

## Significant Analysis for Financial Statements: An Empirical Study of National and Unilever Foods

Farzan Yahya<sup>1</sup>, Syed Atif Ali<sup>2</sup>, Zarak Mir<sup>1</sup>, Mariam Yaqoob<sup>1</sup>, Usman Ahmad Khan<sup>1</sup>.

1. Lahore Business School, The University of Lahore
2. Department of Finance, Lahore Business School, The University of Lahore  
[\\*farzan.yahya@yahoo.com](mailto:farzan.yahya@yahoo.com)

### Abstract

Choosing vital, reliable and hustle free analysis is a bit difficult situation for most of the financiers and managers as there are so many analyses. This study focuses on most significant analyses to perform on financial statements. To accomplish this study, financial statements of two companies, Unilever foods and National foods has selected to perform analysis. Results show that vertical analysis can be a suspicious analysis as it total assets and sales fluctuate gradually. Horizontal analysis is somehow better analysis than vertical analysis as it shows negative or positive trend of variables. DuPont analysis is a reliable analysis but it taken into consideration only two years. However, ratio analysis is seems to be best analysis as it gives concise and paramount review of firm's performance. According to these analyses, Unilever Foods is better corporate than National Foods. Further results are discussed in the light of these analyses.

**Keywords:** Vertical analysis, Horizontal analysis, DuPont analysis, Ratio analysis

### 1. Introduction

Food processing or manufacture is part of an integrated industry. Food Industry is the 2nd largest in Pakistan. There are 27% of its value-added production & 16% of the total employment in manufacturing sector. With an estimated 169 million consumers, Pakistan holds the world's eighth largest market. More than 1000 large scale food processing enterprises in Pakistan. 75% of rural-based food manufacturers are in so-called informal sector (difficulty in accessing raw material, finance material, skills, knowledge & management). Pakistan's food sector is changing drastically with an inclined shift in lifestyles and traditional eating habits.

Average consumer spends 42% of one's income on food. Retail sales of processed foods is growing by 10 % per annum and currently are estimated at about US\$1.4 billion, of which imported products account for US\$325 million. Supermarkets are gaining in popularity as a shopping venue and now account for about 10% of all retail food sales. In addition, Pakistan now hosts numerous western-style fast food chains reflecting a rising popularity with such eating style.

Analyzing financial statement is bit difficult job for most of the financier. Sometimes financiers confused whiling choosing a best analysis, as there are so many analyses to inspect financial statements. To achieve the purpose of this paper, two companies from food sector of Pakistan has chosen, i.e. Unilever Foods and National Foods.

Unilever is one of the largest FMCG companies of the world, represented in 150 countries with over 200,000 employees. 150 million times a day, someone somewhere chooses a Unilever product. They are the number one producer of frozen foods. On 24<sup>th</sup> April, 2007 Rafhan Best Foods Limited was renamed Unilever Pakistan Foods Limited.

National Foods begin its journey in 1970 as a Spice company. National Foods products are distributed in over 35 countries in 5 continents. National foods' initiatives were, to make food that is sanitized, hygienic, reduce time spent in the kitchen by women, promote health and contribute towards personal attractiveness.

### 2. Literature Review

DuPont system performs an analysis that uses both income and balance sheet information to break the ROA and ROE ratios into component pieces. Return on common equity (ROE) is a measurement that captures the return earned on the common stockholders' (owners') investment in a firm. Return on total assets (ROA) is a measurement

of the overall effectiveness of management in generating returns to common stockholders with its available assets. (Smart et al., 2007)

Saunders (2000) provides a model of financial analysis for financial institutions based on the Dupont system of financial analysis return on equity model. The return on equity model disaggregates performance into three components: net profit margin, total asset turnover, and the equity multiplier. The profit margin allows the financial analyst to evaluate the income statement and the components of the income statement. Total asset turnover allows the financial analyst to evaluate assets. The equity multiplier allows the financial analyst to liabilities and owners equity.

