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# A STRATEGIC PROFIT MODEL TO MEASURE INDIAN APPAREL RETAIL PERFORMANCE

SELVARASU A., (I), FILIPE J. A., (P), FERREIRA M. A. M., (P), PEDRO M. I., (P)

Abstract. The strategic profit model (SPM) has been used to measure the performance of three Indian retail companies that focus in apparel. In the study three companies have been chosen to represent three groups of companies viz., large, medium and small corporate. In the case of large size, medium size and small size corporate, Pantaloon retail is considered with a turnover of Rs.3,031 crores, Shoppers' stop retail with a turnover of Rs.849 crores and Provogue with a turnover of Rs.228 for the year 2007 have been included for the study, respectively. In order to find out the suitable strategies for the companies in the categories, the comparison has been done with its best performance as well as the indicators in relation to peer averages. The ROA has been noticed around 5 percent and the study attempt to reveal the appropriate strategy to increase it by 10 percent. The study has been carried out to indicate suitable strategies to maximize the performance in the future years for Indian apparel retail sector in line with the measure of RONW.

**Key words:** Retail strategy, competitiveness, Strategic Profit Model

#### 1 Introduction

Indian textile industry is one of the largest sectors in Indian economy in terms of its contribution to foreign exchange earnings and employment. It has been estimated that one out of every six households in India is directly or indirectly dependant on this sector. It contributes about 14 percent to industrial production, 9 percent to excise collections, 18 percent of employment in industrial sector around 16.63 percent to foreign exchange earnings and 4 percent to GDP of India. This sector employs more than 35 million people and is the second largest employer in the country after agriculture. The per capita consumption of cloth in India is Rs. 1,391 for the year 2006.

In India, the retail industry contributes about 10% to national GDP and 8% towards employment. The share of rural market accounted for 55% of total retail market in 2006. India is the fourth largest economy in terms of Purchase Power Parity. It is expected to be the third largest

economy in terms of PPP behind U.S.A. and China by 2010. According to the reports of Images Retail Study 2007 and FICCI Research 2007, Indian retail market caters to be 2<sup>nd</sup> largest markets in India. The total size of Indian retail market is about Rs 10, 63,800 crore out of which organised retail sector enjoys a small share of around 4.6% which is Rs 48,934.8 crore in value terms. It is estimated that organised retail sector is expected to contribute about 22% to total retail market over Rs 3, 70,500 crore by 2010. As per the recent study on city wise size of retail market, top 6 cities in India accounted for 66% of the total organised retail sales. As per Merrill Lynch India Retail Report March 2007, textile and apparel sector enjoys a major share in Indian organized retail industry which is around 39%.

#### 1.1 Need for the study

Increasing organized apparel retail market results in more competitive situation among Indian companies, which makes top management of the respective companies to think how to curb upon increasing excessive expenditure without disturbing the rising sales for enhancing profit curve. At the same time, they have to keep in mind about the interest of shareholders also. A company performance is measured in terms of their effective allocation of available resources for increasing the value of their shareholders. In other words, measurement of company's Return on Asset (ROA), cash flow and Return on Networth (RONW) reflects financial soundness and overall performance of the company. These acts a indicator upon which top management generally considers for drafting futures strategies. A company's profit performance is determined by the profit earned in relative to the capital invested. In this direction, there is need to study Indian apparel retail sector at three levels spread across small, medium and large companies.

#### 1.2 Objective of the study

In accordance with strategies of the Indian apparel retail companies in the categories of small, medium and large, four objectives have been set as below;

- 1. To draw the interrelationship of various retail financial indicators of companies for the year 2007
- 2. To compare the retail financial ratio used for establishing SPM for three years from 2005 to 2007
- 3. To analyze the deviation of COGS, total expenses and current assets from its peer average for the year 2005(bench mark-the best performance so far) and its peer average for the year 2007
- 4. To suggest measures to maximize ROA by 10% as target upon ROA for the year 2007 focusing change in sales, COGS, expenses, inventory etc.

#### 2 Review of literature

A company's which keeps in mind the interest of their shareholders and perform accordingly, exercise a huge inflow of capital from the investors. A value created by the company towards its share holders helps decision makers in drafting and implementing certain strategies as it is considered as one of the best metric of performance. To measure value created by the company for

there share holders and stake holders along with performance of the company certain methods are used .They are as Customer Satisfaction and customer value added (CVA), Strategic Profit Model (SPM), Economic value -added (EVA), Profitability Analysis, Total cost analysis, Market valueadded (MVA) and Balance Scorecard. The review of studies pertinent to application of SPM model has been presented. Mackay (1992) has studied firm's financial road map which leads to profitability. In this paper, SPM has been applied to study the profit performance of the firm. Koenig, Harold F. (1994), has taken SPM as a example regarding presenting in a easy alternative form using Hypermedia to make marketing class an attractive one. Lambert, Douglas M, Renan, Burduroglo (2000) has discussed the significance of logistics in measuring and selling the value provided to customers along with the impact assessment of customer satisfaction and customer value -added for achievement of higher shareholder value using SPM. Andrew Stapleton, Hanna, Joe B, Steve Yagla, Jay Johnson, Dan Markussen (2002) has applied SPM to six different firm ( Nike, Adidas, Fila, Reebok, Converse & K-Swiss) in the footwear industry to provide an insight by offering a predictive ability to the logistics manager of each firm to improve upon ROA using SPM. Evas, R.Joel (2005) has studied the performance of large retailers of U.S. from 1982-2001 using SPM. N. Viswanadham and Poornima Luthra (2005) have studied the performance in terms of measuring and creation of shareholder value of four players in the IT industry using SPM.

#### 3 Research Methodology

Decision without use of any proper technique can result to the adaptation of irrelevant approach to a particular strategy. Thus, a suitable tool of retail finance viz., SPM is used study the indicators affecting company's growth and reputation. Our study is focused on measuring the performance of retail companies focusing on apparel. For this purpose, three companies have been selected representing three different levels as small, medium and large based on the turnover. These companies occupy a unique position in their categories.

