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IMPACT OF FINANCIAL RATIOS ON PROFITABILITY ASSESSMENT OF AMAZON COMPANY

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Abstract:This study shows financial ratios and relationships with the profitability ratios, namely, "NIM - Net profit margin, ROA - return on assets and return on equity" of the Amazon Company. As an important current ratio, liquidity ratios and quick ratios are calculated in regression analysis and found their statistical significance with NPM and ROA. The given information in this research is obtained from the Macro trend website, in order to calculate and assess over the period of 2010 - 2019 monetary statements results [1]. Furthermore, in order to reach the given target, four groups of financial ratios are selected, such as liquidity ratios, leverage, efficiency ratios, and profitability ratios. On the other hand, in this research, only two ratios have been used from each category, so my research is limited. In this way, to investigate the developed hypothesis, the researcher applied multiple regression analyses for the second hypothesis to ascertain the significance of current and quick ratios with NPM and ROA. In the same way, correlation analysis was utilized for the rest of the hypothesis testing. To sum up, the outcome indicated that three given null hypotheses were rejected, showing a weak and negative relationship between the given financial ratios. However, the current ratio was statistically significant with NPM, but the quick ratio was higher than the p-value, so the second null hypothesis has been partially accepted.

Keywords— Ratios Analysis; Financial Statements; Profitability

Introduction

Monetary analysis can be distinct as the procedure of evaluating a company's monetary position by analyzing the corporation's profitability, survival, and stability. A financial ratio is a ratio determined on the basis of a corporation's monetary evidence and used for assessment. For example, indicators are often mentioned to as "*return on investment (ROI), return on assets (ROA) and debt ratio*," to name a few. These ratios result from sharing the balance or financial ratios of one account with another. These measures or balances are usually found in the annual accounts of one enterprise: "*the balance sheet, the income statement, the cash flow statement, and/or the statement of changes in equity*". Economic ratios can deliver small businesses and executives with valued tools to extent their advancement for a given inner goal, a contestant, or the production as a whole. Additionally, measuring the changing ratio over time is an influential way to identify prompt tendencies. Business analysts, investors and bankers also use relationships to evaluate a corporation's monetary position. The main relationships can be divided into four foremost classifications:

1) Return on asset

2) Leverage

3) Liquidity

4) Performance or efficiency, which specifies some specific ratio calculations.

In this article, scientists chose Amazon, and it is a US-based international expertise corporation founded in "*Seattle with 750,000 employees*" [2]. It emphases on artificial intelligence, digital streaming, cloud computing and e-commerce. Together with Microsoft, Apple and Google, it is considered one of the top four technology companies. It has been called "*one of the most influential economic and cultural forces in the world*." Amazon is known to be disrupting the mature industry due to technological innovation and extensive

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expansion. This is the largest web market in the world. Amazon is the biosphere's largest revenue-generating online company. It is the second-largest secluded company in the US and one of the largest companies in the world. Therefore, this article consists of four parts: introduction, literature, theoretical framework, methodology, analysis, and conclusions.

1. Literature Review

(Ahmed, 2018)depicted that "*Financial statement analysis and assessing the profitability of the Kirkuk's Company for producing constructional materials*" shows that primary objective of a company's secretarialsubdivision is to formulate a summary of dependablemonetary statements in order to prepare an effective income statement, balance sheet, cash flowthe impact of approving the statement of monetary analysis for assessing"*Kirkuk's profitability*." The data from this study are based on supporting data collected from past and current building materials production activities in Kirkuk. The research consequences show that there is no significant associationamong the performance of asset control and the use of assets. At the same time, the link between profitability and liquidity is weak. Moreover, the study of **(Batchimeg, September 2017)**reveals the ratio that can determine the financial performance of Mongolian companies, divided into six main divisions to improve competitiveness. The study analyzed the company's profitability and its relationship with several influencers of "*100 Mongolian companies (JSCs) listed on the Mongolian Stock Exchange (MSE)*".

