Financial Leverage and Firms' Performance: A Study of Tri-Sector Listed Companies in Oman

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Abstract:-

The financial leverage is a major concern of various small and corporate companies listed in Muscat Securities Market (MSM) Oman. Based on earlier researches, the firms' performance has been affected due to financial leverage and various ratios are being used to measure the financial leverage and firms' profitability. This research aims to analyze and examine the effect of financial leverage that is measured by debt ratio on performance of the firms' that are listed under MSM. Firm performance is measured through ROA and ROE. The research included a set of selected companies listed on MSM, which are consisting of 6 companies and the data contains for the period starting from 2015 to 2019. E-views statistical software was used to analyze the financial data, and to run the correlation and regression models. The results of the study indicate that there is a negative impact of financial leverage on firm performance in the service sector. However, the financial leverage has a positive impact on performance of firms categorized under financial and industrial sector. These results contribute to the literature by explaining the changes and use of financial leverage towards the performance of companies listed under MSM from three different sectors.

Keywords: Financial leverage, Firm performance, Return on Assets (ROA), Return on Equity (ROE), Debt Ratio (DR),

1. Introduction
1.1 Background of the Study
The main aim of financing decisions is to growth profitability and that according to the importance of financing decisions that the financial staff in financial management will take to enhance the performance and profitability of the companies, where these decisions can be led the company to better performance or failure. And the most important decision concerning the capital structure that will optimize the company value. Capital structure is defined as a mix of debt and equity used in financing companies' assets and real investments (Myers 2001). Therefore, the biggest responsibility is to determine the best mix, which will guarantee the wealth of shareholders (Maina and Kondongo, 2013). So, any company needs to have good capital saturators that will use to finance its operation, where this capital structure affects each of the risks and companies returns and is directly related to leverage. The leverage can be defined as the borrows or any financial tools used to purchase assets that result in significant effects of profit or loss. In generally, it uses to describe the debt ratios.

Financial leverage is heavily used in this era by various large and small companies, where companies tend to use the leverage for a specific purpose approved to achieve the desired leverage. However, the higher use of leverage in some companies resulted in a negative result that affected the performance and raises the risks. There is a certain limit to the use of leverage in companies depending on the strength of capital and how it is invested in a way the serves the desired objectives of the company's work. So, financial leverage relates to company performance, which is among the many factors that affect the company's performance whether that is positive or negative effects.

Companies' financial performance and profit in all sectors are considered important in the Omani economy, which is a measurement of what the companies are a achieve in a long period. And based on previous studies and research, they show different opinions, where there is a negative relationship between leverage and the firm performance and on the other hand in another study shows that there is a positive relationship. So, the leverage analysis is one of the most important tools that companies use in the areas of planning, performance strengthening and oversight (Al Rawi and Hameed 2012). And in light of the changes taking place in the local and global economy and despite these changes, the financial leverage has achieved the success of use by the companies in various Omani sectors in aims to enhance its financial performance and its role in the Omani economy. And that the degree of financial influence in both the financial sector, services, and industry has become clear, and the role in revealing of that is due to MSM, which creates an opportunity through gives the data and the sector accounting report which will prove the most important data for the analysis of the main leverage for all public firm's listed under MSM.

On the above backdrop, this study attempts to analysis and examine the effect of financial leverage on the firm's performance. Where, the study focused on using traditional indicators instead of modern ones because these indicators which are (ROA and ROE) more able to explain the effect. And the aim of the study leads the selected Omani companies or all of them in general and their employees in the financial field to a wider knowledge of all leverage effects and how it can affect the performance of the company. Also, knowledge and support for financial administrators are achieved in the

correct financial decisions for the financial resources that the company will make the best use.

1.2 Statement of Problem

There are many reasons to study this topic, the previous studies are shown different results, there are no confirmed results of a chosen period of study because all previous study depends on a different study period and in this period the situation of companies and economy is different, as the literature shows different arguments and different results about the relationship between financial leverage and performance, it was necessary to make sure to solve this discrepancy. And the fact that both the leverage and the performance are among the most important financial issues and at the present of the occurrence of the economic crisis has been observed the increasing trend of companies to use leverage and the differences in the levels of use of leverage in terms of knowledge to the degree of optimal leverage. And noticed that there are different levels of abilities in companies to maintain optimal capital and return to its shareholders and that the profits of some firms decreased despite the use of leverage or the presence of borrowings and unlike other firms that recorded a noticeable increase in profits. In addition to the fluctuation in shares\ equity and debt ratio, which in turn conduct to a rise in the level of risk and their impact on firm's performance, So the study problem came in the following main questions: The companies listed on MSM under study are successful in employing financial leverage or not? And is there an effect on the firm performance according to the indicators ROA and ROE?

1.3 Objective of the study

- To comprehend the concept of financial leverage and to review different literature and theories related to the financial leverage and companies' performance.
- To ascertain the impact of debt ratios (DR) on return on assets (ROA) of Omani companies listed under MSM.
- To investigate the effect of debt ratios (DR) on return on equity (ROE) of Omani companies listed under MSM.
- To analysis the correlation between financial leverage on the effect of companies' performance listed under MSM.

1.4 Significance of study

This study is gaining importance in trying to find the effect of financial leverage on Omani company's performance listed on MSM, and this topic is related to the survival and continuity of companies and how to inflate the wealth of their shareholders. Where, the research will be providing many significances that for enable to evaluate how the financial leverage will affect the firm performance, the research will be of utmost importance for different kind of categories as a follow:

Students and Scholars

- This study is important for the business students and for new future researchers who want to do more studies about the same topic and to use it as a reference for their study.

- The study will help new and interested researchers in the issue of leverage to understand the basic concepts of leverage and financial returns. And knowledge of various previous studies on leverage and its results.

Companies

– The importance of the subject of the study for a specific group of employees who occupy the financial position in companies, this study identifies and clarifies for them one of the major indicators of financial leverage that can be used in evaluating the company's financial activities.

– The study will help the management in companies to know about the financial risk faced by using leverage through the benefiting from the study results in the current conditions of the economy.

– The study contributes to facilitating the decision making of the financing process and better defining the financing structure of the companies under study. Where it helps the financial managers, who deal with evaluating and measuring finance leverage to make decisions, especially when making capital structure decisions through relating to the proper mix between debt and equity.

Investors

– The study will help the investors to know about the value of return on assets in selected companies, in aim to taking decision to invest in these companies or not.