In case of large category of companies, Pantaloon India (Retail) Ltd. founded by Mr. Kishoreji Biyani in 1987 has been selected for the study. It is the flagship company of the future group headquartered at Mumbai. In the year 1992, IPO (Initial Public Offering) was made. Its 1st outlet was opened at Kolkata in 1997. It operates with multiple formats i.e. value and lifestyle segments of the Indian consumer market. Company has over 7 million sq. ft. retail spaces comprising of more than 1000 stores across 51 cities providing employment to over 25000 people. Company has been awarded with many distinguished awards and honors. It was awarded as the International Retailer of the Year 2007 by the US-based National Retail Federation (NRF) and the Emerging Market Retailer of the Year 2007 at the World Retail Congress held in Barcelona. Some of its leading retail formats includes Pantaloons, Big Bazar, Central, Fashion station, aLL, Depot, Brand Factory, an online portal futurebazzar.com etc. Future Group's vision is to, "deliver Everything, Everywhere, Every time to Every Indian Consumer in the most profitable manner." The group considers 'Indian-ness' as a core value and its corporate credo is - Rewrite rules, Retain values. Turnover of the company in 2007 was about 3,031.44 crores

In case of medium category of companies, Shopper's Stop Ltd. founded by K.Raheja Corp. Group (L.Charu Chandra Group) in 1991 has been identified for the study. It is headquartered at Mumbai. Shopper's Stop Ltd. is India's largest retail chain of departmental stores having 20 Shoppers' stop and 2 Home Stop covering an area over 1.1 million sq. feet across 11 cities. These stores offer more than 200 different and finest national and international brands. They attract more than 19.95 million shoppers every year with more than 54,000 footfalls everyday. Company made

its IPO (Initial Public Offering) in 2005. It is the only Indian member of the Inter Continental Group of Department Stores (IGDS) along with 29 other experienced retailers from all over the world. Company has been awarded with many distinguished awards and honour. In 2006, it was awarded as "Retailer of the Year – Department Store" at Images India Retail Forum (2006). Turnover of the company in 2007 was about 846.31 crores.

In case of small category, Provogue (India) Ltd. formerly Acme Clothing Private Ltd. founded by Nikhil Chaturvedi and Deep Gupta in 1997 has been included as representative sample of study. It is headquartered at Mumbai. The Company launched the fashion brand 'Provogue' in March 1998. It operates over 100 Provogue stores and shop in shop across 56 cities and Promart stores which offers more than 100 brands in apparel as well as home furnishings and accessories at discounted price round the year. In 2007, first Promart store was opened in Ahmadabad covering an area of around 40,000 sq. feet. Provogue brand was ranked 5<sup>th</sup> amongst brands in all categories in a national customer loyalty survey conducted by Business World in 2006. Company's vision is to evolve Provogue as retail-centric group of branded business focused on customer needs. Turnover of the company in 2007 was 228.27 crores.

In order to draw the interrelationship of various retail financial indicators of companies for the year 2007, the values have been extracted from company's published income and expenditure statement, balance sheet, schedules of income and expenditure and annual reports for the year 2005-06 and 2006-07. In addition, the retail financial values have been obtained for three years from 2005 to 2007. It is understood from the annual report of the companies in this sector that the performance of all the companies have been reported as exemplary in the year 2005 and hence the values of the same year is considered as benchmark for the study in terms its actual and peer average. The retail financial ratios have been used for establishing SPM for three years from 2005 to 2007 in all three categories. In the pursuit of identifying strategies, the deviation financial values of COGS, total expenses and current assets have been analyzed for all three companies from its peer average for the year 2005 and its peer average for the year 2007. As a measure of prediction to maximize ROA by 10% as target upon ROA for the year 2007 'what if' analysis goal seek option have been used focusing change in sales and its corresponding change in COGS, expenses, inventory etc.

#### 3.1 Strategic Profit Model (SPM)

The strategic profit model is used to study the performance of the Indian apparel retail companies with peer averages as benchmarks. According to Oxford Dictionary benchmarking refers to setting a standard point of reference with which other points can be compared and thus evaluated. Benchmarking is systematic process of searching for innovative, effective and operative ideas and procedures to fuel the growth line improving upon performance capability. It enables an organization in readdressing their strategies through comparison of their key performance with their competitors and other industry leaders. Generally companies take financial performance measures as their key performance. It helps top management in taking right decision at the right time to improve their bottom line. These financial performances have been estimated from balance sheet, Profit and loss a/c and cash flow statements.

Performance of retail companies is measured by the use of Strategic Profit Model (SPM). Strategic profit model is the result of subsequent research formularization of DuPont model, useful system of analysis of which considers important inter-relationships based on the information found in financial statements. It explains how RONW is dependent on other functions factors .i.e. financial leverage, ROA (net profit margin (%) x asset turnover ratio). Financial leverage provides a

relationship between total equity of the firm with the total investment made by the shareholders. Financial leverage measures how effectively a firm is using an outside fund for its operation to increase firm's RONW whereas ROA measures how much profit is being returned by the investment made in the asset.

SPM involves the application of ratio analysis method for the calculation of Net profit margin, asset turnover, financial leverage, ROA and RONW for which required data is obtained from financial statement of the firm available publicly. In other words

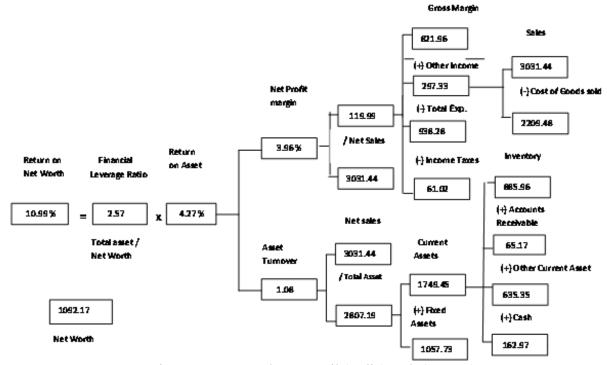


Figure No-1:Pantaloon Retail (India) Ltd. (Rs. Cr.)