Firms can be compared within an industry utilizing the DuPont analysis's financial ratios through a cross sectional analysis or a time series basis (Ou & Penman, 1989; Eisemann, 1997; Abarbanell & Bushee 1997; Fairfield & Yohn, 2001; Milbourn & Haight, 2005; Soliman, 2008).

Nissim and Penman (2003) presents a financial statement analysis. That makes a distinction between leverage that arises in operations from leverage that arises in financing activities. Researchers also do financial statement analysis for use in equity valuation (Nissim & Penman, 2001).

Ratio or financial analysis is the process of determining the significant operating and financial characteristics of a firm from accounting data and financial statements (Hampton, 2003). Liquidity ratios measure a firm's ability to satisfy its short-term obligations as they come due. Debt ratios measure the extent to which a firm uses money from creditors rather than stockholders to finance its operations. Profitability ratios are among the most closely watched and widely quoted financial ratios. Many firms link employee bonuses to profitability ratios and stock prices react sharply to unexpected changes in these measures. (Megginson et al., 2007)

An analysis by which the trend of or changes in various dimensions of an economic unit over a number of years are examined is called horizontal analysis. Common-size analysis is also called vertical analysis because these statements are prepared in up and down form, and when one observes the statements, his observation moves from upwards to downwards. (Sinha, 2010)

### **3. Objectives**

The core objective of this study was

1. To show unproblematic financial statement analysis
2. To verify the most significant and reliable analysis

### **4. Methodology**

To accomplish this study, two companies had selected from Food sector in Pakistan. Financial statement of both companies had chosen from the purpose of analyses. Vertical analysis, Horizontal analysis, DuPont Analysis and Ratio analysis had applied using Balance sheet and Profit & Loss statement of both companies. Furthermore, Net Present Value has evaluated for both companies to check the reliability of company for investment.

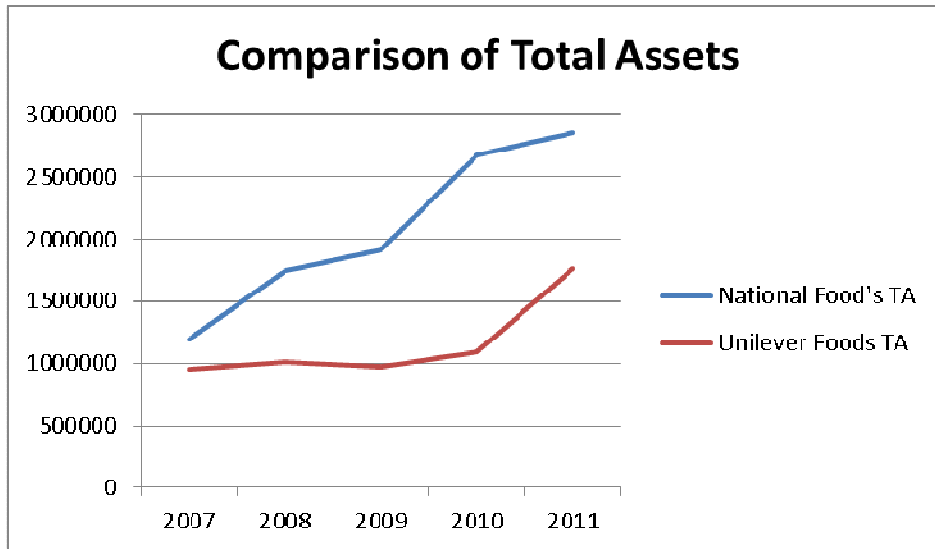
### **5. Empirical Results**

To achieve the objectives of this study financial statements of both companies, Unilever Foods and National Foods, are analyzed. Results have presented with both graphically and financial-based analyses.

#### *5.1 Graphical Presentation*

For a concise review, data has presented graphically using line charts.

Chart No. 1: Total Assets of National and Unilever Foods



Above line chart shows that National foods' total assets was greater than Unilever Foods. Moreover, National foods showed total assets far above the ground through the half decade. Unilever foods illustrated consistent results from 2007 to 2010 though improvement had made in further year.

