

The Effect of Accounts Receivable Management on Corporate Profitability: Empirical Evidence From India

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Abstract: Receivables management is an important aspect of financial management. Their accurate monitoring and proper management have become imperative nowadays due to the increasing volume of credit sales. This study examines the impact of receivables management on the profitability of some selected companies listed on National Stock Exchange (NSE). The variables include, accounts receivable, debt and sales growth. Secondary data was used for the period 2006-2017. The hypotheses were analyzed using the multiple regression analytical tools. The findings show that accounts receivable had negative and non-significant relationship with profitability, while debt had positive but non-significant relationship with profitability. Finally, sales growth also had positive and non-significant relationship with profitability.

Keywords: Debt, Generalized Multiple Regression, Profitability, Receivables Management, Variables.

I. INTRODUCTION

The study of the effect of receivables management on corporate profitability has become necessary because many organizations have fallen victims of premature death. This is as a result of inadequate attention was paid to receivables. The extent to which companies manage their receivables go a long way to the level of their profit. Profit may only be called real profit after the receivables are turned into cash. The management of accounts receivable is largely influenced by the credit policy and collection procedure. A credit policy specifies requirement to value the worth of customers and a collection procedure provides guidelines to collect unpaid invoice that will reduce delays for customers who have not yet made payment for goods and services and outstanding receivable (hill and sartories, 1992, Richard and Laughlin, 1980). The objective of debt management is to minimize the time lapse between inventory acquisition and completion of the entire cash conversion cycle. Accounts receivable represents the average days that firm takes to collect payment from its customers (falope and Ayilore, 2009 and shams and Kumar, 2011). Excessive level of current assets and low level of current assets may lead to negative effect on a firm's profitability and difficulties in mediating smooth operation (Van Horne and Wachowtics, 2004). Study is deemed necessary because of the frequency of corporate failure in recent times owing to improper management of accounts receivables and as a result of the dearth of literature in this area.

Statement of Research Problem

More than 40 percent of the 1600 companies listed on NSE pay no dividend at all. This is despite the fact, that the companies post huge figures of their accounts receivables. It is as a result of this problem that the researcher deemed it necessary to examine the effect of receivables management on the profitability of the companies.

Objectives of the Study

The general objective of this study is to examine the effect of receivable management on the profitability. The specific objectives of the study are :

1. To examine the effect of accounts receivable ratio on corporate profitability.
2. To identify the effect of debt ratio on the profitability.
3. To examine the effect of sales growth rate on corporate profitability.

Hypotheses

The following hypotheses shall be tested in order to address the objectives:

1. There is no positive significant relationship between account receivable ratio and profitability.
2. There is no positive significant relationship between debt ratio and profitability.
3. Sales growth rate has no significant positive effect on corporate profitability.

II. REVIEW OF LITERATURE

Jack and Matthew (1994), state in their article, management of accounts receivable that the simplest means of recovering your accounts receivable is to take active steps to avoid the process entirely. Venkata et al (2013) in their study impact of receivables management on working capital and

profitability ; A study of selected cement companies in India collected their data from the Annual Reports of the selected cement companies from 2001 -2010. The ratios which highlight the efficiency of receivables management viz, receivables to current assets ratio, receivable to total assets ratio, receivable to sales ratio, receivable to turnover ratio, average collection period, working capital ratio, profitability ratio have been completed using ANOVA statistical tool to know the impact of accounts receivable on the working capital and profitability of the selected cement companies. Working capital management and profitability were considered as dependent variables. The investigation reveals that the receivable management across cement industry is efficient and showing significant impact on working capital and profitability.

Ramchandran, and Janakiraman, (2009), analyzed the relationship between working efficiency and earnings before interest and tax of the paper Industry in India. The study revealed that cash conversion cycle and inventory days had negative correlation with earnings before interest and tax, while accounts payable days and accounts receivable days related positively with earnings before interest and tax.