Individual firm performance is measured in terms of ROA and RONW by comparing it with other firm's performance.RONW measures how effectively a firm is using shareholders investment. In other terms, it measures the value which is being created by the firm for its shareholder. **Figure 1** provides an outline of the available SPM model which consist of financial leverage and ROA which further consist of two parts .i.e. net profit margin (%) and asset turnover (%). Net profit margin tells at what rate a firm is earning a profit on the sales and also how effectively a company is manufacturing and selling its products and services. Net profit is calculated after deduction total operating expenses and income tax from gross sales which is obtained after deducting cost of goods sold from the net sales. Net sales means sales obtained after the payment of excise duty and other taxes such as Sales tax and VAT. This information has been obtained from the company's Profit and Loss a/c. While asset turnover ratio indicates number of times total asset is being used for

generating sales in a year. It is calculated by dividing net sales by total asset. Further total asset is divided into fixed asset and current asset. Fixed asset is a tangible long lived resources used for producing goods and services whereas current asset is generally converted into cash during the operating cycle of the firm. These information can easily be obtained from the company's balance sheet. SPM is used for comparing firm's performance with the peer average. Thus helping in taking strategic decisions for improving upon required component/ areas to achieve desired ROA and RONW. RONW of the company can be increased by applying certain changes. The strategies are focused in such way to attempt decreasing financial leverage and increasing ROA. Similarly ROA can be increased through implementation of increasing sales and other income sources on one hand and decreasing cost of goods sold, operating expenses and income taxes, inventory, accounts receivable, cash and other current asset on the other.

#### 3.2 Assumptions

The study encompasses various levels of apparel retail in the context of Indian market in which there are value segment and lifestyle segments promoting apparel as separate entity and also as assortments. In the process of extracting data for the study, there are specific methods of adjusting the data have been done. The ways and means of obtaining data from financial statements is altered based on the type of auditing and reporting formats of annual reports. The following are the specific assumptions proposed for all the three companies in Indian apparel business.

- 1. In case of Pantaloon Retail India Ltd., financial data has been extracted from company's annual report 2005-06 (Pg. No. 86, 87, 93, 94 & 95) and 2006-07 (Pg.No.62, 63, 70 & 71) respectively. The net sales is obtained after adjusting for excise duty, sales tax and VAT and the other operating income is included for obtaining total value of other income. In the case of total expenses, the personal costs, manufacturing & other costs, financial charges and depreciation have been included.
- 2. In case of Shopper's Stop Ltd., financial data has been extracted from company's annual report 2005-06 (Pg. No. 60, 61, 71 & 72) and 2006-07 (Pg. No. 68, 69, 79 & 80). The net sales has been obtained after adjusting the own merchandise, consignment merchandise for VAT and sales tax. The other income is adjusted for other retail operating income as in the case of large companies in apparel as above. The COGS has been adjusted with the cost of consignment merchandise. The total expenses have been adjusted for employee cost, operating and administrative expenses, interest, financial charge, depreciation and amortisation.
- 3. In case of Provogue (India) Ltd., financial data has been extracted from company's annual report 2006-07(Pg. No.62, 63, 71 & 72) and 2005-06 (Pg. No. 60, 61, 68 & 69). The net sale has been obtained after adjusting the gross sales for excise duty and sales tax. The other income has been arrived after adjusting export benefits, incentives, gain on foreign exchange fluctuation, royalty income and other income. The cost of goods sold has been adjusted for increase in stock.
- 4. All the Investments are considered as a long term investment. It is also assumed that income taxes and fixed asset remains that same.
- 5. Since cost of goods sold, total expenses, account receivable and inventory are independent variable where as sales is a dependent variable, an increase in sales will result in increase in these variables also. So, to calculate effect on these variables, it is assumed that this variable remains constant percentage of the sales through out the period.

- 6. It is also assumed that all variable will remain constant, when a variable other than sales is calculated to achieve the desired ROA % using what if analysis tool.
- 7. It is assumed for that total expenses include both variable and fixed expenses. As it is difficult to differentiate among them due to terminology used to define them differs from company to company.
- 8. Peer average performance is considered as the average industry performance to facilitate research process.

#### 3.3 Limitations

- 1. General economic conditions, competition, local factors and policy adopted by the management affect financial results of the company or business. Thus, any change in ratio or other financial indicators must be considered with the above factors while taking any decision.
- 2. Sample size for the study is restricted with three companies in their respective categories .i.e. large, medium and small due to non availability of valid financial data source as there is limited no. of players in Indian organised apparel retail sector.
- 3. Any interpretation about the financial conditions and performance of the firm is a result of correct diagnosis of the study of combined effect of the various financial indicators in the SPM not alone.
- 4. Financial indicators analysed in the SPM are only the preliminary steps in interpretation which helps a business in drawing attention towards the area which requires further analysis and investigation.
- 5. This model does not tell how to increase or decrease various financial factors like COGS, sales, expenses, cash, account receivable etc.
- 6. Research provides only the suggestions to improve company performance.

#### 4 Analysis and interpretation

The retail financial indicators have been used for the purpose of understanding the strategic focus of the companies in apparel business in India. The retail financial performance of the companies has been compared for the period of three years from 2005 to 2007as intra company comparison. Similarly, the retail financial performance has been compared with its peer average as best performance in the history of their business which is for the year 2005 and the same is also compared for the current year peer average for the year 2007. The results of the retail financial performance have been presented for Pantaloon, Shoppers' stop and Provogue under separate sections.

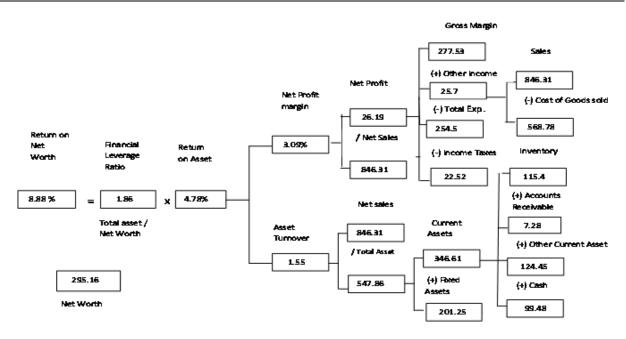


Figure No – 2: Shopper's Stop Ltd. (Rs. Cr.)

