

Quarterly Journal of Econometrics Research



journal homepage: http://www.pakinsight.com/?ic=journal&journal=88

THE EFFECT OF SELECTED FINANCIAL RATIOS ON PROFITABILITY: AN EMPIRICAL ANALYSIS OF LISTED FIRMS OF CEMENT SECTOR IN SAUDI ARABIA

Muhammad Nauman Khan¹* --- Imran Khokhar²

¹Lecturer, Finance Department, College of Business Administration, King Saud University, Riyadh, Saudi Arabia & PhD Research Fellow, Institute of Islamic Banking and Finance, International Islamic University, Malaysia

ABSTRACT

The plinth emergence of infrastructures sector in the Kingdom of Saudi Arabia cardinally hinges upon the growth and development of the Cement industry. The Saudi cement industry is most cost competitive in the world due to availability of raw material and Fuel at very low prices by the government. This has encouraged the researchers to analyze the relationship between profitability and selected financial ratios of cement industry in Saudi Arabia. The research paper makes an endeavor to determine the profitability of listed cement companies in Saudi Arabia with five years accounting period from 2008 to 2012. The paper encompasses six variables, namely, Debt to Equity Ratio (DER), Inventory Turnover Ratio (ITR), Debtors' Turnover Ratio (DTR), Creditors' Velocity (CRSV), Total Assets Turnover Ratio (TATR) and Net profit Margin (NPM). Profitability as a dependent variable is exhibited by Net profit Margin (NPM) while the selected ratios DER, ITR, DTR, CRSV, TATR and CRSV are expressed as independent variables. Based on the findings of the study, it is cogently revealed that there is a significant relationship between the three selected ratios and Net Profit Margin (NPM) of cement companies in Saudi Arabia.

© 2015 Pak Publishing Group. All Rights Reserved.

Keywords: Profitability, Financial ratios, Cement industry.

Contribution/ Originality

This study is one of very few studies conducted on the relationship among different financial ratios and profitability of the companies in Saudi Arabia. The present research investigated the effect of determinants on profitability of cement sector listed companies in Saudi Arabia. Current study concluded that DER, ITR and CRSV have positive effect on the NPM of cement companies.

*Corresponding Author

²Researcher, Economics Department, College of Business Administration, King Saud University, Riyadh, Saudi Arabia

1. INTRODUCTION

Profitability is the state of yielding a financial gain. It is the primary goal of all enterprises. Without profitability the business will not continue in the long run. Increasing profitability is one of the most important tasks of the entrepreneur. They constantly look for ways to change the business to improve profitability. So measuring yesteryear profitability and projecting future profitability is very important. A variety of Profitability Ratios can be used to assess the financial health of a business. These ratios, created from the income statement, can be compared with industry benchmarks. Profitability ratios manifest an enterprise's ability to spawn earnings relative to sales, assets and equity. These ratios gauge the ability of an enterprise to yield earnings, profits and cash flows relative to some indicator, often the capital invested. Profitability is outcome of a numerous policies and decisions. In sum, the profitability ratios expose the blended outcome of liquidity, asset management and debt on the efficiency of the enterprise. Examples of profitability ratios are

- Return on Sales
- Return on Investment
- Return on Equity
- Return on Capital Employed (ROCE)
- Cash Return on Capital Invested (CROCI)
- Gross Profit Margin
- Net Profit Margin

The above mentioned ratios educate about the company performance at earning profits relative to a select standard of measurement. Higher values for most of these ratios convey that the company is providing satisfactory balance in generating profits, revenues and cash flows. Net profit ratio gives a good indication of the overall level of profitability of the company. This ratio quantifies how much of each dollar obtained by the company is transformed into profits. The higher the net profit margin is, the more effective the company is at converting revenue into actual profit. Net profit margin provides evidence to the company's policies& decisions, cost framework and production efficiency. Different strategies cause the net profit margin to vary among different companies. The higher the margin is, the more effective the company is in converting revenue into actual profit.