2. Literature Review

The chapter gives evidence for the purpose of the research aim to analysis and explores the effect of leverage on firm performance in selected companies, as it will highlight topics related to leverage by starting the chapter by review the concept of financial leverage. Where will provide the main theoretical and empirical literature which is related to the leverage and its effects on performance, and the relationship between them. The chapter divided into different aspects as follow:

2.1 Concept of financial leverage

The concept of financial leverage is not just relevant to businesses only; it is evenly true for individuals. Some people interested in financing indicate that the term financial leverage is one of the terms that has moved away from an expression of unfavorable or negative things. And it can define the meaning of leverage differently, objectively, according to use. Where it can define in the language dictionary as "a quality or effectiveness or advantage to obtain a desired effect or result" (dictionary.com 2020). And, defined as "(finance) the relationship between the amount of money that a company owes and the value of its shares" (Oxford Learners Dictionaries 2020). In the physics world, leverage means using a tool to lift something relatively. In the business and financial world, and according to Alwadya (2017) said that the financial leverage dependence on the costs associated with borrowing, as these borrowed funds are operated to achieve a higher return on borrowing costs. Accordingly, it was stated that leverage can be defined by one of the following definitions: Financial leverage is the use of third-party funds that can be loans or shares at fixed costs, which the firms or individuals must commit to paying. Alwadya also mentioned that financial leverage is the ratio between totals of debt and assets. Sinha (2013) mentioned in a study of Financing Leverage

Analysis, mentioned that leverage indicates of how companies use static income like the debts and preferred shares in their capital structure. In another definition, leverage is mentioned as the amount of risk that the individual or institution is willing to take. It was observed that the higher the risk, the higher the potential profit (Anonymous 2015).

Financial Leverage is referred to as leverage or stock trading or as trading on the equity. According to Mohamed (2016), financial leverage is a financial tactic or investment strategy that aims to use debt to double the expected return, where the leverage is proved the relationship between the use of owner's money and debt amount which are made up the capital of firms, and the firm can achieve different outcomes from use leverage either that positive (Increase profits) or negative (Reducing profits/losses). Mohamed also made it clear that excessive use of the crane could have a disaster for the firm if it were not managed and expected properly.

There are several different measures that financial researchers, investors, market analysts, and lenders adopt to predict financial leverage. Firms tend to use debt for financing, as these debts are cheap sources compared to equity financing, so that debt in an institution can be compared in two ways, either by equity or by assets. And Debt Ratio (DR) is one of these measures, which is an agent of leverage. (DR) the debt ratio is a measure that measures the total amounts of creditors in the institution or the individual against the total assets (Onyenwe and Glory 2017).Where this measure is shows that the large portion of the assets' purchases is financed by debt. To verify these ratios is through reviewing both the income statements and balance sheet, and to ensure continued support for the payment of debts, it can review the cash flow statement in the firms.

2.2 Theoretical Background of financial leverage and Firm Performance

There are several theories that have been presented that differ in views on capital and related to financial leverage and firm financial performance. The basis for the launching of theories was Modigliani & Miller Proposition I (1958), and Proposition II (1963) (M&M) theory, which came after the development (M&M) of the theory of Trade-Off, Agency Theory, Pecking Order theory. These theories describe and explain why companies choose a certain percentage of leverage (Sakhi 2011).
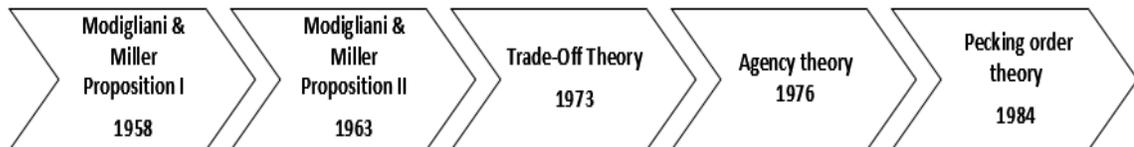

Figure 1: Classification of theories based on years. (Source: Sakhi, 2011: 8)

2.2.1 Modigliani and Miller (MM) Proposition, I and II

Based to the economic researchers, Modigliani, and Miller (1958) presented a scientific analysis showing the relationship between leverage, capital structure, and the value of the firm. And they came up with two propositions.

MM Proposition I (1958): "M&M" demonstrated that the company's market value is not affected by asset return to equity and debt. And they mentioned that the firm value and its performance is not affected by the method of financing and it does not matter if the capital is high due to issuance of the debts or bonds. Where the firm value is decided by

the expected profits before taxes and interest. Hence, the financial leverage does not affect the firm value.

MM Proposition II (1963): According to Modigliani and Miller (1963) they modified the first proposition I to proposition II their take the impact of tax as a consideration in value of the firm who is used the finance borrower. And their viewed that the firm that use leverage it will have a large value and the equity of shareholders will increase because of the firm tax cut; conversely the firm who does not used the leverage.

2.2.2 Trade-Off Theory

This theory came in the reality existence of an ideal capital structure for companies that in turn leads to maximizing the company, unlike the theory of MM, which assumed that there is no ideal capital structure. It presented by Lizenberger and Kraus in (1973), the theory assumes there is a possibility to balance the benefits of the tax from debt. Where determined of optimal debt ratios for the firm through a trade-off between the bankruptcy cost and tax benefit of debts (Onyenwe and Glory 2017). Where, it shows that there is an optimal debt policy exists which maximized firm value, and the higher the value of capital and the use of a high degree of financial leverage, this increases the firm value and risks for a firm. And Persson and Ridderstrom (2014) claimed that the trade-off theory can explain the development of leverage for medium and large companies. This study came to prove that this theory plays a prominent role in making financial decisions because it helps in choosing the optimal financial capital structure.

2.2.3 Agency Theory

Theory of both Jensen and Meckling (1976) which is largely focused on the principle of conflict between the principal (shareholders) and the agent (directors) in terms of how they accept or reduce debt or use leverage. Where the theory helps to ensure that issues are resolved and built a better relationship between them. The theory plays a role in the financing decision being related to the capital structure, most decisions may aim to reduce the cost associated with the agency by reducing ownership rights, and this is done by increasing the debt ratio or using ideal leverage which in turn increases the value and performance of the firm. Whereby optimal leverage will reduce a firm's exposure to liquidation, whereas the increase in leverage degree that leads to financial distress and a negative relationship with financial performance. And Muchiri, Muturi, and Ngumi (2016) observe that this theory encourages firms to use of debt for develop financial performance.

2.2.4 Pecking Order theory

Pecking Order theory was presented by Myers and Majluf) 1984), their assume that investors will consider the issue of shares negatively, the managers may face an issue in the financing decisions and the use of leverage, and the reason for that is the unequal information between managers and investors, as the theory assumed that companies prioritize financing by using any of the three available funding sources. So that first the firm will tend to use the profits (as retained earnings or excess liquid assets) to finance its investments as an internal source of financing; and when these profits are not sufficient for investment, then the firm can view the debt as a second option and then, in the end, the ownership rights (Al-Tally 2014).Mary and Majluf (1984) both presented several

proposals in explaining many aspects of corporate finance behavior, including companies' propensity to rely on internal funding sources, and their preference for debt over equity.

Based on the study subject, they stated in these theories that leverage has different goals and ratios for corporate use and is related to performance. As the research does not agree with the opinion of MM theory in the proposition I, which stated that the leverage has nothing to do with the performance of the company since it has been criticized by critics and also does not support the topic. Contrary to the proposition II. This could be a study that looked at the hypothesis of a Trade-Off theory with an ideal capital structure and an ideal debt ratio as it measures the effect of debt on performance. Financial problems between managers, investors, and shareholders in financial decisions in selected companies are not denied. The agency's theory came to demonstrate and solve these problems, even though this is not related to the study, but the theory assumed that the leverage had a role in that and supported the use of the leverage to achieve financial performance, and this indicates that the leverage is related to performance. Where theories have come to explain the linkage of leverage to performance, and how this leverage affects companies in profits and ROA, ROE with different interpretations.