Chart no. 2: Sales of National and Unilever foods

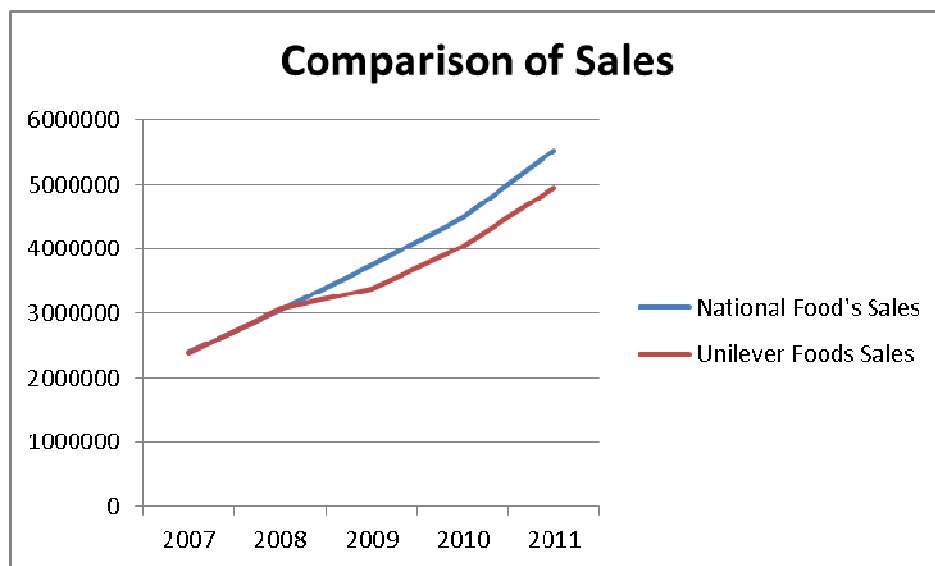


Chart no. 2 show overlapping results in case of both companies till 2008. However, National foods exceed its sales in further years.

### 5.2 Vertical Analysis

Vertical analysis has performed on two financial statements, i.e. Balance sheet and Profit & Loss Account. Furthermore, companies' comparison has shown accordingly.

Table No. 1: Companies' Comparison through Vertical Analysis using BS

|                                | <b>Unilever</b> | <b>National</b> |
|--------------------------------|-----------------|-----------------|
| <b>Non-current assets</b>      |                 |                 |
| Property, plant and equipment  | 35.12410818     | 27.12526285     |
| Intangible assets              | 4.619651329     | 0.313793791     |
| <b>Current assets</b>          |                 |                 |
| Stock in trade                 | 33.56568249     | 60.68536515     |
| Trade debts                    | 10.6703494      | 10.07944328     |
| Other receivables              | 1.633574171     | 0.022348788     |
| Cash and bank balances         | 5.274654136     | 0.498293891     |
| <b>Non-current liabilities</b> |                 |                 |
| Long term financing            | -               | 5.946248714     |
| <b>Current liabilities</b>     |                 |                 |
| Accrued interest / mark up     | 0.008544745     | 0.900852301     |
| Short term borrowings          | 5.349010394     | 25.49933602     |

Above table no. 1 shows comparison of Unilever and National Foods through vertical analysis. Only year 2011 has taken for comparison purposes as it was latest available data for both companies. Furthermore, only critical factors has considered for discussions and interpretation. Property, plant and equipment and intangible assets are greater in case of Unilever foods as compared to National foods. Unilever Foods also had greater Trade debts and other receivables. Cash and bank balance was also superior in Unilever foods. However, Stock in trade was higher in case of National Foods. Lastly, Accrued interest/ markup were greater in case of National foods as they have both types of debts in greater proportion, i.e. Long term financing and short term borrowing. Unilever foods had greater percentage of assets and lesser percentage of liabilities as compared to National foods. Therefore, Unilever can be considered as superior company according to Vertical analysis.