Cement is a man-made powder that, when mixed with water and aggregates, produces concrete, which uses in building infrastructures. Infrastructures are the basic physical and organizational structure needed for the operation of a society or enterprise, or the services and facilities necessary for an economy to function. So cement plays a key role in the development of an economy.

Saudi Arabia is by far the largest cement market in the GCC region. The Kingdom is currently amongst the top 15 cement producing countries in the world and contributes around 1.4% to total global output. Interestingly, until 1956, Saudi Arabia met its entire cement demand through imports. Commercial production of cement began only after the establishment of Arabian Cement Company in Jeddah. Since then, the Saudi cement industry has developed significantly. According

to the Research Department Sector Report (2011), Saudi Arabia's total production capacity stood at 52.8 million tons in 2010. Over the last five years, total production capacity increased at a CAGR (Compound Annual Growth Rate) of 16.1%. Separately, cement consumption in the Kingdom expanded at a CAGR of 11.1% over 2005–2010, much faster than the GCC and global average. This increase can be primarily ascribed to strong domestic sales due to growing need for housing and commercial infrastructure.

Table-1. Position of Cement Industry in Saudi Stock Market

Sector	Trades	% To Market	Volume	% To Market	Volume Traded	% To Market
Cement	1,701,761	4.76 %	2,379,480,667	3.36 %	78,935,907,581.05	3.68 %

Source: http://www.tadawul.com.sa/Resources/Reports/Yearly_en.html

2. REVIEW OF RELEVANT LITERATURE

Many studies have described multi-facets of financial management in order to study the profitability of an organization. Research papers have educated that there are multiples of variables, which contribute into play varying degree of influence on the profitability of the organization. Therefore it is desirable for the financial managers to gauge the prime variables exerting substantial influence on the profitability.

Saleem and Rehman (2011) studied the kinship between liquidity and profitability of oil and gas companies of Pakistan. The results reported that there is a significant effect of only liquid ratio on ROA while there is insignificant effect on ROE and ROI; thus, the study found that liquidity and profitability are closely related because as one increases the other decreases. Innocent et al. (2013) studied the relationship between the financial ratio analysis and profitability of the Nigerian Pharmaceutical industry over the past eleven (11) years period from 2001-2011. The researchers advocate that the financial ratio analyse have tremendous potentials to help organizations in enhancing their revenue generation ability as well as minimization of costs. The study covered five (5) variables for the analyses such as: Inventory Turnover Ratio (ITR); Debtors' Turnover Ratio (DTR); Creditors' Velocity (CRSV); Total Assets Turnover Ratio (TATR) and Gross Profit Margin (GPM). Profitability as a dependent variable is expressed by Gross Profit Margin (GPM) while financial ratio analysis represents as ITR, DTR, CRSV and TATR for independent variables. The study reported that there is a negative relationship between all independent variables with profitability in the Nigerian pharmaceutical industry. Dave (2012) examined the link between financial management and profitability of the Indian Pharma sector for a period of 10 years. The study covered six variables viz. Long term Debt to Equity Ratio (LTDER), Inventory Ratio (IR), Debtors Ratio (DR), Creditors Velocity (CRSV), Total Assets to Sales Ratio (TASR) and Profit after Tax to Sales Ratio (PATSR). These variables are calculated for 64 public limited pharmaceutical companies. The results proved that TASR and CRVS are the central variables for enhancing the profitability of the enterprise. Napompech (2012) studies the effects of working capital management on profitability. The results exposed a negative relationship between the gross