Ksenija (2013), investigates how public companies listed at the regulated market in the republic of Serbia manage their accounts receivable during recession times. A sample of 108 firms is used. The accounts receivable policies are examined in the crisis period of 2008-2011. The short-term effects are tested and the study shows a positive but no significant relationship between accounts receivables and two dependent variables on profitability, return on total asset and operating profit margin. This suggests that the impact of receivables on firm's profitability is changing in times of crisis.

Research studies by Deloof (2003) Laziridis and Tryfonidis (2006) Garcia-Jeruel and Martinez-Solano (2007), Samiloglu and Demrigunes (2008) and Mathura (2010), in Belgium, Greece, U.S.A, Spain, turkey and Kenya respectively, all point out to a negative relationship between accounts receivable and profitability. Contradicting evidence is found by Sharma and Kumar (2011) who found a positive relationship between ROA and accounts receivable.

Singh and Pandey (2008) had an attempt to study the working capital components and its impact on profitability of hildalco industries limited for a period of 1990 to 2007. Results of the study showed that receivable turnover ratio had statistical significant impact on the profitability of hildalco industries limited.

III. RESEARCH METHODOLOGY

The research work focused on the empirical analysis of the relationship between receivable management and corporate profitability in some selected companies listed on NSE. The ex-post factor research design was used because it involves events that have already taken place in the past. The records observed were from 2006-2017, a period of twelve years. The variables tested were accounts receivable, return on total assets, debt ratio and sales growth rate. The study used secondary data that was taken from the Annual Reports of the companies. The data for the study are profit before tax, total assets, debtors, long term debt and sales.

Descriptive Variables

Variables are consistent with basley and brigam (2005) samiloglu and demrigunes (2008). Profitability is the dependent variable of this study. Return on total assets was used to analyze the impact of receivable management on the firm's profitability (pandey, 2008, lazarridis and trynidis, 2006).

$$\text{Profitability} = \text{PBT} / \text{Total Assets} \text{-----} 1$$

Independent Variables

Accounts Receivable

Accounts receivable is calculated as accounts receivable divided by sales. This variable represents the receivable that the firm will collect from its customers (basley and bring ham, 2005 samiloglu and demrigunes, 2008).

$$\text{Accounts Receivable} = \text{Receivables} / \text{Sales} \text{-----} 2$$

Debt

This is measured by long term debt divided by total assets.

$$\text{Debt} = \text{Debt} / \text{Total Assets} \text{-----} 3$$

Sales Growth

Sales growth is the increase or decrease of annual sales measured as a percentage of sales. It is measured in this study as sales1-sales0 divided by sales0.

$$\text{Sales} = \text{Sales1} - \text{Sales0} / \text{Sales0} \text{-----} 4$$

IV. ANALYTICAL TOOL FOR THE TEST OF HYPOTHESES

The data were analyzed using four functional models of multiple regression, and the best fitted to the analysis was selected. This four multiple regression models are as follows:

a. Linear regression model:

$$\text{Profitability} = B_0 + B_1 (\text{AR}) + B_2 (\text{SL}) + B_3 (\text{DT}) + U_1 \text{-----} 5$$

b. Semi - log regression Model:

$$\text{Profitability} = \text{Log} B_0 + \text{Log} B_1 (\text{AR}) \text{Log} + B_2 (\text{SL}) + B_3 (\text{DT}) + U_1 \text{-----} 6$$

c. Double log regression Model:

$$\text{Profitability} = \log B_0 \log + B_1 (\text{AR}) + B_2(\text{SL}) + B_3(\text{DT}) + U_1 \text{ -----7}$$

d. Exponential regression Model:

$$\text{Log profitability } B_0 + B_1 (\text{AR}) + B_2(\text{SL}) + B_3(\text{DT}) + U_1 \text{ -----8}$$

After obtaining the result of the four functional forms of multiple regression models, decisions were taken as to which of them should be chosen as the best-fit model in the analysis, the choice model was used in the interpretation of the results. Decisions and choice model were based on the one that has the highest number of variables. The tables below show the data for Return on Asset, Accounts Receivable, Debt Ratio and sales growth rate for the companies under study.

