

# IMPACT OF CAPITAL STRUCTURE ON STOCK RETURN IN THE MEDIATING ROLE OF FIRM PERFORMANCE: A CASE STUDY OF OIL &GAS SECTOR LISTED ON PSX

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### **Abstract**

The study objective was to determine capital structure (CS) which is an important factor in capital allocation on stock return (SR) in the mediating role of firm performance (FP) in the context of oil and gas sector of Pakistan. In this study CS has been taken as an independent variable while SR as a dependent variable with a mediating role of FP. Oil and gas sector has been considered as a population and for this purpose the analysis is conducted of 10 oil and gas companies operating in Pakistan on the basis of market capitalization over the period from 2017 to 2021 by using purposive sampling technique. The data have been collected from annual financial reports of oil and gas companies available on PSX, and also from others sources like different articles, journals and thesis. In order to inspect the impact of CS on stock outcomes, the Correlation and regression models have been used to test the results. Overall research of current study shows that there is positive significant effect of CS and SR. Furthermore, mediating variable, FP also having positive significant effect on SR of oil and gas sector of Pakistan. The study is applicable with regards to oil and gas sector of Pakistan since the oil and gas plays vital role for the economy of the country. The current study specify the acknowledgement and grasp about the implementation of CS and the appropriate attentions towards the application of all dimensions for boosting SR of oil and gas sector, Pakistan. This study contributed to the body of knowledge by examining the mediating role of FP between CS and SR. Investors, managers and regulators can obtain further understandings, especially those looking for to improve FP in the emerging markets.

**Keywords:** Capital Structure, Firm Performance, Correlation and Regression, Significant, Economy, Capitalization, Financial Reports, Oil & Gas Sector, Pakistan

#### INTRODUCTION

During the last few decades, promoting capital structure has become a major concern for policymakers, practitioners, and researchers. It can, therefore, be argued that capital structure is the main strategic concern that has ever been central in Financing Division. By choosing how to combine different funding sources, the capital structure is influenced by the right hand of the balance sheet. A company's capital structure is the sum of its management' use of debt, equity, and other sources of money to sustain its operations. A company's capital composition is the combination of obligations (debt), shareholder wealth (equity), and other funding sources that it can utilise to finance long-term expenditures and expansion. Fundamentally, the biggest division in the capital structure occurs between equity and debt liabilities. The gearing or leverage ratio is used to calculate the share

of debt financing (Ilyas, 2008). Corporate managers trade off risk and return while deciding on a specific capital structure combination. The danger of bankruptcy rises and stakeholders demand larger returns when a company extensively relies on debt to finance its operations (Brigham and Ehradt, 2001). Companies prefer to fund their capital structure entirely with debt in nations where loan interest is tax deductible. Unlevered businesses do not use any debt in their capital structure, while highly levered businesses use a significant amount (Lasher, 2008).

The ratio of debt to equity is one of the main financing strategies that most businesses adopt, according to Umar (2012). The corporation mostly uses debt obligations and stock investments for long-term financing. In contrast to debt, which includes the company's unsecured and secured debt as well as public and private debt, two-sided debt, and syndicated debt, equity consists of share premium, paid-up



capital, savings, and retained earnings (David & Olorunfemi, 2010). Although, most researches have been done on the fundamentals of capital breakdown, however, to discover the variables that influence an organization's capital structure, significant work remains to be done (Ilyas, 2008). According to Cai & Zhang (2005), during periods of strong business markets, businesses issue excess equity based on book and historical business market values, and during periods of low business market value, they repurchase the equity. The results for debt to equity have been found to be extremely persistent. A result, such as past market prices, is often found by the present debt to equity framework. (Wurgler, Malcolm, & Dough Puncher, 2002). According to Corridor and others (2001), the results are presented as earnings after deductions based on the equity's book value and liabilities. Nguyen Hoang, N. (2022) asserts that capital structure has a negative effect on stock prices. Second, the stock price has a positive impact on the capital structure. Empirical evidence suggests that market timing, signaling, and hierarchy theory are adequate explanations for the relationship between the capital structure and share price of non-agricultural enterprises in Vietnam. As a result, you can possess a small amount of leverage to generate money through stocks. The idea that the structure of capital is associated with the market dynamics caused by fluctuations in stock prices may be explained by a number of proxies (Welch, 2004). Also, it has been noted that the correlation between leverage and stock performance is negligible (Dimitrov & Jain, 2005).