operating profits and inventory conversion period and the receivables collection period. Ajanthan (2013) studies the relationship between dividend payout and firm profitability among stock listed hotels and restaurant companies in the Colombo Stock Exchange. The study proved that dividend payout was a crucial factor affecting firm performance. Velnampy and Niresh (2012) analyze the relationship between capital structure and profitability of ten Stock exchange listed Srilankan banks period from 2002 to 2009. The research shows that there is a negative association between capital structure and profitability. Quayyum (2012) studied the relationship between working capital management and profitability of manufacturing enterprises. The author encompasses companies enlisted with the Dhaka Stock Exchange the year 2005 to 2009. The outcome of the paper clearly present that except food industry, all other covered industries have a significant level of relationship between the profitability indices and various working capital components. Okwo et al. (2012) studied the link between firm financial management techniques and profitability in selected Pharmaceutical firms in Nigeria. The authors covered six variables including Long-Term-Debt to Equity Ratio (LTDER), Inventory Turnover Ratio (ITR), Debtors' Turnover Ratio (DTR), Creditors' Velocity (CRSV), Total Assets Turnover Ratio (TATR) and Net Profit Margin (NPM). Profitability as a dependent variable is represented by Net Profit Margin (NPM) while LTDER, ITR, DTR, CRSV and TATR were the independent variables. The paper discovered a positive relationship between LTDER, DTR, TATR and profitability, while ITR and CRSV have negative relationships with profitability. Capkun et al. (2009) investigated the relationship between inventory performance, both total inventory (INV) and its discrete components (Raw Material (RMI), Work-in-Process (WIP)& Finished Goods (FGI)) and financial performance in manufacturing companies. The study covered the period from 1980 to 2005. The paper brought out a significant positive correlation between inventory performance and measures of financial performance for firms in manufacturing industries. Mohammadzadeh et al. (2013) examined the relationship between the capital structure and the profitability of pharmaceutical companies in Iran. The study includes top 30 Iranian pharmaceutical companies and the financial data were gathered for the period of 2001 to 2010. Net margin profit and debts to asset ratio were expressed as indicators of profitability and capital structure respectively, the sales growth was selected as a control variable. The research showed that there was significant negative relationship between the profitability and the capital structure. Salawu (2009) tested the impact of the capital structure on profitability of Stock listed companies in Nigeria. The study covered financial data for 50 nonfinancial quoted companies. The study disclosed that profitability shows a positive correlation with short-term debt and equity and an inverse correlation with long-term debt. Furthermore, the study observed a negative association between the ratio of total debt to total assets and profitability. Dănulețiu (2010) studied the efficiency of working capital management of companies from Alba County. The paper inquired the relation between the efficiency of the working capital management and profitability covering a sample of 20 annual financial statements of companies encompassing a time frame from the year 2004 to 2008. The study concluded that there is a weak negative linear correlation between working capital management indicators and profitability rates. Lazaridis and

Tryfonidis (2006) examined the relationship of corporate profitability and working capital management. The research covered 131 listed companies in the Athens Stock Exchange (ASE) for the time frame 2001 to 2004. The study described that there is statistical significance between profitability, measured through gross operating profit and the cash conversion cycle. Rehman and Anjum (2013) examined the association between working capital management and profitability with correlation; regression analysis the result proved that there is inverse and positive association between working capital management and profitability in cement industry of Pakistan.

Literature review shows that various studies have been carried on the determinants of profitability but there is a lack of studies related to effect of determinants on profitability in Cement sector in Saudi Arabia. In fulfilling this gap, the research paper makes an endeavor to determine the profitability of listed Cement companies in Saudi Arabia with five years accounting period from 2008 to 2012. The infrastructure developments in the Kingdom of Saudi Arabia largely depend upon the growth and development of the Cement industries.

2.1. Research Gap

Literature review cogently reveals that various studies have been conducted on the determinants of profitability but there is modicum of research papers related to effect of determinants on profitability in Cement sector of Saudi Arabia. In fulfilling this gap, the research paper makes an endeavor to determine the profitability of listed Cement companies in Saudi Arabia with five years accounting period from 2008 to 2012. The pedestal of economic growth of the Kingdom of Saudi Arabia largely hinges upon the growth and development of the Cement companies.