Table1: Data of Sical Logistics

Years	Return on Asset Ratio	Accounts Receivable Ratio	Debt Ratio	Sales Growth Rate (%)
2006	0.113106	0.104605 0.022355	0.022355	0
2007	0.145218	0.099151 0.19.69397	0	19.69397
2008	0.271914	0.104627	0.056991	46.30892
2009	0.218926	0.085761	0.053993	20.13747
2010	0.160043	0.11591	0.020987	5.029189
2011	0.10864	0.092035	0.049627	16.12928
2012	0.099763	0.089625	0.055393	27.23907
2013	0.090575	0.10751	0.207219	23.72896
2014	0.103443	0.104442	0.244824	11.94874
2015	0.069744	0.117126	0.230766	14.03912
2016	0.078634	0.102726	0.178027	17.79708
2017	0.062763	0.082543	0.189346	24.4201

Source: Annual Reports

The return on assets captures the profitability of the firm. The firm at the beginning of the period earned 0.113 or 11.3% return on assets in year 2006. This increased to 14.5% in 2007 while recording the highest increase of 0.2719 or 27.19% in 2008. After this period the return on asset for the firm recorded declines such that in 2012, the return on asset for the firm stood at 0.099 or 9.97% while increasing to 0.1034 or 0.08254 or 8.25% in 2016 and 2017 respectively while recording the least accounts.

Table 2: Data of Prism Cement

Years	Return on Asset Ratio	Accounts Receivable Ratio	Debt Ratio	Sales Growth Rate (%)
2006	0.200304	1.699728	0.001468	-80.1463
2007	0.225111	0.105478	0.233933	30.41862
2008	0.257688	0.238158	0	21.04079
2009	0.078091	0.250475	0	28.48299
2010	0.184423	0.17217	0	7.661647
2011	0.120165	0.306413	0	32.96009
2012	-0.19427	2.496323	0	-93.4763
2013	-0.16201	0.12335	0	937.5683
2014	-0.11914	0.015954	0	1118.764
2015	-0.09425	0.110462	0	-89.4703
2016	0.006856	0.140663	0	14.01166
2017	0.15077	0.147314	0	16.93494

Source: Annual Reports

The Prism Cement has return on asset ratio of 0.25 in the year 2008 and did not do well from 2012-2015. The receivable ratio is 0.105 in 2007 and 2.50 in 2012. Their receivable ratio is low from the years 2013 to 2017, the company borrowed in 2006 and 2007 only, but did not borrow in other years from 2008 – 2017. Their sales growth ratio is low in 2006, 2012, and 2015 and made the highest sales in 2014.

Table 3: Data of Genus Paper

Years	Return on Asset Ratio	Accounts Receivable Ratio	Debt Ratio	Sales Growth Rate (%)
2006	0.062955	0.084558	0	-30.4156
2007	0.045528	0.105999	0	30.2805
2008	0.121243	0.106399	0.014902	40.04672
2009	0.079136	0.112289	0.061983	-2.43955
2010	0.064044	0.116677	0.077586	26.77674
2011	0.050743	0.09088	0.091148	24.72301
2012	0.123591	0.040732	0.094368	29.58734
2013	0.128599	0.042334	0.043324	22.05919
2014	0.090501	0.042113	0.130942	20.8133
2015	0.086655	0.029698	0.198082	41.05095
2016	0.170286	0.03076	0.196633	14.73876
2017	0.10073	0.036113	0.051569	15.57971

Source: Annual Reports

Genus Paper did not do well in all the years under study. Their return on total asset ratio is low. None of the years has up to 0.20 they had little to receive. The company did not borrow in 2006 and 2007 respectively. Their sales growth rate ratio is very high except in 2009 where their ratio is -2.439.