## 4.1 Interrelationship of various financial indicators of Indian apparel companies for the year 2007 (Table No.2)

The financial indicators of the companies in large, medium and small categories have been drawn for Pantaloon (large), shoppers' stop (medium) and Provogue (small). Profit margin of Provogue (8.59%) is much higher in comparison to Pantaloon (3.96%) and Shopper's Stop (3.09%) indicating Provgue management effectiveness to curb upon the manufacturing and other operating expenses to increase their bottom line. But at the same time Provogue is facing a problem in generating enough sales from the investment made in their asset. Asset turnover of Provogue (0.62) which tells that firm is able to generate only 62 paise from the Re 1 investment made in the asset is much below accepted level indicating that firm is facing problems like excess stock, high account receivable due to lenient credit policy, unused cash, idle or improperly used assets etc. But Shopper's Stop is the leader in generating sales from the all the financial resources committed by it indicating high asset turnover ratio (1.55) result of better asset management by the company. Pantaloon is also generating enough sales to cross the accepted level of asset turnover ratio (1.08). As, high profit margin able Provogue to generate enough profit from the investment made in the total asset. Lowering the effect of their low asset turnover ratio which acts as a retarding force for accelerating ROA. Provogue is the leader in earning profit from their asset i.e. ROA (5.33%) followed by Shopper's Stop (4.78%) whose better sales generation from the asset acts as an energizer for strengthening profit margin. Thus ROA while on the other side Pantaloon in spite of having decent profit margin is not able to generate better sales from their asset all though above accepted level resulting in lowering ROA (4.27%). Higher leverage ratio indicates that more asset generation or acquisition through debt .Company's aggressiveness in utilizing debt for the generating asset.. Pantaloon with their aggressive policy of generating or acquiring more asset from the debt lead to have highest leverage ratio (2.57) followed by Shopper's Stop (1.86) and Provogue (1.40). It tells that big, medium and small company are generating or acquiring Rs 2.57, Rs 1.80 and Rs. 1.40 respectively for every Rs.1in the net worth. This further affects their RONW.

Pantaloon with high leverage ratio and low ROA is the leader company in providing maximum value to their share holders. It also tells about Pantaloon's management effectiveness regarding the use of resources by the owners for maximizing shareholders and owner's welfare. But Provogue in spite of having high ROA is not able to achieve high RONW due to its low leverage ratio. Shopper's Stop RONW is the second highest among the sample due to its decent ROA and consistent policy of generating or acquiring asset through debt for viable use. Thus for the large, medium and small companies, RONW is 10.99%, 8.88% and 7.46%, respectively. Further figure 2, would provide further details of financial indicators performance for 2007.

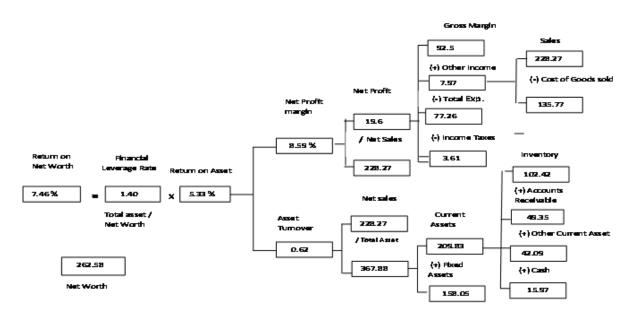


Figure No – 3: Provogue (India) Ltd. (Rs. Cr)

## 4.2 Comparing the financial ratio used for establishing SPM for three years from 2005 to 2007(Table No.1)

Financial ratio is used as an index and yardstick for evaluating the financial position and performance of the firm. It helps in analysis for making qualitative judgments about the company's financial position and performance. Financial ratios which have been used for establishing SPM are net profit margin (%), asset turnover ratio, return on asset (ROA), financial leverage and return on net worth (RONW). The description of retail financial indicators has been presented for Pantaloon, shoppers' stop and Provogue separately.

#### 4.2.1 Pantaloon Retail Ltd.

Net Profit margin (%) has been decreased by 3.63% in 2006 along with low generation of sales from the asset as a result of which asset turnover ratio is lowered by 18.02%. as a combined effect of these indicators is seen on ROA and financial leverage which also is further decreased by 21.00%. and 11.43% respectively. Since RONW is dependent on ROA and financial leverage, it is also decreased by 30.02%. All these changes indicates that company's cost of goods sold and other operating expenses has been increased rapidly in proportion to sales .Pantaloon has idle or

improperly used assets which increases the need for costly financing and expenses for maintenance and up keeping .

In 2007, net profit margin shows a positive sign with an increment by 8.49% .But Pantaloon is not able to sustain the effect of this change on other factors also. Asset turnover ratio is further lowered by 13.93%. Increment in net profit margin is over ridden by lowering asset turnover ratio as a result of which ROA is further lowered by 6.62% along with financial leverage by 3.38%, thus lowering RONW by 9.78%. As company's RONW is falling that indicates that company is borrowing more money for the expansion of their retail operations followed by the under utilization of it in generating asset. Company should improve RONW by getting rid of excessive and idle asset. Thus investing that fund for other purposes like implementation of cost reduction techniques, expansion, paying advances to suppliers to avail maximum purchase benefit etc.

#### 4.2.2 Shopper's Stop Ltd.

In 2006, net profit margin increased by 9.65% but asset turnover ratio showed a downward trend lowering it by 22.1% .As a result of which ROA is declined by 14.59%. Financial leverage is also declined by 41.45% indicating that company is not generating enough amounts of assets from the money borrowed by them which in term reduces their RONW by 50%.

In 2007, net profit margin declined by 27.52% indicating an increase in COGS and other operating expenses. On the other hand, Shopper's Stop management gave importance to management of their asset which resulted in a marginal increment of asset turnover ratio by 0.52%. But this marginal increment is sufficient enough to increase ROA. Resulting in a decline of 27.12% in ROA indicating that profit generated from the investment made in asset is reduced to 4.78 from 6.56. Financial leverage increased by 21.27 % pointing towards proper management of the investment made in the asset .It is not enough to increase RONW which registered a negative growth of 11.62%. Company should improve RONW by improving upon their operating expenses such as selling, distribution etc which acts as a barrier in facilitating net profit growth and avoid holding unnecessary cash balance.

#### 4.2.3 Provogue India Ltd.

A tremendous increment .i.e.22.22 % in net profit margin in 2006 marked Provogue followed by a tremendous decline in asset turnover ratio by 33.81% indicating about ineffectiveness of the management in handling asset. Company might be facing problems like high stock carrying, slow debt collection, high capital blocked in fixed asset etc. which acts a dominating force further affecting ROA and financial leverage by 18.85% and 18.06% respectively effecting RONW which registered a negative growth by 33.31%.