3. RESEARCH METHODOLOGY

The study uses Pearson correlation to measure the degree of association between selected variables. Further the study encompasses multiple regression analysis techniques to examine the relationship of independent variables with dependent variable, to know the extent of influence the independent variables exercise over the dependent variable. Selection of variables is influenced by the literature review. Secondary source of data is taken for the study. The population of Cement companies in Saudi Arabia stock exchange is fourteen (14). Due to paucity of data, the study encompasses ten (10) Cement companies. Table 2 shows the list of companies (Cement Industry). The data from the audited annual financial reports for the ten listed companies are taken for five years (2008 to 2012) in order to assess the effect of selected financial ratios on Net Profit Margin of cement companies in Saudi Arabia. Table 3 reveals the variables for the study. All the variables stated below have been used to test the hypotheses of the study. The dependent variable is Net profit (NP). The independent variables are commonly used financial ratios. Table 4 covers the computation of the selected variables.

Table-2. List of Companies (Cement Industry)

Symbol	Company Name	Short Name
3003	City Cement Co	CITYCEMENT
3004	Northern Region Cement Company	NORTHERNCEMENT
3010	Arabian Cement Co	ARCCO
3020	Yamamah Saudi Cement Co. Ltd	YNCCO
3030	Saudi Cement Company	SACCO
3040	The Qassim Cement Co	QACCO
3050	Southern Province Cement Co	SOCCO
3020	Yanbu Cement Co	YNCCO
3080	Eastern Province Cement Co	EACCO
3090	Tabuk Cement Co	TACCO

Source: http://www.tadawul.com.sa/wps/portal

Table-3. Variables for the study

Dependent Variable	Independent Variables
Financial Performance	Debt to Equity Ratio (DER)
1. Net Profit Margin (NPM)	2. Inventory Turnover Ratio (ITR)
	3. Debtors' Turnover Ratio (DTR)
	4. Creditors' Velocity (CRSV)
	5. Total Assets Turnover Ratio (TATR)

Through their significance, the select dependent variable and the independent variables define the multi facets of efficient financial management and therefore are considered in analyses of the sector.

Net Profit Margin (NPM): The ratio is an effective measure to check the profitability of business.

Debt to Equity Ratio (DER): It indicates the soundness of financial policies and capital structure of the company.

Inventory Turnover Ratio (ITR): This ratio indicates whether investment in inventory is efficiently used or not.

Debtors 'Turnover Ratio (DTR): It indicates the speed at which debts are being collected.

Creditors' Velocity (CRSV): It indicates the speed with which the payments for credit purchases are made to the creditors.

Total Assets Turnover Ratio (TATR): It indicates the efficient utilization of fixed assets.

Table-4. Computation of Selected Variables

Variables	Method of Computation
Net profit Margin (NPM)	Net Profit /Sales
Debt to Equity Ratio (DER)	Total Debt/Shareholder Equity
Inventory Turnover Ratio (ITR)	Cost of Sales / Inventory
Debtors' Turnover Ratio (DTR)	Sales /Trade Debtors
Creditors' Velocity (CRSV)	Cost of Sales /Trade Creditors
Total Assets Turnover Ratio (TATR)	Sales / Total Assets

The study intends to study the relation in the followings ratios:

- To study the effect of Debt to Equity Ratio (DER) on Net Profit Margin (NPM) of cement companies in Saudi Arabia.
- To study the effect of Inventory Turnover Ratio (ITR) on Net Profit Margin (NPM) of cement companies in Saudi Arabia.
- To study the effect of Debtors' Turnover Ratio (DTR) on Net Profit Margin (NPM) of cement companies in Saudi Arabia.
- To study the effect of Creditors' Velocity (CRSV) on Net Profit Margin (NPM) of cement companies in Saudi Arabia.
- To study the effect of Total Assets Turnover Ratio (TATR) on Net Profit Margin (NPM) of cement companies in Saudi Arabia.