Moreover, MSE carried out preliminary steps on the annual accounts of these companies in order to assess their financial position for the period 2012-2015. For performance, select "*Return on Assets (Return on Equity), Return on Equity (Return on Equity) and Return on Investment (ROS)*", but sales growth, earnings growth, capital growth, gross profit, earnings per share, income ratio, benefit or cost ratio, deficit and profit. The explanatory variables used were assets, current short-term ratio, and long-term liabilities of total assets, spot ratios, current rate, and monetary ratio. Panel zoom indicates that ROA is more accurate than "*ROE and ROS*." For example, earnings per share, the percentage of expenses and income have a positive effect, while the ratio of current liabilities to total assets and the percentage of the cost of income haveanundesirable effect. Sales growth, earnings per share and ROS's cost/income ratio have a positive effect on the organization's financial performance, while the cost/revenue ratio has anoptimistic effect on monetarypresentation, which is measured as sales profit.

The aim of the **(Megaladevi, NOVEMBER 2018)**study is to examine the profitability and liquidity ratio of some Indian cement corporations. In order to improve profitability, all companies must have good working capital in their day-to-day operations. Their research shows that the liquidity ratio and the income ratio have a close relationship between each ratio. Furthermore, **(Muhammad Nauman Khan, 2015)**included six variables, namely the "*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*" selection ratios are articulated as "*independent variables - IV*". The results of the studies convincingly state that there is an important link between these three electoral ratios and the net profit of Saudi Cement (NPM).

The purpose of this article is to examine whether the viability of agricultural holdings in terms of added value is linked to their economic performance. According to the traditional concept of **(Kozera, 2011)**the economic efficiency of agricultural holdings depends on the use of "*on-balance sheet and off-balance sheet funds*"; these incomes are called intelligent capital. The "*value-added coefficient -VAIC ™*" established by "*Pulić*," and it is a measure of the impact of the use of these resources. The findings confirmed the correlation between "*VAIC ™ and ROI*" and highlighted the increasingsignificance of intellectual capital in farms as a reason for further research. Research shows that intelligent capital is significant for companies to create value and success. So far, investigators in the cultivatedsubdivision have ignored this problem. Studies have shown that financial performance is closely linked to the cost-effective use of off-balance sheet intellectual property.

Study of **(Zeithaml, December 2000)**examined the literature on six factors, and these may include "*the direct impact of service quality on profits; offensive effect; protective effect; perceived quality of service and*

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purchase relationship between wishes; customer profitability and service and service quality, customer stability and profitability" are key factors. In each class, the author determines what is known, then suggests a relationship program check and questions be answered. This article is organized around a conceptual framework that links six topics. According to the study of **(Garland, 01 February 2002)**shows that the larger the share of the customer's in banking, higher the customer's profit in the bank. The key issue is that customers are assets and can be managed accordingly. The distribution of customer contributions and their impact on marketing research and retail banking is generally discussed. Additionally, a study of **(Jianjun Niu, 23 October 2008)** collected and analyzed data on the profitability of Chinese listed companies from 1992 to 2004. The results show that the average profits of Chinese listed companies fell during this period. Profits on deposits also fell. Further analysis shows that changes in the profitability of listed companies follow a moderately strong regression model on average.

2. Theoretical Framework

According to the accounting concept of Gill (1999), financial reporting is the primary way to disseminate monetaryevidence to external and internal customers. In fact, registered and secluded companies have to comply with strict accounting requirements. The "*basic principles*" of accounting and reporting are generally accepted accounting principles. This customarydelivers a structure for what evidence should be presented in economic statements and how it should be presented. Their structure makes information on companies' annual accounts reliable and comparable. A practical understanding of financing requires knowledge of the "*balance sheet, income statement, and cash flow*" (Maggina, 2008; Sultan, 2014 and Nuhu, 2014).