Market Timing Theory was developed by (Baker & Wurgler, 2002). Market timing is crucial to assessing businesses' performance while maintaining a sound financial framework (Baker & Wurgler, 2002). The theory describes the situation of the market, consumer perceptions, and risk considerations. Also, it implies that businesses issue financing or equity when the cost of equity is cheap. According to the theory of market timing, managers must exercise patience until the market conditions improve, shares offer strong returns prior to equity issuance, and firms enhance their performance beforehand (Miglo, 2010). The Signaling Theory is also very significant because it proposes a method of firm financing in which high calibre firms prefer to facilitate their funding by sending various signals to potential lenders. Potential lenders for agricultural businesses prefer to lend to farms with larger operations, a strong track record of profitability, and good prior income (Zhao, Katchova & Barry, 2004). Private, small, and large public companies all have different funding

options, as noted by Frank & Goya (2005). The private company is more likely to employ retained earnings and bank debt as sources of income. While larger public corporations appear to employ retained revenue and corporate bonds, smaller ones can use equity financing. Many earlier studies on capital structure focused primarily on the financial functionality of the textile, cement, and other sectors. This study examines the relationship between capital structure and firm stock returns in Pakistan's oil and gas sector. In contrast to earlier studies that primarily concentrated on size, development or growth, change in income, tax obligations, profitability, liquidity, and ownership structure of companies, the current study distinguishes the relationship between capital composition and return on stock by taking into account the debt to equity and firm performance. Previous studies' sample sizes and times were different, however this study included data from ten businesses in Pakistan's oil and gas industry during the previous five years.

Therefore, the goal of the current study is to determine how firm performance and capital structure affect stock return. To do this, Pakistani oil and gas companies listed on the PSX from 2017 to 2021 were chosen, with stock return acting as a dependent variable and capital structure acting as an independent variable. Because oil and gas industries are essential to the socioeconomic growth of the contemporary economy. Previous researches have been done using these variables as mediating or moderating variables in different sectors specially banks. But here capital structure is used as an independent variable and stock return as dependent variable while firm performance has been taken as a mediating to check the impact of oil and gas sector of Pakistan.

### PROBLEM STATEMENT

Many studies have been conducted to study the effect of capital structure on stock outcome by selecting various areas and methodologies in numerous contexts. Modigliani and Miller (1958), Scot (1976), Harris & Raviv (1991), Brigham and Ehradt (2001), Corridor et al., (2001), Titman (2001), Dough puncher, Malcolm & Wurgler (2002), Ivo Welch (2004), Cai & Zhang (2005). Dimitrov & Jain (2005), CAI, Jie and ZHANG, Zhe(2006), Shah & khan (2007), Joshua (2008), Lasher (2008), Ilyas (2008), Psillaki & Daskalakis (2009), Brav (2009), Frank & Goyal (2009), (Miglo, 2010), David & Olorunfemi (2010), Hussain & Sana (2011), Umar (2012), Jahanzeb (2013), Saleem et al (2013) Ndung'u Caroline Njoki(2014), Uddin (2015), Wasfi A. Al Salamat(2016),



Mohamed Hassan Hussein (2017), Laith Faris Abu Khader, Mohammed Jamal AlZou'bi, and Ammar Daher Bashatweh (2020), Ta, T.D.N. and Dao, B.T.T. (2020).

The researcher has identified relationships between capital structure, size, growth rate, and stock return in various investigations (e.g. Acheampong et al., 2014). Others, however, examine how size, liquidity, and capital structure impact stock return (e.g. Bergren and Berggvist, 2014). There haven't been many research in Jordan looking at the connection between stock return and capital structure and how it affects financial decisions (e.g., Gharaibeh, 2014). However, some research examined a sizable sample of data, taking into account the impact of the financial crises and covering all industrial enterprises registered on the Pakistan Stock Exchange. But most of the studies ignored the use of techniques to collect primary data to conclude their results due to which many conflicts in the results were found, some results were negative, some were positive. Modigliani and Miller (1958), Scot (1976), Harris & Raviv (1991), Brigham and Ehradt (2001), Dough puncher, Malcolm & Wurgler (2002), Ivo Welch (2004), Cai & Zhang (2005), Cai, Jie And Zhang, Zhe(2006), Shah & khan (2007), Psillaki & Daskalakis (2009), David & Olorunfemi (2010), Ndung'u Caroline Njoki(2014), Uddin (2015), Wasfi A. Al Salamat(2016), Mohamed Hassan Hussein (2017), Mohammed Jamal AlZou'bi, Ammar Daher Bashatweh & Laith Faris Abu Khader (2020), Dao and Ta (2020).

The current study aims to ascertain the effects of various capital structure factors, the debt to equity ratio, short- and long-term ratios, and firm performance on stock return. The purpose of this study is to examine how the capital structure's debt-to-equity, short-term, and long-term ratios affect the stock returns of ten particular oil and gas businesses. This study also investigates the strategies used by oil and gas companies to raise capital for both internal and external initiatives.