3.1. Statement of Hypotheses

For better understanding of the effect of the selected ratios on the Net Profit Margin, the following hypotheses are framed.

Hypothesis 1 (H0): There is no significant relationship between Debt to Equity Ratio (DER) and Net Profit Margin (NPM) of cement companies in Saudi Arabia.

Hypothesis 2 (H0): There is no significant relationship between Inventory Turnover Ratio (ITR) and Net Profit Margin (NPM) of cement companies in Saudi Arabia.

Hypothesis 3 (H0): There is no significant relationship between Debtors' Turnover Ratio (DTR) and Net Profit Margin (NPM) of cement companies in Saudi Arabia.

Hypothesis 4 (H0): There is no significant relationship between Creditors' Velocity (CRSV) and Net Profit Margin (NPM) of cement companies in Saudi Arabia.

Hypothesis 5 (H0): There is no significant relationship between Total Assets Turnover Ratio (TATR) and Net Profit Margin (NPM) of cement companies in Saudi Arabia.

The study has applied Ordinary Least Squares (OLS) method. For the purpose of analysis, the E Views software is used to examine the financial data.

The basic model estimated is as follows:

$$(NPM) y = b0 + b1 (DER) + b2 (ITR) + b3 (DTR) + b4 (CRSV) + b5 (TATR) + C$$

In order to specify the analysis model, the study use the following variables as a series of indicators of financial analysis computed mainly, such as Debt to Equity Ratio (DER), Inventory Turnover Ratio (ITR), Debtors' Turnover Ratio (DTR), Creditors' Velocity (CRSV), Total Assets Turnover Ratio (TATR). For the evaluation of profitability, Net Profit Margin (NPM) is taken as a dependent variable (Dave, 2012).

3.2. Descriptive Statistics

Table 5 is showing the descriptive statistics of all variables used in this model about the selected companies of the cement sector of Saudi Arabia over the period of 5 years from 2008 to 2012. The total no. of observations are fifty (50). Information about the ranges of the variables is

contained in the Minimum and Maximum. Variability can be assessed by examining the values in the Standard Deviation column.

 $\textbf{Table-5.} \ \ \text{Descriptive Statistics for all the Variables Tested for Select Companies over the 5 Year}$

	Mean	Minimum	Maximum	Standard Deviation	Observations
NPM	0.536251	0.173431	3.552293	0.444422	50
DER	0.327370	0.030237	1.181985	0.268731	50
ITR	0.351350	0.041952	4.288537	0.582051	50
DTR	0.135967	0.015541	0.587317	0.108613	50
CRSV	1.788663	0.221054	48.25146	6.726905	50
TATR	4.586934	1.752891	73.16600	9.945440	50

Source: Data computed on the basis of the company's annual financial statements Researchers' EVIEWS

3.3. Analysis

The standard deviation measures the amount of variability in the distribution of a variable. The Net Profit Margin (NPM) measured by Net Profit/Sales gives positive mean values, that is 0.536251. This indicates that the companies showed overall good performance in the analyzed period. The descriptive statistics reveals that under the study period, the selected financial ratios as measured by Debt to Equity Ratio (DER), Inventory Turnover Ratio (ITR), Debtors' Turnover Ratio (DTR), Creditors' Velocity (CRSV), Total Assets Turnover Ratio (TATR) have a positive mean value which ranges from 0.135967 for Debtors' Turnover Ratio (DTR) to 4.586934 for Total Assets Turnover Ratio (TATR). Creditors' Velocity (CRSV) and Total Assets Turnover Ratio (TATR) have highest standard deviation of 6.726905 and 9.945440 respectively. This indicates that the observations in the data set are widely dispersed from the mean. So the management of Cement industry in Saudi Arabia should monitor their creditors and total assets.