2.3 Effect of financial leverage on firm performance

The level of financial leverage effect is different for a firm to another firm and for sector to another sector, where the effect is dependent on the amount of capital and risks in firm. According to a study by Aliwi (2019) with the title of "The Impact of financial leverage on the Financial Performance of Jordanian Public Shareholding organizations listed in Amman Stock Exchange (ASE)".The researcher uses the descriptive-analytical method for a random sample of 49 organizations listed on ASE, that to analysis and research the effect and to know if they're different in effect between sectors at Amman in period (2013- 2017). Where the results are showed that there is an effect of leverage measured by ROE. And there is no effect of leverage measured by ROA. And, the results prove the different effects between sectors. The researcher recommended a set of recommendations for companies, including researching the factors that affect the return on assets that leads to profit generation and advises companies to increase the percentage of financial leverage in services and industry sector to improve their performance. Where the results of the study conducted in the year before the study of Aliwi showed the opposite of the results, (Al-Ashqar 2018) was mentioned in his study of they conducted the aim of verifying the impact of leverage, liquidity, and firm size on the financial performance of Jordanian public insurance companies. Where the researcher focuses on 23 insurance firms in the period of 2010-2017. And were based on multiple regression analysis and several tests to confirm the results and test the hypothesis. Where the study reached several results listed in the following table:

There is an effect	- Between leverage, liquidity, and company size on financial performance.
	- Between leverage and performance measured by ROA
No Effect	- Between leverage and performance measured by ROE
	- Between liquidity and performance measured by ROA

Based on Menacer, Saif-Alyousfi, and Ahmad (2020) in Their study which about the impact of the financial leverage on the Islamic banks' performance in the GCC countries applied using data from 25 Islamic banks for twenty-three years in the period from 2005-2017. Where they used the fixed effect regression model in their study of constant effect. The results disclosed that there is a significant impact of leverage on the performance of the Islamic bonk, and they made clear that there is a positive effect of leverage on ROA, ROE, and Tobin's Q, more specifically they said that the higher the percentage of financial leverage the banks' performance is rising in the GCC countries. And according to the study of Victor (2016) and in the same field of previous studies on the effects of leverage. which aims to discover and analyze critically the potential effects on the performance of companies from the use of leverage; based on an analysis of the results, it became clear that the financial leverage can be used through the companies in ways that increase or decrease profitability, depending on the management decisions of a company. And a second result shows that the frequent use of leverage increases the provision of more money for investment and these investments tend to profit. However, unlike the third result which indicates that the debts may increase the company's performance fluctuations.

Methods for studying effect differ and this is observed for previous studies, so that cannot prove on one study, because the study periods are different in all previous studies, so the results show different for the leverage effect on performance due to a difference in regions, years and conditions that the economy is going through and in turn affects performance Companies, whether global or local. Hence, and based on these changing conditions, times, and timing, it is believed that the firms worked on designing the optimal capital structure to support its performance and use leverage, considering its impact on its performance. So, the results of the current study will be either similar or different from the studies due to the specified period of study.

As for ROA and ROE, each one of them is used to measure a kind of return, both measures the company's profits from investments, and at first glance, some may think that they are similar measures, but they are not the same. Where a closer look may reveal the relationship of these two to religion and some of the major differences between them (Mcclure 2020). However, they were used as a measure of the company's performance.

2.4 Impact of Debt on Firms Assets

As known the debt is the amount that borrowing from financial finance institutions or from other resources, where can use debt to pay expenses or buy assets. Assets is available amount for management, referred to as the relationship between profit and the size of money. Assets can have various sources, such as property capital, rents, and profits or dividends, and they can be based on debt, in other words. The source of the asset is debt (direct borrowing), while the percentage of the amount of debt used in the assets can be found through dividing the total debt on assets. (Carlson 2019). Also, the debts can affect to return on assets in a different way like leverage. For that, there is a relationship between debt and asset. The increase in debt is the impact on the assets or return on assets. Although that increase of debts may increase assets on firms, and that like if looked more at an increase on debt, it will become apparent that it could reduce revenues, where the firms will spend more money for servicing that debt, and when used to increase production it will lead to increased revenues specifically increase ROA (Duff

2020). Despite this, the high increase in the debt can lead to the classification of the firm as in a financial crisis, where the percentage of profits is small and therefore the percentage of assets is small.

Many researchers have found the relationship between debt and assets. Where they explained that the assets can be used to measure performance through return on assets and many of them applied that, including Al-Ashkar (2018), Aliwi (2019), Menacer et al (2020). Where Al-Ashqar (2018) mentioned in his study that debt has a relationship to assets that affect somewhat slightly the return on assets. But Kumar and Krishna (2018) claim in their study there is no correlation between debt and ROA. This may explain why most companies use debt, which may be to support new investment. For this purpose, the current study came to apply that by using ROA as measure of performance and to clarify results on the Omani companies at present

2.5 Impact of Debt on Firms Equity

Debt is a borrowed source, and equity is owned sources, both are used to raise the capital amount in firms (Surbhi 2018). Furthermore, the researchers proved in the topic of Debt and Equity, that there is significant effect equity when the firm is used debts (Efendi et al, 2019). It can view this impact of debt on equity in a boom or normal times and during recessions, as known increase debt in normal time is increased leverage factor, and to return on equity it is better, but in during recessions, the debt is like risk for equity and it will lead to losses (Duff 2020). Unlike the study of Al-Ashqar (2018) that claim there is no relation and effect of debt on equity, therefore does not affect performance. And when looking at Rym (2015) study, which is linked ROE to firm management, Rym stated in her study that the high ROE indicates the efficiency of management in using funds to ensure satisfactory returns for their owners and the firm is more successful in achieves the profit that may result for use firm the debt. While reduction ROE is means there are making poor decisions through the management in firm for the capital reinvested in unproductive assets, this shows a link ROE to the performance. For that ROE can be used to measure performance in firms.

2.6 Relationship between financial leverage and firm performance

The relationship between leverage and performance can be predicted in different ways, approved by the researcher or the subject based. Where the researchers applied several studies, which came from the description of the relationship or its analysis by methods known mathematically, which have produced assorted results.

(Akhtar et al 2012) claims in their study which is aimed to check the relationship between financial leverage and financial performance evidence in the fuel and energy sector of Pakistan. Where it examined the hypothesis of "if a positive relationship between financial leverage and financial performance or not?" And they looked at the saying, "High-profit companies choose high leverage." The result of the study indicates acceptance of the hypothesis that performance has a positive relationship with financial leverage. And those companies with high profitability can enhance their performance with upper echelons of financial profit in the sense of investing debt in the capital structure.

And the study conducted by Dey, Hossain, and Rahman (2018) on Publicly Traded Manufacturing Companies in Bangladesh about the effect of Financial Leverage on Firm performance. Which aimed to analyze the impact of financial leverage that is measured by total debts on the company performance which is measured by ratios of ROE, ROA and EPS, and the new measure Tobin's Q. The researchers are using the correlation matrix and the simple regression model to find the result from 48 manufacturing companies. The result shows there are positive and negative relationships in which it was inference after the analysis. A negative relationship between debt ratios and ROA, Tobin's Q. And the models in the study is shown conflicting results between leverage and ROE, EPS. Where it shown a positive relationship and in other models is shown no relation between. That means the financial management in Bangladeshi companies is ineffective in using debt capital and this is evidence that they need to enhance the reliability of accounting information.