### RESEARCH QUESTIONS

- 1. How does capital structure affect stock return?
- 2. How to determine whether a firm's performance mediates the relationship between stock return and capital structure?

#### RESEARCH OBJECTIVES

- 1. To examine how capital structure affects stock return.
- 2. To check mediating effect of firm performance between capital structure and stock return.

### LITERATURE REVIEW

Various capital structures that are suitable for various organizations exist. Every organization's fundamental aim is to decrease the price of capital while increasing firm's value and share price. In Australia, the relationship between debt to equity and a company's return was found to be unfavourable. Moreover, oil and gas businesses' returns are inversely correlated with their debt to equity ratios (Tahmoorespour, abbar & randajbaran, 2015). The dividend payout ratio, a company's financial success, and its cash balance all have an inverse relationship with financial flexibility. Also, it has been discovered that businesses that place a higher value on their financial adaptability tend to give out lesser dividends.

Moreover, preferential share redemption and dividend payments lower leverage and increase cash accumulation (Rahimi & Mosavi, 2016). The market value of a company's equity and liabilities determines its market value (Warusawitharana, 2014). It has been found that businesses with lower debt have greater values than those with higher debt, and these businesses can increase their worth by choosing to have a small amount of debt or nearly none at all (Psillaki & Daskalakis, 2009). The choice of capital structure varies amongst companies, such as public and private corporations. Compared to public companies, private businesses rely more heavily on loan finance (Brav, 2009).

# Capital Structure (CS) & Stock Return (SR)

The phrase "capital structure" refers to a long-term financing structure made up of long-term debt, owners' capital, and preferred shares. Financial structure and capital structure were frequently used interchangeably in earlier research. But they represent quite different ideas. The firm's financial structure illustrates the relationship between all of its liabilities and all of its assets (Gitman, 2016). The capital structure is attempted to be explained by several ideas. The classic Miller and Modigliani approaches (I & II) and trade-off theory sought the best capital structure pattern that provides enough money for fruitful and effective operations. Of these, trade-off theory is regarded as the most sophisticated since it incorporates elements of the contemporary market, including the debt's tax benefits and market value and the cost of financial hardship for the company, in order to make the connection between the company's cost of capital and its gearing level more clear (Watson & Head, 2017). A distinct approach is



taken by pecking-order theory, which aims to priorities corporate finance according to the degree of information asymmetry. According to the hypothesis, businesses will first opt to finance new projects using retained earnings because doing so will help to reduce information asymmetry (Khan, Qu, Shah, Bah, & Khan, 2020). After then, due to their lower cost of interest, debt financing will be preferred over equity financing. Consequently, it makes sense that a successful company would be more likely to use debt instead of internal resources (Ferrarini, Hinojales, & Scaramozzino, 2017; Myers, 2015; Suto, 2003).

One year or less is the maximum loan duration for shortterm loans, which must be repaid in full within 90 to 120 days. Short-term loans help with short-term finance need without requiring long-term commitments (Peavler, 2017). The expense of repaying short-term debt is less of a strain on the organisation. Most lenders do not start charging interest until after all of the loan approval dates have gone, and short-term loans often have lower interest rates. A study by Ebaid focused on leverage and financial performance for companies listed on the Egyptian Stock Exchange (2018). Short-term debt was found to have a negative impact on asset return. In their 2016 analysis of the cash positions of Spanish SMEs, Teruel and Solane discovered that companies with higher levels of short-term debt had higher cash balances because they could lessen the likelihood that their short-term debt would not be renewed. Did. An aggressive liquidity strategy combines higher levels of frequently low-cost short-term loans with less long-term capital, according to Weinraub and Visscher's (2020) work on leverage. Despite a lower cost of capital, there is now more risk associated with short-term liquidity. They found a link between corporate profitability and both long- and short-term debt. They also found a negative relationship between physical debt and shortterm debt and a positive relationship between physical debt and long-term debt, which is consistent with most capital structure theories that claim that businesses without fixed assets to use as collateral do not have access to long-term financing. Short-term debt and the likelihood of business growth are correlated, according to Garcia-Terul and Martinez-Solano (2016). Anecdotal data suggests that short-term leverage and financial performance may be related. However, given the paucity of empirical study in this area, particularly with regard to the use of short-term borrowing, this prediction appears dubious. Long-term debt is that which is due longer than a year from the current balance sheet date. There is no correlation