3.1 Liquidity Ratios

The present ratio is a financial ratio that trials a corporation'saptitude to repay its current and non-current liabilities. The present liquidity ratio is:

- The "*current ratio*" measures a corporation's ability to repay short-term accountabilities with current assets:

Current ratio = Current assets / Current liabilities

- Ration of "*acid-test*" is used to measure a company's ability to repay short-term debt with quick assets:

Acid-test ratio = Current assets – Inventories / Current liabilities

- The "*cash ratio*" indicates the company's ability to use cash and cash equivalents to repay short-term debt:

Cash ratio = Cash and Cash equivalents / Current Liabilities

- The "*operating cash flow ratio*" from operations shows how many times an enterprise can use cash to pay short-term debt during a period:

Operating cash flow ratio = Operating cash flow / Current liabilities

3.2 Influence of Financial Ratios

Debt measures how much capital debt generates. This means that the leverage ratio is used to assess the level of corporate debt. The overall debt ratio is:

- The "*debt ratio*" measures the relative amount of the company's assets given by debt:

Debt ratio = Total liabilities / Total assets

- The "*debt to equity ratio*" calculates the total amount of debt and financial liabilities from equity:

Debt to equity ratio = Total liabilities / Shareholder's equity

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- "*Interest coverage ratio*" shows how well a company can cover interest expenses:

Interest coverage ratio = Operating income / Interest expenses

- The "*debt services ratio*" shows how well a company is able to repay a debt:

Debt service coverage ratio = Operating income / Total debt service

3.3 Proficiency Ratio

The efficiency ratio, also called the financial performance ratio, is used to measure the extent to which a company uses its assets and assets and common efficiency ratios include:

- The "*asset turnover ratio*" measures a company's ability to generate asset sales:

Asset turnover ratio = Net sales / Total assets

- The "*inventory turnover ratio*" is used to measure how many times an enterprise sells and replaces inventories in a given period:

Inventory turnover ratio = cost of goods sold / Average inventory

- The interpretations "receivable turnover ratio" measures the number of times a company can convert its debtors into cash during a given period:

Receivables turnover ratio = Net credit sales / Average accounts receivable

- The "*days sales in inventory ratio*" measures the average number of days a stock company has before selling to customers:

Days sales in inventory ratio = 365 days / Inventory turnover ratio

3.4 Profitability Ratios

ROI measures a company's ability to earn revenue based on revenue, balance sheet assets, operating expenses, and equity. Current cash flow rates include:

- The "*gross margin ratio*" is used to compare the company's gross profit with its sales revenue to show the company's profit by the cost of the product sold:

Gross margin ratio = Gross profit / Net sales

- To determine efficiency, "*operating margin ratio*" compares a company's operating profit with net sales:

Operating margin ratio = Operating income / Net sales

- The "*return on assets ratio*" is used to measure the success of the use of a company's assets for profit:

Return on assets ratio = Net income / Total assets

"*Return on equity*" measures how effectively an enterprise uses its equity for generating the organizational profit:

Return on equity ratio = Net income / Shareholder's equity

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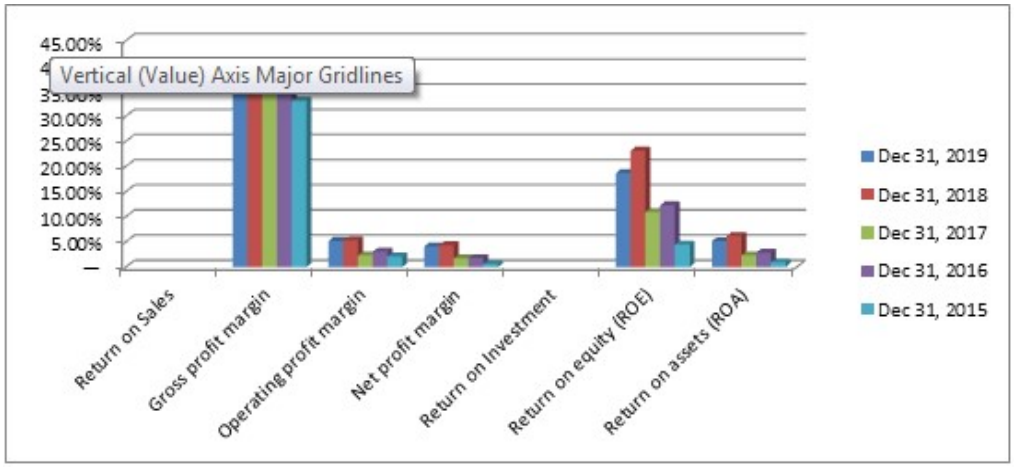

Fig.1:*Profitability ratio of Amazon*

As the figure describes, the gross profit margin was the highest, whereas "*net profit margin, ROA, and OPM*" were the lowest ones, Gross income margin increased in 5 years from 33% till 41% net income margin decreased from 5,33 to 5,11%, during 2018-2019.