Year 2007 embarks net profit margin with an increment of 7.24% indicating company's management effectiveness in curbing upon COGS and other operating expenses But Company's ineffectiveness regarding managing their asset put increment of net profit margin in vain which lowers asset turnover ratio by 20.31% which further affected ROA and financial leverage ratio. Both registered a negative growth of 14.54% and 20.42% respectively which affected RONW by 31.99% adversely. Company should improve RONW by effectively managing their assets by avoiding high stocks, slow debt collection, not availing unlimited credit, blocking capital in fixed and idle or unused asset

# 4.3 To analyze the deviation of COGS, total expenses and current assets from its peer average for the year 2005(bench mark-the best performance so far) and its peer average for the year 2007

In every business, the concept of increasing return on asset (ROA) can be achieved by improving upon two factors .i.e. profit maximization (increasing sales and sustaining expenses) and reduction in unutilized asset. In year 2005, ROA performance of Pantaloon, Shopper's Stop and Provogue was a bench mark performance so far. Peer group average performance for year 2005 is far than year 2007. There is drastic increase in expenses, followed by other income sources and assets embarking up rising top line figures from 2005 to 2007. Industry average(peer average) for items/sales has significantly increased by .i.e. COGS (3.35%), other income (157.5%), expenses (5.55%), account receivable (37.5%), inventory (17.50%), cash (346.50), other current asset (19.35%) whereas sales (155%). In spite of increase in sales, companies are not able to reach or cross the bench mark level performance. This deviation plays a major role in determining the strategies for enhancing the performance of various financial indicators to achieve the desired level of performance. Each sample has been examined separately. Here each item of individual sample is expressed as percentage of sales and then compared for year 2005 & 2007. To study deviation of items .i.e. COGS, expenses and current asset between bench mark year (2005) and current year (2007) difference between company's individual item/sales(%)of year 2005 v/s 2007 and peer average of 2005 v/s 2007

#### 4.3.1 Pantaloon Retail Ltd.

Pantaloon sales have increased by 182.1% but other expenses and current asset rises unproportional. From year 2005 to 2007 changes in items/sales(%) are as follows: COGS by 5.62%; other income by 166.30%; expenses by 5.56%; inventory by 7.86%; account receivable by 77.69%; cash by 176.30%; and other current asset by 126.60%. At the same time when these items are compared among the peer average of year 2005 and 2007 certain difference in items has been noticed. They are as follows: COGS by 2.48%; other income by 2.67%; expenses by -0.65%; account receivable by 40.36%; inventory by -7.53%; cash by 44.42%; and other current by -3.07%. Here increment in any item is referred to an increase in that item in respect to share of difference between actual item/sales (%) v/s peer average value of current year and actual item/sales (%) v/s peer average value of previous year

#### 4.3.2 Shopper's Stop Ltd.

Shopper's Stop sales have increased by 73.18%. From year 2005 to 2007 changes in items/sales(%) are as follows: COGS by -4%; other income by 89.44%; expenses by 9.94%; inventory by 16.08%; account receivable by 62.26%; cash by 5,775%; and other current asset by 8.72%. At the same time when these items are compared among the peer average of year 2005 and 2007 certain difference in items has been noticed. They are as follows: COGS by -7.5%; other income by -69.86%; expenses by 4.27%; account receivable by 62.18%; inventory by -2.32%; cash by 702.21%; and other current by 14.73%.

#### 4.3.3 Provogue (India) Ltd.

Provogue sales have increased by 107.12%. From year 2005 to 2007 changes in items/sales(%) are as follows: COGS by -4.16%; other income by -32.84%; expenses by -1.08%; inventory by 35%; account receivable by 19.44%; cash by 278.37%; and other current asset by 6.40%. At the same time when these items are compared among the peer average of year 2005 and 2007 certain difference in items has been noticed. They are as follows: COGS by -8.5%; other income by -190.34%; expenses by 5.66%; account receivable by -1.8%; inventory by 8.94%; cash by 14.84%; and other current by -41.91%.

#### 5. Recommendation to increase ROA 10%

#### 5.1 Pantaloon Retail India Ltd.

Basic strategies that Pantaloon's management can apply are increase sales, increase other income sources, reduce cost of goods sold, reduce expenses, reduce inventory, reduce account receivable and/or reduce cash and other current asset. It is assumed that they desire to increase ROA by 10% keeping parallel to targeted growth of India's GDP. SPM model has been applied independently to various factors like sales; COGS, etc. study the various changes independently. To achieve a 10% increase in the ROA, Pantaloon management would have to increase sales by 12.88%. To achieve this sale, company would have to corresponding increase its cost of goods sold (COGS); expenses; inventory; other income sources; account receivable; cash and other current asset. As a result of which net profit remains the same time asset turn over ratio increase helping ROA to increase by 10%.

Next strategy is to increase other income sources, assuming all remain same .Other income sources have to be increase by Rs 11.95 cr (4.02%). As company's other income sources are above of peer average. It is not possible to increase it. It might divert the attention of the firm from its regular business course. It is only a short term gain followed by long term diversion of business.

Another strategy is to reduce cost of goods sold (COGS) and expenses, assuming all remains the same. Then COGS is to be reduced by Rs.11.94 cr (0.54%) to achieve an increase in ROA by 10%. Likewise, if an expense is reduced by Rs.11.95 cr (1.27%) same result can be achieved. Reducing COGS and expenses simultaneously by Rs 11.95 cr would be another better way to increase ROA by 10%. Reduction in COGS and expenses would increase the profit margin resulting in an increase in ROA.