According to Kumar and Krishna (2018), the financial leverage is plays a vital role in the firms in the process of profit magnification, and it has shown the relationship between it and performance, and by used measures has demonstrated a positive relationship between leverage and performance measured by ROE and a negative relationship measured by ROA. And on the fact that the increase in the percentage of leverage leads to an increase in ROE unless most of the public sector companies do not prefer to increase the share of debt financing because of the expected financial risks, which in turn leads to a fluctuation in ROE.

These studies show the accept relation between leverage and performance, and no one of the studies was opposition to this relationship. That the results of previous experimental studies and the relationship between leverage and performance have a different theme and results which came positive or negative. However, the correlation of these variables shown mixed results in terms of leverage and firm performance in studies.

3. Research Methodology
3.1 Research Design
Research design can be defined as the planning framework for research, which is worked to answering the research questions through creating design with included the parameters for research that include decisions that serve the achievement of research objectives (Shona 2019). There are different types of research design that researchers adopt in their different studies where the research design differs from one study to another because of differences in the research topics that can be descriptive, Conclusive or Exploratory, and also the methodology used in collecting and analyzing data, whether it is primary or secondary and quantitative data or qualitative data.

The research to be conducted is quantitative research, which is also called observational, it involves a descriptive study among different variables that are dependent variables (ROA, ROE), and an independent variable (DR). This method of research design seeks to achieve and monitor the objectives. It includes a specific systematic method which is verification using statistical or numerical methods. Quantitative research shows measurement data and an analysis of trends in the relationship between variables that can be applied statistically or description of data according to the proportions that have been deduced from the analytical procedures known as inferential statistics, and validation of procedures in measurements (Watson 2015).

Figure 2: Quantitative research designs

The study will focus on descript, and analysis adopted to describe relevant aspects of this research depending on the available data from different variables that are found and analysis it. Where this method of research design is helping to obtain data from sample selected companies with a statistical method.

3.2 Population of the Study

A research population is a group of individuals, companies, or things, whether they are specific or random, which including a common feature or common characteristic that the researcher focuses on for scientific query. And due to the large size of the population, the researcher can often rely on different sampling techniques to support and facilitate the conduct of the research, since the large size of the population is expensive in a study and takes a long time to complete the research (Explorable 2020).

In this research, the set population of the study is the companies registered under MSM in the period 2015- 2019. They are only Omani companies without regard to foreign companies in the Sultanate of Oman. Where, Muscat Securities Market provides all the necessary financial information and data related to the performance of the market and the listed companies directly to investors and others, through the advanced electronic system (Saed 2014). Where the current total number of listed companies in MSM are 110 companies, divided into three sectors as follows:

Table 1: Number of Companies listed in MSM 2019

	Sector	Number of companies
1	Financial sector	36
2	Services sector	35
3	Industrial sector	39
Total		110

(Sources: Companies Guide Public Joint Stock (MSM/ INFINITY 2019))

To address the topic of the study, a group of companies registered in MSM, was adopted that use debt in different proportions, and whose are available their financial statements and annual report on the Muscat Securities Market website.

3.3 Sampling Technique and Sample Size

The sampling specified for the research is very important in determining the accuracy of the research as several techniques help in taking the sample correctly and according to the research need for the data that are collected according to its purpose and size, these samples can be probability and non- probability, which clarifies whether it was chosen by randomization or not (Singh 2018)

3.3.1 Sampling Technique

Sampling Technique is the method used by the researcher in taking the sample, and the researchers used in their previous studies different techniques that are included with probability and non- probability. Where some is focused to non-probability and that by selecting the elements of sample like select study one sector or number of specific companies specializing in the same field, which is non-random sampling. And some researchers are focused to probability which is randomization, and that by selecting any sample from a population, where it has different categorizes that will achieve the research like Stratified, Systematic, Cluster, and Multistage Sampling.

Sampling Technique in this study is the stratified random sample of companies that use debt in different proportions and distribute them in a balanced manner in three specific sectors in the Sultanate of Oman, which is a target population. This was done to ensure better and clearer results. This is a method that increases the accuracy of estimating the effect of the correct results on the validity of the study results. The technique is done as follow: First, Omani companies that used debt were sorted in three sectors after that, two companies were randomly chosen for each sector, and moved away from companies that do not use debt as it does not serve the subject of the study.

3.3.2 Sample Size

The sample can be defined as a subset of the population. Which came to this definition, given that the researcher is unable to study and test a large size group of the population. And this sample is according to the population, and its size justifies the results of the research analysis. (Explorable 2020). Based on the research, the sample on which the study was conducted consisted of 6 companies listed on the MSM, randomly chosen according to their use of debt. This number of companies has been chosen because the researcher believes that it fulfills the purpose required to verify the study objectives, in addition to facilitating the study purpose. Thus, the final sample on which the study was conducted consisted of Omani companies listed in the following table:

Table 2: The relative distribution of the sample of companies by sector

	Companies Name	Sector	Percentage
1	NBO	Financial sector	33%
2	Muscat Finance		
3	National Gas	Services sector	33%
4	Oman Telecommunication		
5	Oman Fisheries	Industrial sector	33%
6	Raysut Cement		
Total			100%

The table shows the distribution of the study sample from the Omani companies that were chosen, distributed over several sectors, which will study the specific variables of these companies based on an analysis and description of the effect of leverage on the firm's performance.

3.5 Data Collection Techniques

The data is the main source for the study where it can be numbers or words, divided into primary or secondary data. Data collection technique is a method of how will generate the data for research, the different techniques are used for uncovering the data that the different researchers are used in their research, which will be primary or secondary data, and can be classified based on which is can be quantitative, and qualitative, or combination of these methods. As (Puckett 2018) mentioned in her article that "Some methods are better for research that only require quantitative data, while others are better for uncovering qualitative data".

The research-based to using secondary sources to gathering all the financial data and other information for the purpose of achieving the research objectives, where all data are determined from various sources such as sites on the Internet and academic sites and articles and books and includes previous studies and different theories and research in the field that was studied. And, the data that is taken from the annual reports and account statements (Income Statement and Balance Sheet) that are available on the sites of companies listed under the MSM, and the official MSM site, as these data are certified and accurately, and have acceptable credibility to the nature of the variables.

3.6 Data Analysis Technique

The research will be based on two simple methods to apply the analysis for verifying the objectives of the study.

- **Financial analysis:** The financial measurement indicators (ROA, ROE, and DR) will be used for impact analysis for all six Omani companies listed together in MSM. Microsoft Excel will use to find the measurement of the indicators for each company in the last past five years from 2015 to 2019.

- **Statistical analysis:** The researcher will use E-views to test the purposes of the study, as the following statistical methods will be used: Descriptive statistics for quantitative variables, and Correlation analysis, which is utilized to measure the degree of correlation between variables (ROA, ROE, and DR), enables us to find the relationship between DR (Independent Variable) and ROA, ROE (Dependent Variables). And Regression analysis, this analysis is used to measure or find the impact between the variables (ROA, ROE, and DR).

