825)	.054 (.825)	.011	As $p > .05$ , there exists a non significant negative relationship.
	Trend Value	-.095	-.233 (.825)			
Future Enterprises Ltd.	Intercept	241.576	.718 (.485)	.509 (.487)	.035	As $p > .05$ , there exists a non significant negative relationship.
	Trend Value	-.120	-.713 (.487)			
Provogue (India) Ltd.	Intercept	-58.367	-.156 (.879)	.025 (.877)	.003	As $p > .05$ , there exists a non significant positive relationship.
	Trend Value	.030	.159 (.877)			
Shoppers Stop Ltd.	Intercept	-301.714	-.871 (.404)	.762 (.403)	.071	As $p > .05$ , there exists a non significant positive relationship.
	Trend Value	.150	.873 (.403)			
V 2 Retail Ltd.	Intercept	344.941	.646 (.536)	.414 (.538)	.049	As $p > .05$ , there exists a non

	Trend Value	-1.71	-.491 (.637)			significant negative relationship.
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Source: Same as in Table 1.2.

**Table: 1.15 Growth Analysis (Total Return) –Company Wise**

Companies	Regression parameter	Regression estimates	t-statistic (p-value)	F-Statistic (p-value)	R2	Remarks	EAGR
Aditya Birla Fashion & Retail Ltd.	Intercept	1106.496	29.754 (.021)	883.640 (.021)	.999	As $p < .05$ , there exists a significant but negative relationship.	-54.9%
	Trend Value	-.549	-29.726 (.021)				
Cantabil Retail India Ltd.	Intercept	-875.616	-4.014 (.155)	16.116 (.155)	.942	As $p > .05$ , there exists a non significant positive relationship.	43.5%
	Trend Value	.435	4.015 (.155)				
Future Enterprises Ltd.	Intercept	51.297	.268 (.794)	.071 (.795)	.007	As $p > .05$ , there exists a non significant negative relationship.	-2.5%
	Trend Value	-.025	-.267 (.795)				
Provogue (India) Ltd.	Intercept	-48.105	-.180 (.863)	.033 (.862)	.005	As $p > .05$ , there exists a non significant positive relationship.	2.4%
	Trend Value	.024	.181 (.862)				
Shoppers Stop Ltd.	Intercept	-346.545	-.963 (.373)	.928 (.373)	.134	As $p > .05$ , there exists a non significant positive relationship.	17.2%
	Trend Value	.172	.963 (.373)				



V 2 Retail Ltd.	Intercept	-1.489	-.008 (.994)	.000 (.990)	.000	As $p > .05$ , there exists a non significant positive relationship.	1%
	Trend Value	.001	.014 (.990)				

Source: Same as in Table 1.2

**Table: 1.16 Frequency of Growth Analysis (Total Return) –Company Wise**

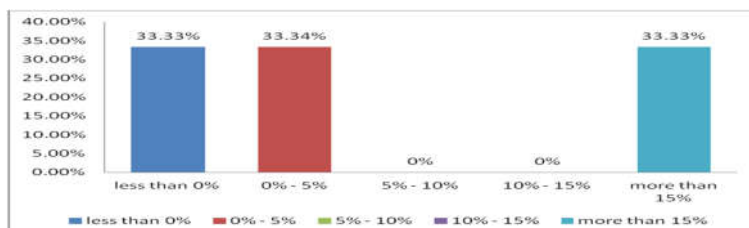
EAGR	Frequency	Percent
less than 0%	2	33.33%
0% - 5%	2	33.34%
5% - 10%	0	0%
10% - 15%	0	0%
more than 15%	2	33.33%
Total	100	100.00%

Source: Same as in Table 1.2

The results in **table: 1.16** and **figure: 1.5** indicate that 33.% of the firms have negative growth rate in the Total Return for the selected firms, more than 33% of the firms are having growth rate more than 15% per year. The firms with the highest growth rate of Total Return as indicated in **table: 1.15** are found to be Cantabil Retail India Ltd. (43.50%), Shoppers Stop Ltd. (17.20%).

Similarly the firms with lowest but positive annual growth rate are Provogue (India) Ltd. (India) Ltd (2.4%) and V2 Retail Ltd.

Similarly the results also indicate the firms with highest negative growth rate of Total Return are Aditya Birla Fashion & Retail Ltd. Ltd(-54.90%) and Future Enterprises Ltd.(-2.5%). The results are also shown in graphical form below in **Figure: 1.5**.



**Figure: 1.5- Frequency of Growth Analysis (Total Return) –Company Wise**

### **Summary and Conclusion**

India's share of organised retailing is ranging around 6-7%. Ample opportunities are available in the organised retail sector. Out of the selected companies in organised retail sector, the result of Trend and Growth Analysis shows that Future Enterprises Ltd. has achieved maximum growth rate in terms of Profit After Tax, Aditya Birla Fashion & Retail Ltd in terms of Closing Price and Price to Book Ratio, Provogue (India) Ltd. in terms of Shares Deliverables and Cantabil Retail India Ltd. in terms of Total Returns. Thus, the Indian Retail Industry is on the growth and never ending development path. Number of listed retail sector companies is now getting increased with upgraded technology, managerial expertise, enhanced portfolio etc.

### **Limitations of the Study and Scope for Further Research**

The information used in the present paper is primarily from recent annual statistics available to the public that may also include missing data. Due to time constraint we have taken only five parameters. However, an attempt has been made to present the relevant and latest available data regarding financial performance of retail sector companies in India. Now-a-days, most of the developed and developing countries in the world have regarded Retail Industry performance analysis as an important theme and a key towards balanced growth of the economy as the ultimate consumer is getting the goods manufactured through retail outlets only. There is a scope for further research to investigate the impact of other financial variables to analyse the financial performance of more listed retail sector companies in India. This will help in better understanding of the financial performance of retail sector companies.

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