4. CORRELATION STATISTICS

Table 6 indicates the relationship between the various independent variables and the dependent variable used in the study. The correlation matrix below shows that Debt to Equity Ratio (DER), Inventory Turnover Ratio (ITR), Debtors' Turnover Ratio (DTR), Creditors' Velocity (CRSV), Total Assets Turnover Ratio (TATR), Creditors' Velocity (CRSV) have a weak positive relationship with Net Profit Margin (NPM). The strength of their relationship is indeed at 0.325%, 0.939%, 0.560%, 0.968%, 0.963% for Debt to Equity Ratio (DER), Inventory Turnover Ratio (ITR), Debtors' Turnover Ratio (DTR), Creditors' Velocity (CRSV), Total Assets Turnover Ratio (TATR), Creditors' Velocity (CRSV) respectively.

Table-6. Correlations for all the Variables Tested for Select Companies over the 5 Year Period Correlation

	NPM	DER	ITR	DTR	CRSV	TATR
NPM	1.000000	0.325994	0.939922	0.560772	0.968017	0.963973
DER	0.325994	1.000000	0.481115	0.344465	0.511087	0.500101
						Continue

Quarterly Journal of Econometrics Research, 2015, 1(1):1-12

ITR	0.939922	0.481115	1.000000	0.585817	0.981254	0.981529
DTR	0.560772	0.344465	0.585817	1.000000	0.594253	0.626637
CRSV	0.968017	0.511087	0.981254	0.594253	1.000000	0.996552
TATR	0.963973	0.500101	0.981529	0.626637	0.996552	1.000000

Source: Data computed on the basis of the company's annual financial statements Researchers' EVIEWS Analysis

4.1. Regression Statistics

In Table 7(Model Results), the coefficient column for variable CRSV stands at +0.114095. This reveals that there is a positive relation between CRSV and Net Profit Margin; it means that an increase in CRSV will also lead to an increase in the Net Profit Margin. At the significance level of 0.0000 < 0.05, it is statistically significant. The weight of evidence, therefore suggests rejecting the null hypothesis and confirming that there is a significant relation between CRSV and Net Profit Margin of cement sector companies in Saudi Arabia. As shown in the table, the coefficient column for variable DTR stands at +0.036969. This reveals a positive relation between DTR and Net Profit Margin, it means that an increase in DTR will also lead to an increase in the Net Profit Margin. At the significance level of 0.7649, it is more than 0.05, so it is statistically insignificant. The weight of evidence, therefore suggests accepting the null hypothesis. This implies that change in DTR does not have influence on the Net Profit Margin of cement companies in Saudi Arabia.

Table-7. Model Results

Dependent Variable: NPM Method: Least Squares

Sample: 150

Included observations: 50

Variable	Coefficient	Std. Error	t-Statistic	Prob.		
С	0.615128	0.030237	20.34356	0.0000		
DER	-0.401315	0.040037	-10.02360	0.0000		
ITR	-0.286162	0.083666	-3.420292	0.0014		
DTR	0.036969	0.122869	0.300884	0.7649		
CRSV	0.114095	0.018975	6.013062	0.0000		
TATR	-0.012222	0.013407	-0.911569	0.3670		
R-squared	0.981795	Mean dependent var	0.536251	Mean dependent var		
Adjusted R-squared	0.979727	S.D. dependent var	0.444422	S.D. dependent var		
S.E. of regression	0.063279	Akaike info criterion	-2.570361	Akaike info criterion		
Sum squared resid	0.176186	Schwarz criterion	-2.340918	Schwarz criterion		
Log likelihood	70.25902	Hannan-Quinn criter.	-2.482988	Hannan-Quinn criter.		
F-statistic	474.5908	Durbin-Watson stat	1.498613	Durbin-Watson stat		
Prob(F-statistic)	0.000000					