4. Data Analysis

4.1 Research findings

The Financial analysis is the process to do the analysis ratio for quantitative variables which was identified through the financial statements in the published annual reports of selected companies listed on MSM, as this analysis serves the purpose of the project by analyzing the ROA, ROE, DR for all companies in the period from 2015 to 2019, which is the chosen period being the closest to the contemporary time and which witnessed changing economic conditions. And the (Table 3) is shown the financial analysis for the company's according to the ratios analysis as followed:

Table 3: Financial analysis for companies listed in MSM.

Financial Sector				
Company name	years	ROA	ROE	DR
National Bank of Oman	2015	0.0186	0.1177	0.1258
	2016	0.0154	0.1013	1.4029
	2017	0.0116	0.0740	0.1100
	2018	0.0135	0.0901	0.1344
	2019	0.0138	0.0911	0.2614
Muscat Finance	2015	0.0274	0.1214	0.5350
	2016	0.0337	0.1350	0.5039
	2017	0.0281	0.1022	1.0067
	2018	0.0244	0.0973	0.5146
	2019	0.0032	0.0109	0.5356
Industrial Sector				
Company name	years	ROA	ROE	DR
Raysut Cement	2015	0.1345	0.1850	0.1433
	2016	0.0994	0.1304	0.1076
	2017	0.0298	0.0383	0.0849
	2018	0.0183	0.0250	0.1019
	2019	0.0089	0.0155	0.1677
Oman Fisheries	2015	0.1038	0.1556	0.2276
	2016	0.0257	0.0346	0.1364
	2017	0.0929	0.1135	0.0748
	2018	0.0066	0.0079	0.0491
	2019	0.2395	0.3508	0.1807
Services Sector				
Company name	years	ROA	ROE	DR
Oman Telecommunication	2015	0.1450	0.2276	0.0291
	2016	0.1422	0.2149	0.0069
	2017	0.0239	0.0670	0.1909
	2018	0.0286	0.0799	0.0760
	2019	0.0393	0.1143	0.4144
National Gas	2015	0.0201	0.0467	0.2434
	2016	0.0740	0.1547	0.2129
	2017	0.0790	0.1613	0.1817
	2018	0.0401	0.0784	0.2536
	2019	0.0618	0.1175	0.1941

(Source: secondary data of annual reports in period 2015 to 2019)

Figure 3: Financial analysis for selected companies listed in MSM
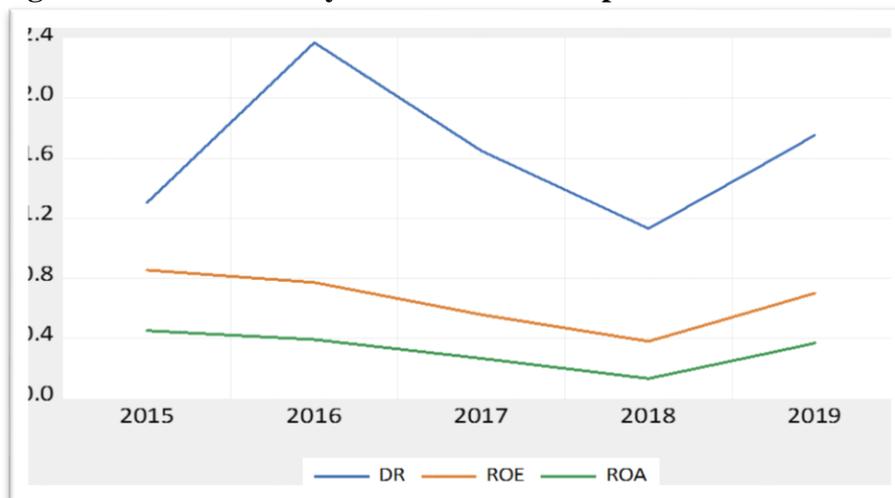
In order to analysis the effect and relationship between financial leverage and companies' performance with more precision and details, the sample study was divided into 3 sectors and that is shown in (Table 3), and the (Figure 4.3) is shown the fluctuation in the ratio of variables over the five years. The graph shows a high rise in the debt ratio (DR) of companies and, in contrast, a decrease in both ROA and ROE from 2015 to 2016, this is due to changes in the economy. In 2018, the graph shows the lowest decrease in the debt ratio, which is evidence of the companies that were reducing the use of debt during the period from 2017 to 2018. And in the same year 2018, that both ROA and ROE came slightly down after they were at their highest rise in 2015. Where the graph above shows that the high debt ratio in recent years is offset by an increase in the ratio of ROA and ROE.

4.2 Descriptive statistics

This study investigates the analysis of the relationship and the impact of financial leverage on the performance of companies listed on MSM. In order to achieve the objectives of the study, the descriptive statistics for quantitative variables (DR, ROA, and ROE) was analyzed by extracting the actual financial data from the published annual reports of companies in each of the three sectors (financial sector, industry sector, and service sector) and for all companies together. Below are tables for the results of the descriptive analysis of the study variables:

Table 4: Descriptive statistics for Financial Sector

	DR	ROA	ROE
Mean	1.026060	0.037940	0.188200
Median	0.797000	0.039700	0.187400
Maximum	1.906800	0.049100	0.239100
Minimum	0.649000	0.017000	0.102000
Std. Dev.	0.527251	0.012561	0.055856
Skewness	1.086166	-1.024362	-0.640095
Kurtosis	2.598274	2.661581	2.160593
Observations	5	5	5

The above table is showing the results of the descriptive statistics for financial sector, where is illustrates the value of mean for ratio are DR (1.026060), ROA (0.037940), and ROE (0.188200). The value of Std.Dev. For DR (0.527251), ROA (0.012561), ROE (0.055856), where it reached the lowest value between the ratios of Minimum (0.017000) for ROA, and high value of Maximum (1.906800) for DR and this indicates that companies are financing themselves with a very high debt ratio (DR).

Table 5: Descriptive statistics for Industrial Sector

	DR	ROA	ROE
Mean	0.254802	0.151843	0.211342
Median	0.244038	0.125053	0.164983
Maximum	0.370865	0.248390	0.366322
Minimum	0.151016	0.024877	0.032879
Std. Dev.	0.102680	0.092839	0.139888
Skewness	0.104265	-0.190710	-0.011153
Kurtosis	1.282567	1.698286	1.540740
Observations	5	5	5

The descriptive statistics (Table 5) shows the results for the industrial sector, and a mean value of DR (0.254802), ROA (0.151843), and ROE (0.211342). And Std.Dev value for DR (0.102680), ROA (0.092839), ROE (0.139888), where it reached the lowest value between the minimum ratios (0.024877) for the ROA, and the maximum high value (0.370865) for (DR).