3.5 The hypothesis of the Study

- **First hypothesis**

H0 Liquidity ratios have strong relationship with profitability ratios

H1 Liquidity ratios doesn't have strong relationship with profitability ratios

- **Second hypothesis**

H0 Liquidity ratios have impact on profitability ratios

H1 Liquidity ratios don't have impact on profitability ratios

- **Third hypothesis**

H0 Efficiency ratios have optimistic association with the ratios of profitability

H1 Efficiency ratios have destructive association the ratios of profitability

- **Fourth hypothesis**

H0 Leverage ratios have optimistic association with the abilities of profit abilities

H1 Leverage ratios have destructive association with the abilities of profit abilities

3. Methodology and Collection of Data

This segmentclarifies the investigationintention and explains how to design methods to achieve research objectives. The study includes data analysis and explains how to organize and analyze the data from this study.

4.1 Design of Research

The structure of this study is an imaginary investigationtechnique. "*Qualitative and quantitative methods*" are used for documentsassortment and analysis. This article uses a research method that allows researchers to make detailed observations and research on important aspects of a research unit.

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4.2 Assortment and Analysis of Data

Additional data were collected and pooled in this study. Support data was obtained from Amazon Company's Macro Trend website. The use of data includes the company's audited annual accounts, and the data period includes (2010-2019). Use relationship group data and perform mathematical calculations. The data were then analyzed and applied to "*Microsoft Excel and ANOVA to obtain results*."

4.3 Analysis and Result Discussion

The outcomes of the described method are shown in tables. The statistical analysis and associated matrix used for the analysis in this study see Fig 1, Fig 2 and 4shows the direction of the regression model of the correlation model. The determination of this study is to confirm the influence of the analysis of Amazon's financial statements on return on investment. The descriptive study design was used in the study. Supporting data were also used in this study. Data from this study were analyzed using Microsoft Excel and the social sciences statistical software package (IBM SPSS Software, V. 22). Statistical methods such as mean, standard deviation, correlation, regression analysis, and variance were used. Current data cover the period from "*December 2010 to December 2019*".

Table 1: Descriptive Statistics

	Current Ratio	*Quick Ratio*	*Financial Leverage*	*Debt/ Equity*	*Receivables Turnover*	*Asset Turnover*	*Net Margin*	*Return on Assets*	*Return on Equity*
Mean	1,116	0,818	4,047	0,758	18,906	1,862	1,719	2,987	11,045
standard error	0,02679	0,02322	0,23393	0,1347	1,13720	0,07836	0,53549	0,89138	3,18670
Median	1,095	0,8	4,045	0,85	18,045	1,855	1,51	2,845	10,77
stdev	0,0847	0,0734	0,739760	0,426270	3,596143	0,2478	1,6933	2,8188	10,077
Interval	0,29	0,25	2,33	1,28	11,61	0,73	4,6	7,58	30,62
Max	1,04	0,75	2,74	0,09	14,96	1,45	-0,27	-0,51	-2,35
Min	1,33	1	5,07	1,37	26,57	2,18	4,33	7,07	28,27

As we can observe from the given table 1, the highest mean can be seen in Receivable turnover and ROA (return on equity). Whereas it can be seen from the table, the standard deviation is the highest in receivable turnover.