Table 4: Data of PVP Ventures

Years	Return on Asset Ratio	Accounts Receivable Ratio	Debt Ratio	Sales Growth Rate (%)
2006	0.481512	0.036229	0	-95.8007
2007	0.542715	0.038762	0	41.07834
2008	0.538042	0.054848	0	38.39675
2009	0.490925	0.02872	0	25.80868
2010	0.455249	0.040198	0	15.54538
2011	0.468611	0.033442	0	20.64157
2012	0.433563	0.039647	0	11.90268
2013	0.398252	0.052219	0	14.58703
2014	0.406804	0.083199	0.205094	17.52262
2015	0.311483	0.049805	0.026949	32.03375
2016	0.302325	0.104984	0.130988	17.25981
2017	0.240945	0.087637	0.108809	22.28536

Source: Annual Reports

In PVP Ventures, the highest ratio of return on total assets is 0.542 in 2007, while the lowest is in 2017. This means that it was in 2007 and 2008 that they made up to 50% profit. They had less to receive. The company did not borrow from 2006 to 2013, their sales growth ratio is high except in 2006 when they had -95.801 as their ratio.

Table 5: Data of Nagarjuna Fert

Years	Return on Asset Ratio	Accounts Receivable Ratio	Debt Ratio	Sales Growth Rate (%)
2006	0.393536	0.813535	0.16795	-99.3784
2007	0.206563	0.005077	0.016966	15400.98
2008	0.189522	0.068714	0.00665	-82.223
2009	0.179394	0.000294	0.001568	26064.26
2010	0.10425	0.021482	0.0072	-98.9168
2011	0.081297	0.025977	0.00155	16.59303

2012	0.041572	0.257943	0.145827	-89.2371
2013	0.090393	0.022628	0.17138	1048.382
2014	0.046941	0.033735	0.127306	16.85642
2015	0.065202	0.044436	0.140371	12.63138
2016	0.066978	0.045666	0.925761	2.420694
2017	0.069759	0.050567	1.345363	2.927982

Source: Annual Reports

The Nagarjuna Fert has the highest profit of 0.394 in 2006 and the lowest of 0.0416 in 2012. The company has highest debt ratio of 1.345 in 2017 and lowest of 0.001 in 2011, their sales growth ratio is low in 2006, 2008, 2010 and 2012; their highest sales growth ratio is in 2009.

Table 6: Multiple Regression Analysis showing the relationship between Profitability ratio and AR, DT and SL of Sical Logistics

Variables	Linear Regression	Semi Log Regression	Double Log Regression	Exponential Regression
Constant	0.586 (1.257)	-0.114 (-0.187)	-2.606 (-0.688)	-0.471 (-0.094)
Accounts Receivable Ratio (AR)	1.519 (0.552)	-0.389 (-0.590)	-1.236 (-0.300)	-6.846 (-0.231)
Debt Ratio (DT) (Control)	-1.267* (-2.262)	-0.097 (-1.235)	-0.241 (-0.494)	2.555 (0.424)
Sales Growth Rate (SL) (Control)	5.403E-6 (1.863)	0.029 (1.154)	0.119 (0.764)	-2.112E-5 (-0.677)
R ²	0.774	0.554	0.275	0.257
Adjusted R ²	0.297	-0.225	-0.993	-1.042
F-Ratio	1.663	0.711	0.217	0.198

1. Profitability = Bo + Bi (AR)ii + B2DT 2i + B2SL 2i + Ui
2. Also, 1%, 5%, 10% levels of significance are represented by ***, ** and * respectively
3. Values in brackets are coefficients while those outside brackets are t-values of the variables

The linear regression model shows that the company's accounts receivable had significant positive relationships with the profitability ratio. This means that the unit increase in the variable brings about a corresponding increase in the profitability ratio of Sical Logistics. Debt had negative but significant relationship with profitability. Again sales growth was negatively but significantly related to profitability. This means that even when they sell more, they are not making enough profit. This is surprising.