Reducing current asset i.e. inventory, cash, account receivable and other current asset is the last set of strategy to be applied to achieve the desire ROA. Assuming all remains same. Each asset is to examined separately in order to achieve an desired ROA. Then inventory has to be reduced by Rs 254.20 cr (28.69%) which might result in a loss in sale due to stock outs. Another ways to reduce cash by Rs 71.30 cr (43.75%). As Company's cash balance is well below the peer average indicates that company is follows a policy of holding less cash. Then it is advisable not to decrease cash balance. It might increase the risk of crisis of short term capital for meeting day-to-obligations. Reducing account receivable by Rs.254.31cr. (389.95%) indicating that company has to follow a strict policy regarding giving credit to its customers. This appears to be an unrealistic scenario as Pantaloon's account receivable is already below than peer average. It indicates that max. sale of the company is in cash. In the last desired ROA can be achieved by reducing other current asset by Rs254.11 cr (40%). This change is substantial which may result in loss in purchasing goods at a low

and attractive price from its suppliers by making advance payment along with attracting world famous brands to its counter who generally ask for some type of special deposits before providing goods.

It appears best and suitable policy for Pantaloon to increase ROA by 10% lies in the combination of increasing sales and decrease its cost of goods sold expenses. As discussed above decrease in inventory, cash, account receivable and other current asset is affecting firm's performance adversely in spite of increasing ROA. Company's success lies in increasing sales and decreasing expenses. So, the model suggests that a modest increase in sales by 1.5% followed by a decrease in COGS by 0.5% is sufficient enough to increases ROA by 10%. As these changes are easily to achieve without any special effort.

#### 5.2 Shopper's Stop Ltd.

Using SPM, financial data are analysed. These data forms the base on the basis of which financial indicators are identified and calculated. Among the samples Shopper's Stop is found to the best in the area of managing asset effectively .In order to achieve an increase in ROA by 10%, Shopper's Stop management can apply following strategies .i.e. increase sales & other income sources , decrease expenses .i.e. COGS and expenses and / or finally reduce asset .i.e. inventory, account receivable , cash and other current assets. Other current assets include loans and advances also.

If a sale of Shopper's Stop is increased by Rs.71.76 cr (8.46%), then ROA can be increased by 10%. To achieve this sale company correspondingly has to increase its other income, COGS, expenses, account receivable, inventory, cash and other current asset. As a result of which profit margin would remain almost the same while asset turn over ratio increases. Thus acts as a catalyst in achieving desired ROA. Increasing sales in a short span of time appeared to be a little tough exercise. It requires a handsome amt. of effort to push sales up equivalent to India's GDP growth rate (about 10%). Another strategy is to increase other income sources, keeping all things constant. Then it requires an increment of Rs.2.61 cr (10.12%) which is below the peer average. But increasing this might result in the deviation from the vision and mission of the company.

A successful company is one which is able to curb upon the expenses. It is considered to be one of the foremost strategies. Assuming all things remain the same, Shopper's Stop management can cut COGS by Rs2.6 cr (0.46%) to achieve the desired ROA. As, company's COGS is far below the peer average giving an indication that the further reduction in COGS is not possible. Another method is to reduce expenses by Rs.2.61 cr (1.03%). It would be more realistic scenario when combination of both COGS and expenses is applied simultaneously to reduce cost by Rs 2.6cr to achieve desired ROA.

Another similar approach is to decrease current asset .i.e. inventory, account receivable, cash and other current asset. Assuming all things remain the same, inventory is to be reduced by Rs.49.53cr (42.92%). This reduction might result in loss of sale due to stock out. Shopper's Stop inventory levels are far below peer average of inventory to sales .So, it is not favourable for the company to reduce stock. Another way is to reduce account receivable level by Rs49.56 cr (680.77%) but it is not suggested to do so .Already Company's account receivable level is much better than industry peer average. So, further reduction is not possible. It indicates that company is following a controllable credit policy. Cash plays an important role in carrying out day-to-day business transaction. To achieve the desired level of ROA, cash level can be reduced by Rs49.51cr (49.77%). Company's cash to sales ratio is greater than industry peer average indicating company's

ineffectiveness in the management of cash. Suddenly reducing cash to such extent might result in cash shortage. It can be reduce to a certain extent only. The final approach is to reduce other current asset by Rs. 49.41 (39.81%). As Shopper's stop other current asset to sales ratio is much better than industry peer average then further reduction can effect the growth of the company.

Shoppers Stop management should look after those are area which is under performing relative to the peer average. So combination of certain factors would help in achieving the increment in ROA with an ease. It is recommended that to increase sales by 2% along with reduction in expenses by 0.5% and cash by 11%.

#### 5.3 Provogue India Ltd.

Among the samples, Provogue India Ltd. is first in terms of ROA but last in terms of RONW. So, to increase its ROA by 10% company's management can increase the sales by Rs153.71 cr (67.34%). To get this sale company correspondingly has to increase its other income, COGS, expenses, account receivable, inventory, cash and other current asset. Nevertheless to get this much sale in short span is not easy to achieve.

Another strategy that Provogue management can apply is to increase other income sources by Rs 1.96 (24.59%) by keeping all things remain same. It is not advisable to increase other income source because it is an uncertain source of income. It is only for a short term.

On of the most secret weapon which is often generally used by management to increase ROA is to reduce expenses and increase profit margin. Another approach is to reduce COGS by Rs 1.99 cr (1.44%) keeping all things same. Further reduction in COGS is further not possible to achieve. Since Provogue's COGS is much lower than industry peer average indicating management effectiveness in purchasing / manufacturing goods at a lower price but selling than at a high rate. Similarly reducing expenses by Rs2.56 cr (3.29%) keeping all thing remain the same. As operating expenses is more than industry peer average which acts as a slow poison in eating away the advantage of low COGS. In a realistic situation it is possible to curb upon excessive operating expenses to neutralise the effect of slow poison and acts as a lifesaver.

Another approach is to reduce current asset. Each component of current asset is examined keeping all thing remain same. Reducing inventory by Rs 33.41cr (32.62%) to achieve the desired increment in ROA .i.e. 10%. Company is having excess of stock with them. This is supported by the fact that its inventory peer average is much more than industry peer average. So, it is advisable to decrease stock which would result in increase in asset turn over ratio. On other hand account receivable can be reduced by Rs.33.41cr (74.38%). As company's account receivable to sales is much above the industry level indicating towards company's lenient credit policy. Company is adopting a policy providing credit to generate sales. It is not possible to reduce account receivable to such a extent since it can result in loss of sale due to tight credit policy. But an optimum level of reduction is possible. Another approach is to reduce cash by Rs 33.42 cr (209.08%) to achieve the increase in ROA by 10%. It is not possible to decrease cash to such an extent as company cash level is almost equivalent to industry peer average. Reducing cash can adversely affect the day-to-day working of the company. Final approach is to reduction of other current asset by Rs.33.42 (79.39%) to increase ROA by 10%. It is not a realistic situation to reduce other current asset as it is already below industry norms.