Table no. 2: Companies' Comparison through Vertical Analysis using PLS

|                        | <b>Unilever</b> | <b>National</b> |
|------------------------|-----------------|-----------------|
| Cost of sales          | 61.03944921     | 71.48988005     |
| Gross profit           | 38.96055079     | 28.51011995     |
| Other operating income | 1.671615471     | 0.218501733     |
| Profit from operations | 18.56170871     | 8.829313974     |
| Finance costs          | 0.138920067     | 2.27677973      |
| Profit before taxation | 18.42278864     | 6.552534243     |

Likewise Vertical analysis of Balance sheet, profit & loss statement has shown in table no. 2. Results show that cost of sales was lower in case of Unilever foods as compared to National foods. Unilever foods' Gross profit was 10% greater than National foods. Profit from operations and profit before taxation was also greater in case of Unilever Foods. Additionally, National Foods had higher finance costs. Considering the results of vertical analysis it is apparent that Unilever showed better performance.

### 5.3 Horizontal Analysis

Following is the horizontal analysis of Unilever food and National foods. There are actually two methods to perform horizontal analysis, base method and chain method. However, base method is no more applicable. Therefore chain method had used to perform analysis.

Table no. 4: Companies comparison through Horizontal analysis using PLS

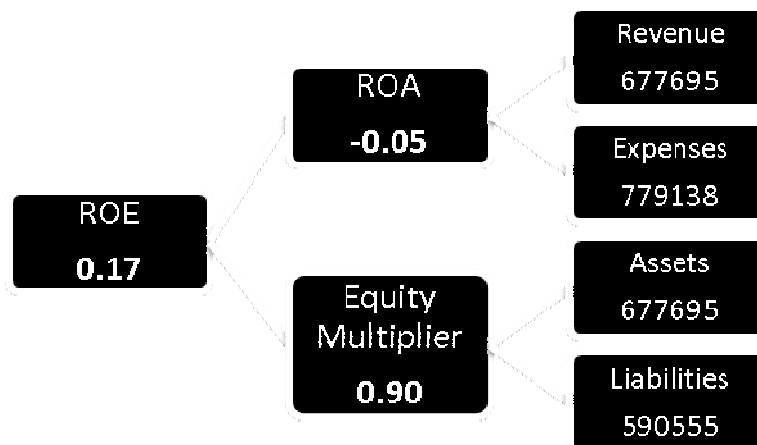
|                        | Unilever | National |
|------------------------|----------|----------|
| Cost of sales          | 0.203311 | 0.247724 |
| Gross profit           | 0.254003 | 0.186346 |
| Other operating income | 2.502799 | -0.48036 |
| Profit from operations | 0.392957 | 0.885347 |
| Finance costs          | -0.44871 | 0.265005 |
| Profit before taxation | 0.409181 | 1.272577 |

Now there is horizontal analysis of both companies' profit and loss statement. In 2011, Unilever foods' cost of sales increased with lesser pace and gross profit with greater pace as compared to National Foods. Other operating income showed negative trend in case of National foods and positive in Unilever. Finance cost showed inverse case. However, Operating Profits and profit before taxation increased with much superior tempo in case of National Foods.

### 5.4 DuPont Analysis

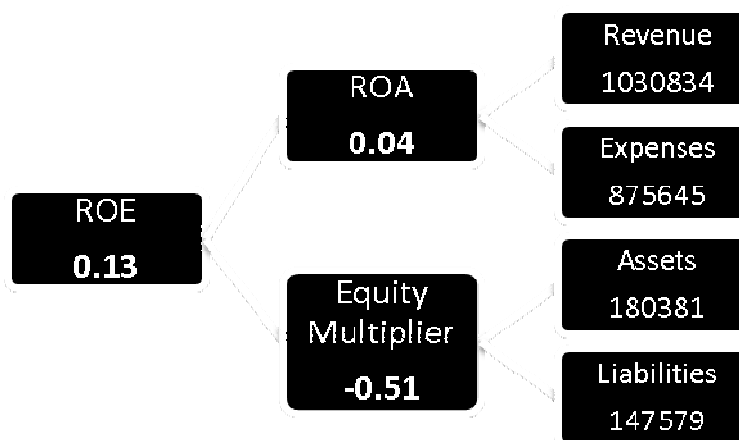
Actually DuPont analysis deals with three core concerns, asset utilization, financial leverage and operating leverage.