Table 7: Multiple Regression Analysis showing the relationship between Profitability ratio and AR, DT and SL of Prism Cement

Variables	Linear Regression	Semi Log Regression	Double Log Regression	Exponential Regression
Constant	0.087 (0.675)	-0.068 (-0.589)	1.065* (2.441)	0.132 (0.116)
Accounts Receivable Ratio (AR)	0.001 (0.004)	-0.039 (-1.023)	3.418*** (4.619)	6.147 (0.831)
Debt Ratio (DT) (Control)	-0.103 (-1.180)	-0.018 (-0.675)	-0.570* (-2.403)	4.413 (0.776)
Sales Growth Rate (SL) (Control)	0.001 (0.459)	0.023 (0.660)	-1.291*** (-5.273)	-0.010 (-1.161)
R ²	0.628	0.722	0.952	0.562
Adjusted R ²	-0.022	0.234	0.868	-205
F-Ratio	0.966	1.481	11.373**	0.733

1. Profitability = Bo + Bi (AR)ii + B2DT 2i + B2SL 2i + Ui
2. Also, 1%, 5%, 10% levels of significance are represented by ***, ** and * respectively
3. Values in brackets are coefficients while those outside brackets are t-values of the variables

The double-log multiple regression model results show that the Prism Cement's accounts receivable had significant and positive relationship with profitability. This shows that a unit increase in the variable brings about a corresponding increase in the profitability ratio of Prism Cement. However, debt also had significant but negative relationship with the profitability of the company. Sales growth had significant negative relationship with the profitability ratio, which means that even when the sales increases, the profit does not increase.

Table 8: Multiple Regression Analysis showing the relationship between Profitability ratio and AR, DT and SL of Genus Paper

Variables	Linear Regression	Semi Log Regression	Double Log Regression	Exponential Regression
Constant	-0.169 (-1.414)	-0.089 (-0.429)	-0.212 (-0.449)	-0.829 (-1.060)
Accounts Receivable Ratio (AR)	-1.738* (-2.230)	-0.129 (-0.367)	0.149 (0.962)	1.175 (1.261)
Debt Ratio (DT) (Control)	-0.847 (-1.414)	-0.100 (-0.892)	-0.154 (-1.420)	1.355* (2.562)
Sales Grow Rate (SL) (Control)	0.003** (2.939)	0.152 (1.312)	0.082 (0.565)	-0.013 (-1.475)
R ²	0.916	0.839	0.953	0.857
Adjusted R ²	0.770	0.557	0.869	0.608
F-Ratio	6.269	2.975	11.467**	3.436

1. Profitability=Bo + Bi (AR)ii + B2DT 2i + B2SL 2i + Ui
2. Also, 1%, 5%, 10% levels of significance are represented by ***, ** and * respectively
3. Values in brackets are coefficients while those outside brackets are t-values of the variables

Results of double-log multiple regression model show that Genus Paper's accounts receivable had significant but negative relationship with the profitability. This implies that unit increase in variables brings a corresponding decrease in the company's profitability. On the other hand, debt also had significant but negative relationship with profitability, which means that there is no corresponding increase in the profitability of Genus Paper even when their external debt increases. Sales growth had significant and positive relationship. Here as their sales increases so also their profit.

Table 9: Multiple Regression Analysis showing the relationship between Profitability ratio and AR, DT and SL of PVP Ventures

Variables	Linear Regression	Semi Log Regression	Double Log Regression	Exponential Regression
Constant	-0.310 (-0.494)	0.387 (1.772)	-0.179 (-0.176)	-0.113 (-1.039)
Accounts Receivable Ratio (AR)	-0.547 (-0.105)	0.080 (0.929)	0.415 (1.040)	3.095 (0.129)
Debt Ratio (DT) (Control)	-0.078 (-0.056)	0.122*** (4.574)	0.342* (2.759)	-2.130 (-0.332)
Sales Growth Ratio (SL) (Control)	0.003 (0.629)	0.144 (1.673)	0.207 (0.517)	-0.021 (-0.863)
R ²	0.497	0.984	0.943	0.622
Adjusted R ²	0.817	0.956	0.843	-0.040
F-Ratio	2.556	34.898***	9.420**	0.939

1. Profitability=Bo + Bi (AR)ii + B2DT(control)2i + B2SL(control)2i + Ui
2. Also, 1%, 5%, 10% levels of significance are represented by ***, ** and * respectively
3. Values in brackets are coefficients while those outside brackets are t-values of the variables

The results of semi-log regression show that PVP Ventures' accounts receivable had positive but non-significant relationship with the profitability of PVP Ventures. This implies that as the receivables increase there is a corresponding increase in the profitability even though it is not significant. Debt also had positive and significant relationship with profitability which shows that as the debt of this company increases its profit will also increase. Sales growth had positive and significant relationship with the profitability.