As Provogue management should look toward reducing unused and unutilised asset. So, a combination of change can be applied to modestly increase sales by 2% tripled with decrease in expenses by 2%; inventory also by 2% and account receivable by 2% to increase ROA by 10%. It

is further advised to Provogue management that further increment in ROA can be achieved by working upon the under performance area in comparison to industry peer average.

#### References

- [1.] N.VISWANADHAM and POORNIMA Luthra (2005), Models for measuring and predicting shareholder value: A study of Third Party Software Service Providers, Sadhana, Vol.30, Part 2 & 3, April/June 2005, Pg. No. 475- 498.
- [2.] EVANS, R.JOEL (2005), Are the largest public retailers top financial performers? A longitudinal analysis, International Journal of Retail & Distribution Management, Vol.33 Issue 11, Pg. No. 842-857.
- [3.] Andrew STAPLETON, HANNA, Joe B, STEVE YAGLA, Jay Johnson, Dan Markussen (2002), International Journal of Logistics Management, Vol.13 Issue 1, Pg. No. 89-107.
- [4.] LAMBERT, Douglas M, RENAN, Burduroglo (2000), International Journal of Logistics Management, Vol.11 Issue 1, Pg. No. 1-16.
- [5.] KOENIG, F. Harold (1994), Marketing Education Review, Vol.4 Issue 1, Pg. No. 36-44
- [6.] MACKAY J.R. (1992), Does your financial road map lead to profitability? , Textile Rental, Vol. 75 Issue 7, Pg. 22.
- [7.] BHABATOSH Banerjee, Financial Policy & Management Accounting, 7<sup>th</sup> Edition, Pg.No. 330 360.
- [8.] Leopold A. BERNSTEIN, Financial Statement Analysis Theory, Application & Interpretation, Pg.No 562,563.
- [9.] Patrick M.DUNNE, Robert F.CUSCH, David A.GRIFFITH, *Retailing*, Fourth Edition, Pg.No 37 67.
- [10.] TEXSUMMIT 2007, Background Paper, Ministry of Textiles, Govt. of India .p.1.

#### Table No - 2. Intra Company Ratio Comparison

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Pantaloon Retail Ltd.									
Year	Sales (Cr.)	Profit Margin (%)	Asset Turnover	ROA(%)	Financial Leverage	RONW (%)			
2007 (Latest Performance)	3031.44	3.96	1.08	4.27	2.57	10.99			
2006	1758.5	3.65	1.25	4.58	2.66	12.18			
2005 (Max Performance)	1018.25	3.79	1.53	5.79	3.00	17.40			

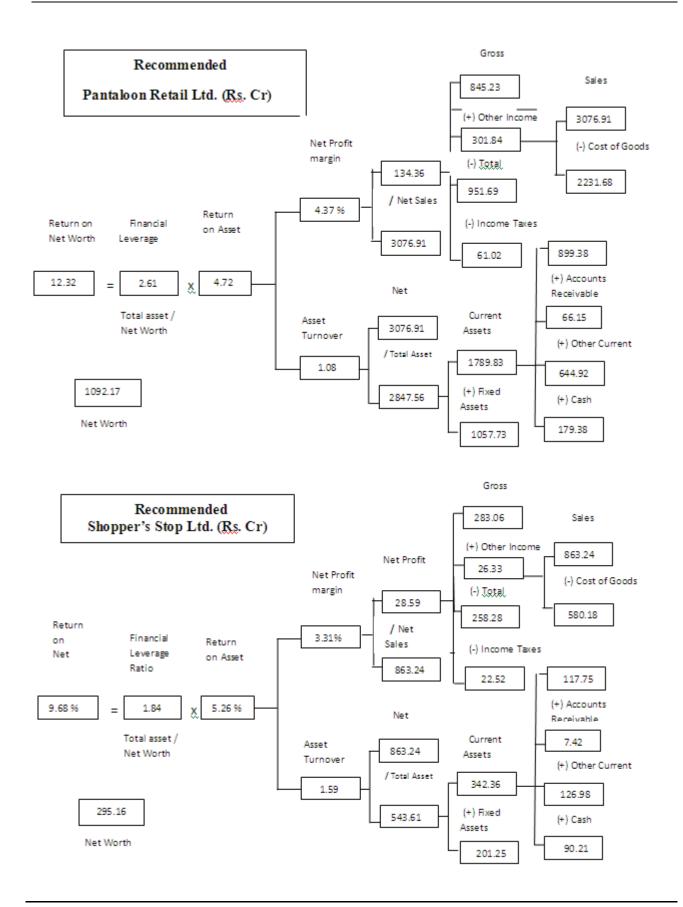
Shoppers' Stop Ltd.										
Year	Sales (Cr.)	Profit Margin (%)	Asset Turnover	ROA(%)	Financial Leverage	RONW (%)				
2007 (Latest Performance)	846.31	3.09	1.55	4.78	1.86	8.88				
2006	634.93	4.27	1.54	6.56	1.53	10.04				
2005 (Max Performance)	488.69	3.89	1.97	7.69	2.61	20.08				