Chart no. 3: Unilever food's DuPont Analysis



Unilever food's return on equity increased with respect to previous year as they are using their shareholders' equity more efficiently to generate their earnings. Moreover, their financial leverage was also stronger as equity multiplier showed positive value. However, asset utilization showed feeble situation as return on equity decreased. Furthermore, as per standard rules, operating leverage increase with the increase in activity level (Production). Thus, revenue demonstrated positive value so it can interpreted that operating leverage was strong.

Chart no. 4: National Food's DuPont Analysis



ROE also increased in case of National foods. However, financial leverage and asset utilization showed contradictory results as compared to Unilever foods. Moreover, operating leverage also increased.

#### 5.5 Ratio and Sector Analysis

Ratio analysis includes four sub analysis, Profitability analysis, Capital management ratio, Short-term analysis and long-term analysis. Moreover, three more companies have opted to complete sector analysis, Nestle, Mitchell's and Engro Foods.

Table No. 5: Ratio and Sector Analysis

| Short term Analysis            |          |          |          |            |          |          |
|--------------------------------|----------|----------|----------|------------|----------|----------|
|                                | National | Unilever | Nestle   | Mitchell's | Engro    | Average  |
| Current Ratio                  | 1.231648 | 0.884903 | 0.797871 | 1.3291553  | 1.734437 | 1.195603 |
| Cash Ratio                     | 0.008476 | 0.079593 | 0.052409 | 0.0314185  | 0.034151 | 0.04121  |
| Profitability Analysis         |          |          |          |            |          |          |
| Gross Profit Margin Ratio      | 0.285101 | 0.389606 | 0.25801  | 0.2196556  | 0.223353 | 0.275145 |
| Operating Profit Margin Ratio  | 0.088293 | 0.185617 | 0.130474 | 0.0816535  | 0.08129  | 0.113466 |
| Net Profit Margin Ratio        | 0.041769 | 0.124831 | 0.072015 | 0.0409225  | 0.023289 | 0.060565 |
| Long term Analysis             |          |          |          |            |          |          |
| Return on Asset                | 0.080777 | 0.348974 | 0.1327   | 0.0960572  | 0.041527 | 0.140007 |
| Return on Equity               | 0.249885 | 1.254631 | 0.613256 | 0.2042454  | 0.095479 | 0.483499 |
| Total Asset turnover Ratio     | 2.660363 | 4.263512 | 1.842656 | 2.3472929  | 1.783094 | 2.579384 |
| Fixed Asset turnover Ratio     | 8.098669 | 10.36578 | 1.789929 | 5.5625822  | 3.124373 | 5.788267 |
| Current Asset turnover Ratio   | 3.961786 | 7.242332 | 5.961426 | 4.6263563  | 5.870949 | 5.53257  |
| Operating Asset turnover Ratio | 3.133933 | 6.112676 | 12.64838 | 2.9219753  | 2.448322 | 5.453057 |

| Capital Management Ratio |          |          |          |           |          |          |
|--------------------------|----------|----------|----------|-----------|----------|----------|
| Debt to Equity           | 1.023268 | 0.192308 | 2.229685 | 0.430589  | 0.875014 | 0.950173 |
| Debt to Capital          | 0.50575  | 0.16129  | 0.690372 | 0.3009872 | 0.466671 | 0.425014 |

Current Ratio shows that National foods had more capability to cover its current liabilities by its current assets and Unilever's current ratio was below the average sector ratio. However, Unilever's cash ratio was highest among food sector though National foods had too low cash ratio. Unilever food's profitability was also highest as they are using their operations and production process more efficiently. Long term analysis was also favoring Unilever Food's. However, Capital management ratio showed lower ratio in case of Unilever foods as they are not aggressive about growing their business through debts since they get good return on equity.