Table 6: Descriptive statistics for Services Sector

	DR	ROA	ROE
Mean	0.360618	0.130814	0.252496
Median	0.329627	0.102936	0.231757
Maximum	0.608484	0.216275	0.369654
Minimum	0.219873	0.068672	0.158322
Std. Dev.	0.150104	0.059174	0.077596
Skewness	0.969162	0.508052	0.454914
Kurtosis	2.602835	1.810410	2.308365
Observations	5	5	5

Looking at the results of the descriptive analysis presented for service sector in the (table 6) where is illustrates the value of mean for ratio are DR (0.360618), ROA (0.130814), and ROE (0.252496). The value of Std.Dev. For DR (0.150104), ROA (0.059174), ROE (0.077596), where it reached the lowest value between the ratios of Minimum (0.068672) for ROA, and high value of Maximum (0.608484) for DR. The decrease in the Std.Dev value of (ROA) indicates a weakening of the competencies of companies in investing the assets, which led to losses.

Table 7: Descriptive statistics for All Sector

	DR	ROA	ROE
Mean	1.641460	0.320620	0.651980
Median	1.649000	0.366500	0.700100
Maximum	2.370600	0.449400	0.854000
Minimum	1.129600	0.131500	0.378600
Std. Dev.	0.479607	0.124885	0.187857
Skewness	0.548771	-0.625870	-0.475131
Kurtosis	2.152159	2.044982	1.892052
Observations	5	5	5

The results of the descriptive statistics for all sector is illustrates in (Table 7) where the values of mean for DR (1.641460), ROA (0.320620), ROE (0.651980). The decrease in value of Std.Dev of DR (0.479607), ROE (0.187857), ROA (0.124885) are due to the absence of a significant difference between the minimum and maximum values, where it reached the lowest value between the ratios of Minimum (0.131500) for ROA, and high value of Maximum (2.370600) for DR and that mean the companies are financing themselves by used a very high debt ratio (DR).

4.3 Regression Analysis

Least Squares regression model is used to determine the impact of financial leverage measured by (DR) which is independent variables on the performance which is measured by (ROA) and (ROE) as dependent variables, the general models were as follows:

4.3.1 Impact of DR on ROA in the Financial Sector

Table 8: Regression analysis between ROA and DR

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.026970	0.013884	1.942518	0.1473
DR	0.010708	0.012295	0.870860	0.4479
R-squared	0.201787	Mean dependent var		0.037956
Adjusted R-squared	-0.064283	S.D. dependent var		0.012567
S.E. of regression	0.012964	Akaike info criterion		-5.564038
Sum squared resid	0.000504	Schwarz criterion		-5.720262
Log likelihood	15.91009	Hannan-Quinn criter.		-5.983330
F-statistic	0.758398	Durbin-Watson stat		1.231612
Prob(F-statistic)	0.447915			
Dependent Variable: ROA				
Method: Least Squares				
Date: 06/01/20 Time: 22:08				
Sample: 2015 2019				
Included observations: 5				

The results in the (Table8) show that (DR) has positive impact not significant on (ROA), where the coefficient shows a positive value (0.010708) and the Prob value is more than 0.05 which is a not significant independent variable. And based on the R-squared is explains that the percentage of the interpretation of the independent variable (DR) to the total change in the dependent variable (ROA) is estimated at (1.0708%) and it is a weak percentage. As for the rest of the percentage (98.9292%), it explains by the variables that are not studied in the table. where this result indicates the explanatory power of the model is weak.

4.3.2 Impact of DR on ROE in the Financial Sector

Table 9: Regression analysis between ROE and DR

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.148751	0.064365	2.311051	0.1039
DR	0.038454	0.057000	0.674625	0.5483
R-squared	0.131723	Mean dependent var		0.188205
Adjusted R-squared	-0.157703	S.D. dependent var		0.055859
S.E. of regression	0.060102	Akaike info criterion		-2.496373
Sum squared resid	0.010837	Schwarz criterion		-2.652598
Log likelihood	8.240932	Hannan-Quinn criter.		-2.915665
F-statistic	0.455119	Durbin-Watson stat		1.162536
Prob(F-statistic)	0.548250			
Dependent Variable: ROE				
Method: Least Squares				
Date: 06/14/20 Time: 22:09				
Sample: 2015 2019				
Included observations: 5				

The regression analysis results in (Table 9) for the impact of (DR) and (ROE) in Financial Sector is shown there is a positive impact where the coefficient value (0.038454), and Prod (0.5483) is more than 5%, which mean the impact of Debt Ratio (DR) is not significant in ROE. It was noted in the table that (R-squared = 0. 131723). That is mean the variable of the debt ratio (DR), accounts for 13.1723% of the total change in (ROE). As for the remaining percentage, it is described by other variables that are not estimated in the study. Consequently, firm performance did not decrease or increase significantly concerning financial leverage.

4.3.3 Impact of DR on ROA in the Industrial Sector

Table 10: Regression analysis between ROA and DR

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.061487	0.053379	-1.151905	0.3328
DR	0.837239	0.197081	4.248203	0.0239
R-squared	0.857463	Mean dependent var		0.151843
Adjusted R-squared	0.809951	S.D. dependent var		0.092839
S.E. of regression	0.040473	Akaike info criterion		-3.287209
Sum squared resid	0.004914	Schwarz criterion		-3.443434
Log likelihood	10.21802	Hannan-Quinn criter.		-3.706501
F-statistic	18.04723	Durbin-Watson stat		3.315581
Prob(F-statistic)	0.023898			
Dependent Variable: ROA				
Method: Least Squares				
Date: 06/01/20 Time: 22:06				
Sample: 2015 2019				
Included observations: 5				

The table is shown the main statistic result of the impact of (DR) on (ROA) in the Industrial Sector. Where it turned out that the impact is positive based on the positive value of coefficient (0.837239). And when evaluating a model, it became clear that (DR) is a significant impact on (ROA), as a Prob value (0.0239) is less than 0.05. And to confirm that, the table shows that the percentage of the interpretation of the change between (DR) and (ROA) in the total change is equal (85.7463 %) and this indicates the explanatory power of the model is strong. So, it can be said that increasing or reducing the use of debt by companies in the industrial sector has a significant impact on (ROA).

4.3.4 Impact of DR on ROE in the Industrial Sector

Table 11: Regression analysis between ROE and DR

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.116098	0.070734	-1.641338	0.1993
DR	1.285077	0.261157	4.920703	0.0161
R-squared	0.889760	Mean dependent var		0.211342
Adjusted R-squared	0.853013	S.D. dependent var		0.139888
S.E. of regression	0.053631	Akaike info criterion		-2.724191
Sum squared resid	0.008629	Schwarz criterion		-2.880415
Log likelihood	8.810477	Hannan-Quinn criter.		-3.143483
F-statistic	24.21332	Durbin-Watson stat		3.157351
Prob(F-statistic)	0.016081			
Dependent Variable: ROE				
Method: Least Squares				
Date: 06/01/20 Time: 22:05				
Sample: 2015 2019				
Included observations: 5				

The statistical table for the dependent variable (ROE) and the independent variable (DR) for the industrial sector is showing the coefficient value is a positive which is equal (1.285077), and the Prob value (0.0161) is less than 0.05 that mean (DR) is a significant independent variable. Where the table also shows that the percentage of change is estimated at (88.9760%), this percentage is clarifying the change DR to the total change for the dependent variable ROA. And the remaining percentage (11.024%) indicates the change for other variables that were not included in the study. Thus, the impact of (DR) is a significant positive impact.