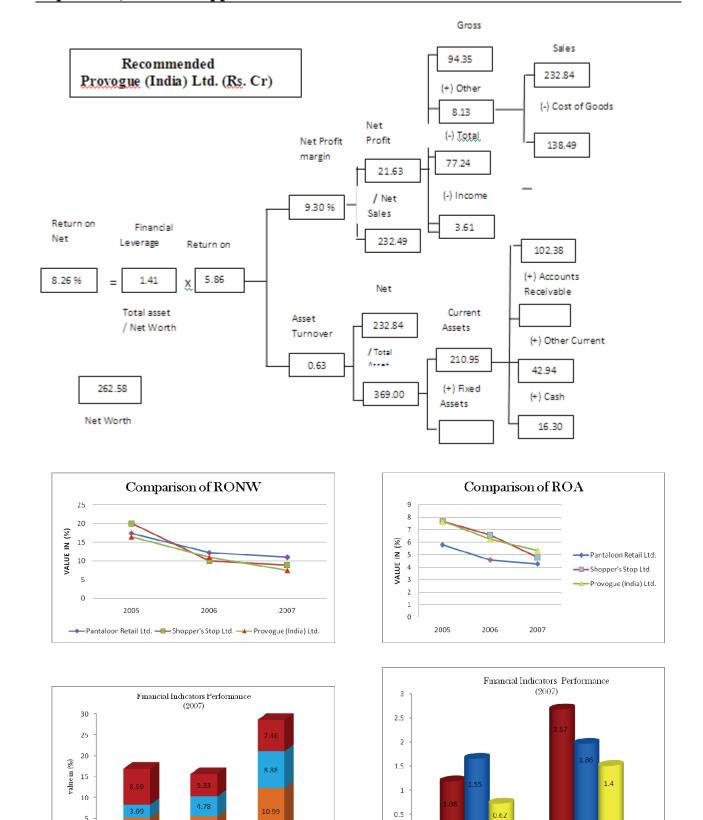
Provogue India Ltd.									
Year	` '		Asset Turnover	VVVVVVW /		RONW (%)			
2007 (Latest Performance)	228.27	8.59	0.62	5.33	1.40	7.46			
2006	149.25	8.01	0.78	6.23	1.76	10.98			
2005 (Max Performance)	110.21	6.55	1.17	7.68	2.15	16.51			

Table No-1										
Comparison of change in various financial indicators of different companies										
Year	Year Company		Asset Turnover	ROA(%)	Financial Leverage	RONW				
	Pantaloon Retail Ltd.	8.49	-13.93	-6.62	-3.38	-9.78				
2006-07	Shopper's Stop Ltd.	-27.52	0.52	-27.12	21.27	-11.62				
	Provogue India Ltd.	7.24	-20.31	-14.54	-20.42	-31.99				
2005-06	Pantaloon Retail Ltd.	-3.63	-18.02	-21.00	-11.43	-30.02				
	Shopper's Stop Ltd.	9.65	-22.11	-14.59	-41.45	-50.50				
	Provogue India Ltd.	22.22	-33.61	-18.85	-18.06	-33.55				

	Table No.3									
Target Firm (07) Comparison with Peer Group (07) – Items as a % of sales										
		cogs	Other Income	Expenses	Account Receivable	Inventory	Cash	Other Current Asset		
Peer Average (07)		70.97%	8.06%	30.93%	2.97%	26.88%	6.79%	19.53%		
Pantaloon Retail (India) Ltd.	Actual(07) v/s Peer (07)	72.89% 1.92%	9.81% 1.75%	30.95% 0.02%	2.15%	29.23% 2.35%	5.83%	20.96% 1.43%		
Shopper's Stop Ltd.	Actual(07) v/s Peer (07)	67.21%	3.05%	30.08%	0.86%	13.64%	11.75%	14.71%		
Provogue	Actual(07)	-3.76% 59.48%	-5.01% 3.13%	-0.85% 33.85%	-2.11% 21.62%	-13.24% 44.87%	4.96% 7.00%	-4.82% 18.44%		
(India) Ltd.	Peer (07)	-11.49%	-4.93%	2.95%	18.65%	17.99%	0.21%	-1.09%		

	Table No. 4									
	Target Firm (05) Comparison with Peer Group (05) – Items as a % of sales									
		cogs	Other Income	Expenses	Account Receivable	Inventory	Cash	Other Current Asset		
Peer Average (05)		68.68%	3.13%	29.30%	2.16%	22.88%	1.52%	11.09%		
Pantaloon Retail (India) Ltd.	Actual(05) v/s Peer (05)	68.78% 0.10%	3.69% 0.56%	29.70% 0.40%	1.21% -0.95%	27.10% 4.22%	2.11% 0.59%	9.25% 1.84%		
Shopper's Stop Ltd.	Actual(05) v/s Peer (05)	70.01% 1.33%	1.61%	27.36%	0.53%	11.75% -11.13	0.20%	13.53% 2.44%		
Provogue (India) Ltd.	Actual(05) v/s Peer (05)	61.95%	4.66% 1.53%	34.22% 4.92%	18.10% 15.94%	33.23% 10.35%	1.85% 0.33%	17.33% 6.24%		





Financial Leverage

■ Pantaloon Retail Ltd. ■ Shopper's Stop Ltd. ■ Provogue India Ltd.

Profit Margin (%)

ROA (%)

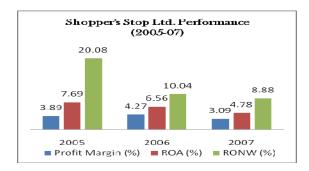
■Shopper's Stop Ltd.

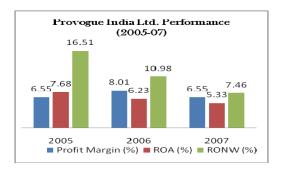
RONW (%)

■ Provogue India Ltd.

Asset Turnover







#### **Current address**

#### A. Selvarasu,

Professor of Marketing in Sardar Vallabhbhai Patel Institute of Textile Management (Autonomous Institute, Government of India, Ministry of Textiles), Coimbatore, India. e-mail: jeemanse@rediffmail.com

#### José António Candeias Bonito Filipe, Professor Auxiliar

ISCTE - Instituto Superior de Ciências do Trabalho e da Empresa UNIDE – Unidade de Investigação e Desenvolvimento Empresarial Av. Forças Armadas 1649-026 Lisboa (Lisbon, Portugal), Tel.+351 217 903 000 e-mail: jose.filipe@iscte.pt

#### Manuel Alberto Martins Ferreira. Professor Catedrático

ISCTE - Instituto Superior de Ciências do Trabalho e da Empresa UNIDE – Unidade de Investigação e Desenvolvimento Empresarial Av. Forças Armadas 1649-026 Lisboa (Lisbon, Portugal), Tel.+351 217 903 000 e-mail: manuel.ferreira@iscte.pt

#### Maria Isabel Craveiro Pedro, Professor Auxiliar

IST - Instituto Superior Técnico CEGIST - Centro de Estudos Gestão Av. Rovisco Pais 1100-099 Lisboa (Lisbon, Portugal), Tel.+351 21 423 35 07 e-mail: ipedro@ist.utl.pt