### 5.6 Discussion

Analyzing financial statements is bit difficult job for most of the financiers as there are vast and complicated analyses. Therefore, choosing an authentic and uncomplicated analysis for examining financial performance of a firm is sometimes frustrated situation for managers and financiers. For that reason, this study showed different effortless analyses to perform on financial statements of a firm. To accomplish this study balance sheet and Profit & Loss statement of two companies, Unilever Foods and National Foods had selected.

Graphical presentation showed that both sales and total assets of National Foods were greater than Unilever foods. According to vertical analysis, Property, plant and equipment and intangible assets are greater in case of Unilever foods as compared to National foods. Unilever Foods also had greater Trade debts and other receivables. Cash and bank balance was also higher in Unilever foods. Nevertheless, Stock in trade was higher in case of National Foods. Accrued interest/ markup were greater in case of National foods as they have both types of debts in greater proportion, i.e. Long term financing and short term borrowing. Unilever foods had greater percentage of assets and lesser percentage of liabilities as compared to National foods.

Cost of sales was lower in case of Unilever foods as compared to National foods. Unilever foods' Gross profit was 10% greater than National foods. Profit from operations and profit before taxation was also greater in case of Unilever Foods. Additionally, National Foods had higher finance costs. Considering the results of vertical analysis it is apparent that Unilever showed better performance. Therefore, Unilever can be considered as superior company according to Vertical analysis. However, as vertical analysis deals with percent to sales and percent to total assets so the results can be suspicious as sales and total assets fluctuate gradually.

According to horizontal analysis, Property, plant and equipment shows increasing trend in case of Unilever though decreasing in National Foods. Intangible assets remain unaffected in Unilever although decreased in National Foods. Stock in trade and trade debts moved with superior rapidity in Unilever. Other receivables decreased in National Foods in year 2011. Cash and bank balances augmented in both companies but privileged in case of Unilever. There was no long term financing by Unilever foods but in National Foods it amplified. Accrued interest and short term borrowing decreased in both companies.

Unilever foods' cost of sales enlarged with slighter tempo and gross profit with greater pace as compared to National Foods. Other operating income showed negative trend in case of National foods and positive in Unilever. Finance cost showed inverse case. Nevertheless, operating Profits and profit before taxation increased with much superior pace in case of National Foods. Horizontal analysis is bit better analysis than vertical analysis as it tells negative and positive trend of variables.

DuPont analysis designated actually three significant essentials, Asset Utilization, Financial and Operating leverage. Unilever food's return on equity increased regarding previous year as they are using their shareholders' equity more efficiently to generate their earnings. Moreover, their financial leverage was also stronger as equity multiplier showed positive value. However, asset utilization showed delicate situation as return on equity decreased. Additionally, as per defined rules of accounting and finance, operating leverage increase with the increase in activity level (Production). Thus, revenue demonstrated positive value so it can be interpreted that operating leverage was strong.

Return on equity also increased in case of National foods as they are using their shareholders' equity more efficiently. Nonetheless, financial leverage was weaker and asset utilization was stronger as compared to Unilever foods. Moreover, operating leverage also increased. DuPont analysis is also a reliable analysis though it taken into consideration only two years.

Ratio analysis includes four sub analysis, Profitability analysis, Capital management ratio, Short-term analysis and long-term analysis. Moreover, three more companies have opted to complete sector analysis, Nestle, Mitchell's and Engro Foods. Current Ratio shows that National foods had more capability to cover its current liabilities by its current assets and Unilever's current ratio was below the average sector ratio. Nevertheless, Unilever's cash ratio was highest among food sector though National foods had too low cash ratio. Unilever food's profitability was also highest as they are using their operations and production process more efficiently. Long term analysis was also favoring Unilever Food's. However, Capital management ratio showed lower ratio in case of Unilever foods as they are not aggressive about growing their business through debts since they get good return on equity. It can be said that ratio analysis is the best analysis among all financial analysis as it shows enhanced and concise review of firm's financial performance.