4.3.5 Impact of DR on ROA in the Services Sector

Table 12: Regression analysis between ROA and DR

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.214208	0.070930	3.020002	0.0568
DR	-0.231254	0.184329	-1.254570	0.2985
R-squared	0.344111	Mean dependent var		0.130814
Adjusted R-squared	0.125481	S.D. dependent var		0.059174
S.E. of regression	0.055337	Akaike info criterion		-2.661571
Sum squared resid	0.009187	Schwarz criterion		-2.817795
Log likelihood	8.653927	Hannan-Quinn criter.		-3.080863
F-statistic	1.573945	Durbin-Watson stat		2.061920
Prob(F-statistic)	0.298481			
Dependent Variable: ROA				
Method: Least Squares				
Date: 06/01/20 Time: 21:57				
Sample: 2015 2019				
Included observations: 5				

The above table is showing a negative impact not significant between (DR) and (ROA). Where the value of the coefficient was (-0.231254) which is a negative value, and Prob value at (0.2985) which is more than 5%. And the R-squared is estimated at (34.4111%), where this percentage is estimated as the interpretation percentage of the independent variable (DR) to the total change in the dependent variable (ROA) in Services Sector, and another percentage is explained by other variables that are not estimated in the study and it is a very small change, and it cannot be ignored due to the slight impact on (ROA).

4.3.6 Impact of DR on ROE in the Services Sector

Table 13: Regression analysis between ROE and DR

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.336243	0.102607	3.277013	0.0465
DR	-0.232232	0.266650	-0.870928	0.4479
R-squared	0.201812	Mean dependent var		0.252496
Adjusted R-squared	-0.064250	S.D. dependent var		0.077596
S.E. of regression	0.080050	Akaike info criterion		-1.923144
Sum squared resid	0.019224	Schwarz criterion		-2.079369
Log likelihood	6.807860	Hannan-Quinn criter.		-2.342436
F-statistic	0.758515	Durbin-Watson stat		2.267936
Prob(F-statistic)	0.447884			
Dependent Variable: ROE				
Method: Least Squares				
Date: 06/01/20 Time: 21:59				
Sample: 2015 2019				
Included observations: 5				

The table of least squares regression analysis for (DR) and (ROE) in the services sector is shown there is a negative impact of (DR) on (ROE) but is not significant, where the coefficient value (-0.232232) and value of Prob is equal (0.4479) more than 0.05, is not significant in impact. The result of R-squared showed that the model depicts that 20.1812% percent of the impact change in (AOE) is explained by (DR) with value at 0.201812. And another percent (79.8188%) means that the other variables other than the DR lead to an impact on (ROE).

4.3.7 Impact of DR on ROA in All Sectors

Table 14: Regression analysis between ROA and DR

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.126177	0.227138	0.555505	0.6173
DR	0.118458	0.133880	0.884808	0.4414
R-squared	0.206954	Mean dependent var		0.320620
Adjusted R-squared	-0.057394	S.D. dependent var		0.124885
S.E. of regression	0.128419	Akaike info criterion		-0.977863
Sum squared resid	0.049474	Schwarz criterion		-1.134088
Log likelihood	4.444657	Hannan-Quinn criter.		-1.397155
F-statistic	0.782885	Durbin-Watson stat		1.355735
Prob(F-statistic)	0.441425			
Dependent Variable: ROA				
Method: Least Squares				
Date: 06/01/20 Time: 21:55				
Sample: 2015 2019				
Included observations: 5				

The table is shown the main regression analysis to find the impact of (DR) on (ROA) for sectors. Where it turned out that the positive impact based on the value of coefficient (0.118458). And the debt ratio (DR) does not significantly impact the return on assets (ROA), as a Prob value (0.4414) is greater than 5%. And to confirm that, the table shows that the percentage of change is estimated at (20.6954%), this percentage is clarifying the change (DR) to the total change for (ROA). And the remaining percentage indicates the change for other variables that were not included in the study; this indicates the explanatory power of the regression analysis model is weak. So, it can be said that a high increase or high decrease in the use of debt in sectors does not have a significant impact on (ROA).

4.3.8 Impact of DR on ROE in All Sectors

Table 15: Regression analysis between ROE and DR

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.360832	0.342078	1.054825	0.3689
DR	0.177371	0.201627	0.879701	0.4438
R-squared	0.205061	Mean dependent var		0.651980
Adjusted R-squared	-0.059919	S.D. dependent var		0.187857
S.E. of regression	0.193403	Akaike info criterion		-0.158906
Sum squared resid	0.112214	Schwarz criterion		-0.315130
Log likelihood	2.397264	Hannan-Quinn criter.		-0.578198
F-statistic	0.773874	Durbin-Watson stat		1.188494
Prob(F-statistic)	0.443792			
Dependent Variable: ROE				
Method: Least Squares				
Date: 06/01/20 Time: 21:52				
Sample: 2015 2019				
Included observations: 5				

The impact of debt on ROE is different than the impact on ROA, the table above is depicting the impact of the debt ratio, where is show a positive impact not significant of debt ratio on ROE. The coefficient value (0.177371) is explained as the positive impact, and the Prob value at (0.4438) which is more than 0.05, that means is this (DR) is no significant impact on ROE. And based on the R-squared (0.205061) it explains that the percentage of the interpretation of (DR) to the total change in (ROE) is estimated at (20.5061%) and it is a weak percentage. As for the rest of the change on ROE which at (79.4939%), it explains by the variables that are not studied in the table.

4.4 Correlation Analysis
To achieve the objective of the research in determining the correlation between leverage and firm's performance indicators in different sectors, correlation analysis was used as follows:

Table 16: Results of correlation analysis between financial leverage and performance for the Financial Sector

Correlation	DR	ROA	ROE
DR	1.000000		
ROA	0.447560	1.000000	
ROE	0.362739	0.973140	1.000000

The correlation between (DR and ROA), (DR and ROE) in Financial Sector measured by using the correlation coefficient that is shown in the table. Where it shows there is a weak positive correlation between both (DR) and (ROA). And weak positive correlation between (DR) and (ROE), and these relationships take into account the fact that the correlation coefficient between (DR) and (ROA) is equal (0.447560), that means the decrease of debt use will lead to decrease (ROA). While the increase in using debts will result in increased (ROA) in companies. And the result in the table is shown that the correlation coefficient value between (DR) and (ROE) is equal (0.362739), which is mean that decrease in debt will decrease in (ROE) and vice versa.

Table 17: Results of correlation analysis between financial leverage and performance for Industrial Sector

Correlation	DR	ROA	ROE
DR	1.000000		
ROA	0.925993	1.000000	
ROE	0.943271	0.996603	1.000000

The correlation between financial leverage that is measured by (DR), firm performance measured by (ROA, ROE) is a strong positive correlation between (DR) and (ROA, ROE) in Industrial Sector. Where the correlation analysis shows that value of correlation coefficient between DR and ROA (0.925993) this correlation is strong and evidence for this is the correlation coefficient value close to (1) which is mean the higher (DR), the greater (ROA) and vice versa. And the value of the correlation coefficient between DR and ROE (0.943271) which shows that the more debts, the greater the return on equity and vice versa. So, it can be said that increasing financial leverage may increase performance for the companies in the industrial sector.