Table 10: Multiple Regression Analysis showing the relationship between Profitability ratio and AR, DT and SL of Nagarjuna Fert

Variables	Linear Regression	Semi Log Regression	Double Log Regression	Exponential Regression
Constant	-0.111* (-2.593)	0.344 (1.520)	-3.464*** (-10.395)	-1.221 (-0.909)
Accounts Receivable Ratio (AR)	0.269*** (5.321)	0.003 (0.042)	0.029 (0.283)	0.587 (0.371)
Debt Ratio (DT) (Control)	-0.058 (-1.733)	0.008 (0.171)	-0.283*** (-4.849)	-0.179 (-0.170)
Sales Growth Rate (SL) (Control)	8.800E-6 (1.462)	-0.013 (-0.253)	0.028 (0.384)	0.000 (1.074)
R ²	0.994	0.726	0.960	0.688
Adjusted R ²	0.983	0.245	0.890	0.142
F-Ratio	89.286***	1.511	13.705**	1.260

1. Profitability = $B_0 + B_1(AR)_i + B_2(DT)_i + B_3(SL)_i + U_i$
2. Also, 1%, 5%, 10% levels of significance are represented by ***, ** and * respectively
3. Values in brackets are coefficients while those outside brackets are t-values of the variables

The result of the analysis revealed that Nagarjuna Fert's accounts receivable had positive significant relationship with the profitability ratio. This means that a unit increase in the variable brings a corresponding increase in the profitability ratio of Nagarjuna Fert. On the other hand debt had negative and non-significant relationship with the profitability while sales growth also had positive and significant relationship.

Test of Hypotheses

Hypothesis one

H_0 : There is no positive significant relationship between accounts receivable and profitability of selected companies listed on NSE.

H_1 : There is significant and positive relationship between accounts receivable and profitability of selected companies listed on NSE.

From the result it was found out that the coefficient of the variables was negative and non-significantly related to the profitability. This means that null hypothesis was rejected. The result is interpreted to mean that as accounts receivables (debtors) increase the impact on profitability decrease. This agrees with the study of Mathura (2009) where he found out that there was a significant but negative relationship between receivables and profitability.

Hypothesis two

H_0 : There is no positive significant relationship between debt and profitability.

H_1 : There is positive significant relationship between debt and profitability.

This was used to test the long term debt of the companies under study, whether the borrowing has negative or positive impact on the profitability. The result shows that there is a positive and non-significant relationship between debt and profitability. This means that Nagarjuna Fert, Sical Logistics and Genus Paper borrowed in almost all the years and this had serious influence on their profit. Prism Cement and PVP Ventures did not borrow like the other three companies.

Hypothesis three

H_0 : Sales growth has no positive significant relationship with corporate profitability.

H_1 : Sales growth has positive significant relationship with corporate profitability.

This hypothesis was used to test the decrease or increase in sales of the companies under study, and it was found out that sales growth had positive and non-significant relationship with the profitability. This means that as sales increases profitability decreases, which shows that even through the sales of these companies increase, there is no corresponding increase in their result of operation. They were not performing well. Therefore, the null hypothesis is rejected.

V. CONCLUSION

The competitive nature of the business environment requires firms to adjust their strategies and apply financial polices to survive and enable growth. Accounts receivable management is an important aspect of financial management.