## 6. Conclusion

Analyzing financial statements is bit difficult job for most of the financiers as there are vast and complicated analyses. Therefore, choosing an authentic and uncomplicated analysis for examining financial performance of a firm is sometimes frustrated situation for managers and financiers. For that reason, this study showed different effortless analyses to perform on financial statements of a firm. Unilever foods and National foods had chosen for these analyses.

Vertical analysis declared Unilever foods as better company as compared to National Foods, same case in horizontal analysis. DuPont analysis showed that Asset utilization was efficient in case of National foods though weak financial leverage. However, there were inverse results in case of Unilever foods. Profitability analysis, long term analysis and short term analysis favor Unilever foods. However, capital management ratio was higher in National foods as they are aggressive about growing their business through debts.

Vertical analysis is somehow a suspicious analysis as total assets and sales fluctuate gradually. Horizontal analysis is bit better analysis than vertical analysis as it shows increasing and decreasing trend of variables. DuPont is also a reliable analysis but it taken into consideration only two years. Ratio analysis is seems to be best analysis as it gives concise and paramount review of firm's performance.

## References

- Abarbanell, J., & Bushee, B. (1997). Fundamental analysis, future earnings and stock prices. *Journal of Accounting Research*, 35(1), 1-24.
- Eisemann, P. (1997). Return on equity and systematic ratio analysis. *Commercial Lending Review*, 12 (3), 51-57.
- Fairfield, P., & Yohn, T. (2001). Using asset turnover and profit margin to forecast changes in profitability. *Review of Accounting Studies*, 6, 371-385.
- Hampton, J. J. (2003). *Financial Decision Making*. New Delhi: PHI Learning
- Milbourn, G., & Haight, T. (2005). Providing students with an overview of financial statements using the Dupont analysis approach, *Journal of American Academy of Business*, 6(1), 46-50.
- Nissim, D. & Penman, S. H. (2003). Financial Statement Analysis of Leverage and How It Informs About Profitability and Price-to-Book Ratios. *Review of Accounting Studies*, 8, 531-560.
- Nissim, D. & Penman, S. H. (2001). Ratio Analysis and Equity Valuation: From Research to Practice. *Review of Accounting Studies*, 6, 109-154.
- Ott, S., Riddiough, T., & Yi, H. (2005). Finance, investment and investment performance: Evidence from the REIT sector. *Real Estate Economics*, 33(1), 203-235.
- Saunders, A. (2000). *Management of Financial Institutions*. (3rd ed.). McGraw Hill.



- 
- Sinha, G. (2010). *Financial Statement Analysis*. New Delhi: PHI Learning
- Soliman, M. (2008). The use of Dupont analysis by market participants. *The Accounting Review*, 83(3), 823-853.
- Smart, S., Megginson, W., & Gitman, L. (2007). *Corporate Finance*. Mason, OH: Thomson South-Western.

This academic article was published by The International Institute for Science, Technology and Education (IISTE). The IISTE is a pioneer in the Open Access Publishing service based in the U.S. and Europe. The aim of the institute is Accelerating Global Knowledge Sharing.

More information about the publisher can be found in the IISTE's homepage:

<http://www.iiste.org>

## CALL FOR PAPERS

The IISTE is currently hosting more than 30 peer-reviewed academic journals and collaborating with academic institutions around the world. There's no deadline for submission. **Prospective authors of IISTE journals can find the submission instruction on the following page:** <http://www.iiste.org/Journals/>

The IISTE editorial team promises to review and publish all the qualified submissions in a **fast** manner. All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Printed version of the journals is also available upon request of readers and authors.

### IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