Table 18: Results of correlation analysis between financial leverage and performance for the Services Sector

Correlation	DR	ROA	ROE
DR	1.000000		
ROA	-0.586610	1.000000	
ROE	-0.449235	0.974853	1.000000

The above table displays the correlation between the study variables of the measurement of financial leverage and performance, where it shows a negative correlation between (DR) and (ROA), which indicates that increasing the ratio of debt use reduces the rate of (ROA) and that the low rate of (ROA) will lead to an increase in the use of debt, equally the value of the correlation coefficient is equal (-0.586610). In addition to this negative

correlation, the analysis shows another negative correlation between (DR) and (ROE), where the value of correlation coefficient was come negative (-0.449235) to explaining the course of the relationship between the two variables which is mean an increase in debt will lead to reduces (ROE).

Table 19: Results of correlation analysis between financial leverage and performance for All Sectors

Correlation	DR	ROA	ROE
DR	1.000000		
ROA	0.454922	1.000000	
ROE	0.452836	0.996533	1.000000

Based to the above table which is present the results of correlation analysis of study variables, where is show that the analysis found positive correlation between both (DR) and (ROA) and (ROE), and these correlations take into account the fact that the correlation coefficient between (DR) and (ROA) is equals (0.454922), and the correlation coefficient ratio between (DR) and (ROE) is equals (0.452836). This correlation shows the positive relationship between the variables of study, which indicates that by increasing the ratio of debt use it will increase (ROA) and (ROE). And reduce the ratio of debt use will reduce the ratio of both (ROA) and (ROE).

5. Results and Discussion
Based on the analysis of the tables of research findings of statistical analysis it showed different results of impact between DR and ROA, ROE for different sectors, which are helping to answer the research questions in understanding and analyzing financial leverage and firm performance.

5.1 Impact of debt ratios (DR) on return on assets (ROA) and return on equity (ROE).
The regression analysis for the financial sector shows there is positive significant impact between DR and ROA. And positive impact not significant between DR and ROE. Despite the difference in the influence strength, the study conducted by Menacer, Alyousfi, and Ahmad (2020) showed its results there is a positive impact between financial leverage and firm performance. It is a result that shows that leverage in the financial sector has a clear impact, when companies use leverage, whether it is high or low, it greatly impacts performance.

The result of the regression analysis of the industrial sector came in the presence of a significant positive impact between the financial leverage measured by DR and the firm's performance measured by ROA and ROE for the companies under study. And in the II proposal of the theory of both Modigliani, and Miller (1958), they mentioned that firms who are use debt, have a high value of shareholders 'equity, and this is illustrated by the positive impact of debt on both ROA and ROE.

According on the results, the regression analysis presented in the tables displays that the financial leverage has a negative impact, but it does not have a significant impact of ROA and ROE in companies within the services sector, and therefore it can be said that there

are no differences in the impact of financial leverage of the services sector on performance between different companies.

The findings of regression analysis for All sectors revealed there is a positive impact not significant between DR and both ROA and ROE. And that means the financial leverage positively influences the performance in companies. Where Victor (2016) revealed that there is a positive impact that indicates that debts may increase the company's performance.

5.2 The correlation between financial leverage and companies' performance.

Based to the correlation model of measures of financial leverage and firm performance used in the study, the result is found that there is a positive correlation between financial leverage and firms performance in the financial sector, which was inferred by the independent variable (DR) and dependent variable which are (ROA, ROE), that means the decrease of debt use will lead to the decrease (ROA) and (ROE). While increase using debts will result in increased ROA and ROE in companies.

In the industrial sector, the result found a strong positive correlation between financial leverage and performance that is measured by ROA and ROE. Contrary to the finding that Dey, Hossain, and Rahman (2018) where they found there is a negative correlation between financial leverage and performance measured by ROA and positive correlation between them that is measured by ROE. Where the reason for the difference in results may be the difference in the period of the studies.

Either in the services sector, it has been concluded that there is a negative correlation between the leverage and performance of the companies listed on MSM which indicates that increasing use financial leverage reduces the firm performance and that the low rate of use financial leverage will lead to increase performance in companies. And in the theory of Trade - off is mentioned that an increase in the use of leverage is due to a negative relationship with the company performance, which in turn leads to reduction equity in a company. Whereas in the study of Akhtar (2019) that the results of his study showed an opposite relationship to the results, which he explained that financial leverage has a positive relationship with the company's performance.

The correlation analysis table found the positive correlation between financial leverage and performance of all companies in MSM, which shows there is a direct correlation between DR and (ROA, ROE) and this means that the change in debt is the same change in ROA and ROE, as the increase in debt leads to an increase in ROA and ROE, and vice versa.

6. Conclusion and Policy Suggestions

In conclusion, and according to the results that analysis based to collected from quantitative data which are found it from annual reports of companies that are listed on MSM. As per the selected models to doing the analysis, it was found the impact of financial leverage on selected firms' performance. Where that ROA, ROE that is used as the performance measures it was impacted by financial leverage in different sectors. Where the negative impact of financial leverage on firm performance in the service sector can be explained that companies do not balance between total debts with need in ROA and ROE, for that the companies can increase the rate of returns and that by depending less on the debt in their capital structure. And in the industrial and financial sectors, the

financial leverage has a positive impact on performance, and it can be explained that the companies used debts to employ more funds for investment and that tends to increase profit for companies.

Besides, the correlation between leverage and the company's performance has been positive and negative in various sectors. Correlation analysis was used to reach the ideal result, as it demonstrated a negative correlation between the leverage and the company's performance in the services sector, which explains the negative impact between them. Concerning the financial and industrial sectors, there is a positive correlation, which proves that the increase or decrease of debts will affect the returns with the same change depending on the method used in the capital structure and the ability of management in companies to employ debts properly.

The rule of leverage cannot apply to all sectors with the same effect and rate. The reason is due to the different effects in every sector or from company to another, and because of the factors and fluctuating events in the economy so that the leverage may increase the volatility of the companies 'performance in the sectors, but that can depend on the economy and policies within companies, and this is what was found in the study results. So that the basis of the problem can be clarified that not all companies succeeded in using the leverage to enhance its performance, and despite that, the leverage came with a negative or positive effect whatever the purpose of its use in the companies.

According to the results of the analysis, there is some recommendation that is recommended to the companies as the following:

- The researcher advises companies' management to emphasize financial decisions that must be compatible with the objective to increase the wealth of equity.
- Based to result of research, there is an inverse relationship between financial leverage and firm's performance in the service sector, the researcher recommends that for companies in this sector to use optimal level of debts that is no impact to performance, with taking into account the degree of risk especially during the marked decline in the rate of ROA.
- The researcher recommends the companies' departments under study to search about other factors that have an impact on performance, which are leads to the generation of profits.
- Advises companies to conduct studies on other factors that affect performance and that may be related to leverage such as cash flow ratios, stock returns, market value, and dividends.
- All companies should not rely on debt financing if their sales are declining because debt financing in such a case will maximize shareholders' loss. If the company's sales are rising, then financing the debt will maximize the profit for the shareholders.

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