Table 2: Correlation Matrix

	Current Ratio	**Quick Ratio**	**Financial Leverage**	**Debt/Equity**	**Receivables Turnover**	**Asset Turnover**	**Net Margin**	**Return on Assets**	**Return on Equity**
Current Ratio	1								
Quick Ratio	0,88	1							
Financial Leverage	-0,725	-0,72581	1						
Debt/Equit	-0,71442	-0,46961	0,801516	1					

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Receivables Turnover	0,84142	0,56693	-0,640	-0,8664	1				
Asset Turnover	0,51040	0,0924	-0,306	-0,7888	0,820634492	1			
Net Margin	0,243543517	0,59767138	-0,5892	-0,026540231	-0,083512248	-0,55631	1		
Return on Assets	0,40575995	0,705099402	-0,689	-0,182729049	0,120558111	-0,39040	0,975560518	1	
Return on Equity	0,14265	0,49371	-0,5189	0,018553696	-0,1205	-0,570	0,97974748	0,958963941	1

The given table 2 describes a correlation matrix. As we observe, the current ratio and quick ratio have a positive relationship, but a weak relationship, whereas the quick ratio has a strong relationship with ROA estimating 0.705. Financial leverage has a negative medium relationship with profitability ratios.Efficiency ratios have a negative and weak relationship with profitability ratios.

Table 3:NPM is as dependent Variable

Regression statistics NPM					
multiple r	0,857920922				
R-square	0,736028308				
Adjusted R-square	0,660607825				
Standard error	0,98652003				
Obs	10				
ANOVA					
	df	*SS*	*MS*	*F*	*F value*
REGRESSION	2	18,99533762	9,497668808	9,758997497	0,009450412
RESIDUAL	7	6,812552383	0,973221769		
TOTAL	9	25,80789			
	Coefficients	*Standard deviation*	*t-stat*	*P-value*	
Y-intercept	-2,131980824	4,357525862	-0,489264067	0,639612224	
Current Ratio	-26,48552693	8,35648068	-3,16945	0,015719681	
Quick Ratio	40,84208909	9,641281167	4,236168	0,003858555	

Table 4: Regression Statistics – ROA

regression statistics ROA				

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Multiple R	0,847961445				
R-square	0,719038612				
Adjusted R-square	0,63876393				
standard error	1,694182332				
Observations	10				
ANOVA					
	df	*SS*	*MS*	*F*	*F VALUE*
ANOVA	2	51,41903358	25,70951679	8,957227765	0,011756099
	7	20,09177642	2,870253774		
REGRESSION	9	71,51081			
RESIDUAL					
TOTAL	*Coefficients*	*st deviation*	*t-stat*	*P-value*	
Intercept	-9,694201506	7,483318233	-1,295441568	0,23624965	
Current Ratio	-33,74084997	14,35085097	-2,351139319	0,051001902	
Quick Ratio	61,53544019	16,55727985	3,7165187	0,007490293	

As we can see from the table F value of Anova is lower than the 0,05 significance level, so it means it is significant in our analysis, quick ratio is lower than the p-value, so it is significant whereas the current ratio is higher than 0,05% significance level, so it is insignificant.

Table 5: Hypothesis Testing

	HYPOTHESIS	**RESULT**
	First hypothesis	
	H0 Liquidity ratios have strong relationship with profitability ratios	REJECTED
	H1 Liquidity ratios weak relationship with profitability ratios	ACCEPTED
	Second hypothesis	
	H0 Liquidity ratios have impact on profitability ratios	PARTIALLY ACCEPTED
	H1 Liquidity ratios don't have impact on profitability ratios	PARTIALLY REJECTED
	Third hypothesis	
	H0 Efficiency ratios have optimistic association with the ratios of profitability	REJECTED
	H1 Efficiency ratios have destructive association the ratios of profitability	ACCEPTED
	Fourth	
	H0 Leverage ratios have optimistic association with the abilities of profit abilities	REJECTED
	H1 Leverage ratios have destructive association with the abilities of profit abilities	ACCEPTED

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Conclusion

The foremost purpose of this article is to regulate the influence of accounting analysis on Amazon's profitability. Thanks to a thorough examination of all departments and the validation of factors and results, the scope of this study were reduced to the use of financial statements to identify factors that may not affect the company's profitability due to the weak liquidity-to-profitability ratio. Therefore, there is a weak and negative link between efficiency and debt. At the same time, there is an important link between liquidity and the company's profitability, so the second hypothesis is partially accepted. There are some limitation in this research like limited availability of data and limited analysis tools.

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