Generalized multiple regression analytical tool was used to test the hypotheses, and it was found out that accounts receivable was negatively and non-significantly related to profitability, while debt had positive but non-significant relationship with the profitability. Sales growth had also positive and non-significant relationship with the profitability. The work contributes to the body of knowledge being the first attempt to empirically establish the effect of accounts receivable management on the performance of the selected companies listed on NSE. The study also appears to be the first work to conduct analysis using the four functional models of multiple regression analysis method.

VI. REFERENCES

- [1] Bougheas, S. Mateut, S. & Mizen, P. (2009). *Corporate trade credit and inventories: New evidence from a trade-off from accounts payable and receivable*. *Journal of Banking and Finance*, 33(2), 300-307.
- [2] Deloof, M. (2003). *Does working capital management affect profitability of Belgian firm*. *Journal of Business Finance and Accounting*, 30 (3 and 4), 573-587.
- [3] Garcia, T. Pedro, J. & Solano, M. (2007). *Effects of working capital management on SME profitability*. *International Journal of Managerial Finance*, 3 (2), 164-177.
- [4] Gill, A. Biger, N. & Mathur, N. (2010). *The relationship between working capital management and profitability: Evidence from the United States*. *Business and Economics Journal*, 10, 1-9.
- [5] Grzegorz, M.M. (2008). *A profitability management approach in accounts receivable management*. *South East European Journal of Economics and Business*, 3(2), 89-96.
- [6] Jack, D. & Mathew, B. (1994). *Management of Accounts Receivable*. *Canadian Veterinary Journal*, 35(5), 307-312.
- [7] Knauer, T. & Wöhrmann, A. (2013). *Working capital management and firm profitability*. *Journal of Management Control*, 24(1), 77-87.
- [8] Lazaridisi, I. & Trynidis, D. (2006). *Relationship between working capital management and profitability of listed companies in the Athens stock exchange*. *Journal of Financial Management and Analysis*, 19 (1), 26-35.
- [9] Mathuva, D. (2010). *The Influence of working capital management components on corporate profitability. A survey of Kenyan listed firms*. *Research Journal of Business management*, 3, 1-11.
- [10] Padachi, K. (2006). *Trends in working capital management and its impact on firms' performance: An analysis of Mauritian small manufacturing firms*. *International Review of Business Research Papers*. 2(2), 45-58.
- [11] Philip, L. & Dawne, L. (2011). *Refining Measures to improve Performance Measurement of the Accounts Receivable*. *Journal of JAMAR*, 9(2), 1-20.
- [12] Pike, R. Cheng, N.S. & Craven, K. (2005). *Trade credit terms, Asymmetric information and Price discrimination, Evidence from three continents*. *Journal of business finance and accounting*, 32 (5 and 6), 1197-1236.
- [13] Raheman, A. & Nasr, M. (2007). *Working capital management and profitability—case of Pakistani firms*. *International Review of Business Research Papers*, 3(1), 279-300.
- [14] Ramachandran, A. & Janakiraman, M. (2009). *The Relationship between working capital management efficiency and EBIT*. *Managing Global Transitions*, 7 (1), 61-74.
- [15] Sammiloglu, F. & Demirgunes, (2008). *The effect of working capital management on firm's profitability. Evidence from turkey*. *The international Journal of Applied Economics and finance*, 2, 44-50
- [16] Sharma, A.K. & Kumar, S. (2011). *The effect of working capital management on firm's profitability: Empirical Evidence from India*. *Global business Review*, 12, (1), 159 – 173.
- [17] Singh, J.P. and Pandey, S. (2008). *Impact of working capital management in the profitability of Hindalco industries limited*. *ICFAI University Journal of financial Economics* 6 (4) 62 – 72.
- [18] Soenen, L.A. (1993). *Cash conversion cycle and corporate profitability*. *Journal of Cash Management*, 13, 53-53.
- [19] Venkata, N.R. Ramakrishnaiah, R. & Chengalrayulu, P. (2013). *Impact of receivables management on working capital and profitability; A study of selected cement companies in India*. *International Journal of Marketing, Financial Management and Management Research*, 2, 74-82.