Source: Authors' EVIEWS Analysis

As shown in the table, the coefficient column for variable DER stands at -0.401315 This indicates that DER has negative relationship with Net Profit Margin. It means that an increase in DER will lead to decrease in the Net Profit Margin. At the significance level of 0.0000< 0.05, it is

statistically significant. The weight of evidence, therefore, suggests that null hypothesis Ho(ITR) be rejected and the alternate hypothesis H1 (DER) be accepted. This means DER exert significant influence over Net Profit Margin negatively of cement companies in Saudi Arabia. As per the table, the coefficient column for variable ITR stands at -0.286162. This indicates that ITR has negative relationship with Net Profit Margin. At the significance level of 0.0000< 0.05, it is statistically significant The weight of evidence, therefore, suggests that null hypothesis H0(ITR) be rejected and the alternate hypothesis H1 (ITR) be accepted. This means ITR exert significant negative influence over Net Profit Margin of cement companies in Saudi Arabia. As per the table, the coefficient column for variable TATR stands at -0.012222. This indicates that TATR has negative relationship with Net Profit Margin. At the significance level of 0.3670 that is more than 0.05, it is statistically insignificant. The weight of evidence, therefore, suggests that null hypothesis H0(TATR) be accepted and the alternate hypothesis H1 (TATR) be rejected. This means TATR does not exert significant influence over Net Profit Margin of cement companies in Saudi Arabia.

The R2, the coefficient of multiple determinations indicate the extent to which the independent variables influence the dependent variable. The (model snapshot) demonstrates that coefficient of multiple determinations (R2) is 0.981795. Thus 98% of the variations in the dependent variable are explained by the independent variables of the model. It also shows that the independent variables are the major determinants factor of net profit margin of the Cement companies in Saudi Arabia. While, the remaining 2.0% could be explained by other macroeconomic factors. F-test provided in Table 7, manifests that F = 474.5908 at a significance level of 0.000. This indicates that all standardized regression coefficients will be non-zero. So, the test outputs described below provide considerable reliability to the results and the emerging multiple regression equation is as:

 $\begin{aligned} NPM &= 0.615128 + -0.401315(DER) + -0.286162(ITR) + 0.036969(DTR) + 0.114095(CRSV) \\ &+ -0.012222(TATR) + \varepsilon i. \end{aligned}$

Thus, in sum, out of the five hypotheses, it is revealed that our two variables Debtors' Turnover Ratio (DTR) and Total Assets Turnover Ratio (TATR) has no significant relationship with Net Profit Margin (NPM) of cement companies in Saudi Arabia.

	0 11	
No.	Hypothesis	Result
Hypothesis 1 (H0):	There is no significant relationship between Debt to Equity	Rejected
• • • • • • • • • • • • • • • • • • • •	Ratio (DER) and Net Profit Margin (NPM) of cement	J
	companies in Saudi Arabia.	
Hypothesis 2 (H0):	There is no significant relationship between Inventory	Rejected
	Turnover Ratio (ITR) and Net Profit Margin (NPM) of	
	cement companies in Saudi Arabia.	
Hypothesis 3 (H0):	There is no significant relationship between Debtors'	Accepted
	Turnover Ratio (DTR) and Net Profit Margin (NPM) of	_
	cement companies in Saudi Arabia.	
Hypothesis 4 (H0):	There is no significant relationship between Creditors'	Rejected
	Velocity (CRSV) and Net Profit Margin (NPM) of cement	
	companies in Saudi Arabia.	
		Continue

Table-8. Testing of Hypotheses

Hypothesis 5 (H0):	There is no significant relationship between Total Assets	Accepted
	Turnover Ratio (TATR) and Net Profit Margin (NPM) of	
	cement companies in Saudi Arabia.	

5. CONCLUSION

Cement industry is one of the major contributors to Saudi Arabia's economy. The Saudi government is actively promoting the sector's diversification and greater downstream expansion for increasing the production of value added products. This move is expected to enhance the profitability of local producers. The challenge that determines the pace and scale of future development of this industry is the profitability. Thus, the objective of this paper is to examine the selected financial ratios as a determinant of profitability in the Cement Industry in Saudi Arabia, so that the financial managers may gauge the prime variables exerting substantial influence on the profitability. It is revealed that the Total Assets Turnover Ratio (TATR) have the highest standard deviation of 9.945440. The management of the Cement sector have to rein in this ratio. The study covered five hypotheses. Out of the five hypotheses, it is revealed that two variables Debtors' Turnover Ratio (DTR) and Total Assets Turnover Ratio (TATR) have no significant relationship with Net Profit Margin (NPM) of Cement companies in Saudi Arabia. This reveals that the Debtors' Turnover Ratio (DTR) and Total Assets Turnover Ratio (TATR) are not considered as a significant determinant of the profitability of the enterprise. Based on the findings of the study, it is cogently revealed that there is a significant relationship between the three selected ratios and Net Profit Margin (NPM) of Cement companies in Saudi Arabia.

REFERENCES

- Ajanthan, A., 2013. The relationship between dividend payout and firm profitability: A study of listed hotels and restaurant in Sri Lanka. International Journal of Scientific and Research Publications, 3(6): 1.
- Capkun, V., A. Hameri and L.A. Weiss, 2009. On the relationship between inventory and financial performance in manufacturing companies. International Journal of Operations & Production Management, 29(8): 789-806.
- Dănulețiu, A.E., 2010. Working capital management and profitability: A case of Alba county companies.

 Annales Universitatis Apulensis Series Oeconomica, 12(1): 364-374.
- Dave, A.R., 2012. Financial management as a determinant of profitability: A study of Indian pharma sector. South Asian Journal of Management, 19(1): 124.
- Innocent, E.C., O.I. Mary and O.M. Matthew, 2013. Financial ratio analysis as a determinant of profitability in Nigerian pharmaceutical industry. International Journal of Business and Management, 8(8): 107.
- Lazaridis, I. and D. Tryfonidis, 2006. Relationship between working capital management and profitability of listed companies in the Athens stock exchange. Journal of Financial Management & Analysis, 19(1): 26-35.
- Mohammadzadeh, M., F. Rahimi, F. Rahimi, S.M. Aarabi and J. Salamzadeh, 2013. The effect of capital structure on the profitability of pharmaceutical companies the case of Iran. Iranian Journal of Pharmaceutical Research, 12(3): 573-577.

- Napompech, K., 2012. Effects of working capital management on the profitability of Thai listed firms. International Journal of Trade, Economics and Financ, 3(3): 227-232.
- Okwo, I.M., C.I. Enekwe and U.D. Okelue, 2012. Financial management as a determinant of profitability: A study of selected pharmaceutical firms in Nigeria. European Journal of Business and Management, 4(20): 28-36.
- Quayyum, S.T., 2012. Relationship between working capital management and profitability in context of manufacturing industries in Bangladesh. International Journal of Business and Management, 7(1): 58.
- Rehman, M.U. and N. Anjum, 2013. Determination of the impact of working capital management on profitability: An empirical study from the cement sector in Pakistan. Asian Economic and Financial Review, 3(3): 319-332.
- Research Department Sector Report, 2011. Saudi cements sector. Aljazeera Capital.
- Salawu, R.O., 2009. The effect of capital structure on profitability: An empirical analysis of listed firms in Nigeria. The International Journal of Business and Finance Research, 3(2): 121-129.
- Saleem, Q. and R. Rehman, 2011. Impacts of liquidity ratios on profitability case of oil and gas companies of Pakistan. Interdisciplinary Journal of Research in Business, 1(7): 95-98.
- Velnampy, T. and J.A. Niresh, 2012. The relationship between capital structure & profitability. Global Journal of Management and Business Research, 12(13): 67-74.