between long-term debt and return on investment, according to a 2019 EBaid study. For well-established corporate organizations, long-term debt is a desirable source of leverage due to its asset basis, and many deposit-taking institutions require collateral. The ability of large financial institutions to lend to SMEs has been significantly reduced, the European Commission reported (2017), limiting their ability to grow and perform financially. According to Pelham (2016), long-term debt helped smaller businesses outperform bigger ones in the marketplace. The data show a large and direct positive association between long-term loans and small businesses' financial health. His research revealed a positive correlation between small and medium-sized manufacturing firms' growth/share, sales effectiveness, and gross profit. Yet, because this field hasn't seen a lot of prior research or actual data. Also, it lowers the amount that the corporation can invest and boosts the cost of borrowing money from outside sources If the percentage of debt in the capital structure rises above a particular point, the added cost of debt will result in lower business performance and increased bankruptcy costs, financial distress issues, and shareholder disputes. Also, due of concerns with information asymmetry, corporations frequently choose internal money over debt when financing activities, according to the pecking order theory. More successful companies should try to take on less debt since the pecking order hypothesis predicts a negative association between leverage and corporate performance. An empirical test of the relationship between a firm's leverage and performance yields mixed results.

Abor (2005) compared the capital structures of significant unlisted enterprises, SMEs, and listed companies in Ghana and examined how capital structure affected the profitability of companies listed on the Ghana Stock Exchange. This research implies a favorable correlation between company leverage and performance. Capon et al. (1990) conducted a meta-analysis of the results of 320 published researches on financial performance and found a positive link between the use of leverage and financial performance. By using eastern Asian businesses as an example, Ari (2011) discovered a favorable relationship between firm performance and leverage. Researchers Zeitun and Tian (2007) found a significantly unfavorable association between the two using a sample of 167 Jordanian businesses. Using data from G7 nations, Rajan and Zingales (1995) discovered a negative correlation between company leverage and business performance.



Using data from Nigeria, Onaolapo (2010) discovers a markedly inverse relationship between a firm's debt ratio and its ROE or ROA. Financial leverage and performance, according to Majumdar and Chhibber (1997), Fama and French (2002), and Booth (2001), are not positively correlated. Theories of Reverse Causality from Capital Structure to Performance although the focus of this essay is on how capital structure influences business performance, it's also possible that managers' decisions on capital structure will be influenced by the firm's performance. There will be a reverse causality issue if performance can also influence capital structure. Using data from the US banking sector, Berger and di Patti (2002) developed a simultaneous equation model to demonstrate how capital structure might influence performance. Regarding how performance may impact capital structure, they offer the efficiency-risk and franchise-value hypotheses.

The competence and risk notion states that higher productivity frequently lowers a company's cost of bankruptcy. This is because when a company does well, the likely rate of return is often higher. A high projected rate of return can be used to determine the underlying portfolio risk of a company, acting as a stand-in for stocks. Hence, better performing firms often use less capital in their capital structure in accordance with the positive link between performance and expected rate of return as well as the proxy relationship between expected rate of return and capital. This theory contends that company leverage and performance are positively correlated. The franchise value theory has been examined in terms of economic rents in the interim. The franchise-value argument states that greater performance could result in economic rents for businesses in the future, and businesses are prepared to take on less debt to secure this franchise value. So, businesses seek to maintain a high level of equity in their capital structure when they do well. Franchise-value hypothesis suggests a negative correlation between a firm's leverage and performance, in contrast to the efficiency-risk idea. These two theories suggest that a firm's capital structure can be affected by its performance in two different ways, each of which has an opposing influence. The reverse causality conundrum is not fully resolved by Berger and di Patti (2002). They do, however, offer a fresh idea for how a company's success impacts its capital structure. The existence of the agency relationship, or the relationship on the separation of ownership and management direction, is given and discussed in the

theory of agency in financial management. Conflicts in these agency connections or other conflicts of interest can arise (Jensen & Meckling, 1976 in Febriyanto, 2020).

The literature on strategic management serves as the foundation for stakeholder theory (Abrams, 1951; Rhenman, 1968; Ackoff, 1974; Cyert & March, 1963; Ansoff, 1965; Freeman, 1984;). Stakeholders are important to a company's performance because they affect its long-term strategic goals, according to the notion of stakeholder theory (Aarseth et al., 2016). Thus, it is crucial for a business to succeed that it incorporates stakeholder interests into its strategic decisions in a direct and transparent manner (Theodoulidis, Diaz, Crotto, & Rancati, 2017). Yet, there is controversy over what exactly a "stakeholder" (Miles, 2019). This is partly a result of academics placing different emphasis on what constitutes a stakeholder and how inclusive a group of individuals should be (Derry, 2017). Moreover, conflicts of interest between managers and stakeholders or even within the stakeholders themselves may exist, which could make it difficult to distinguish between different roles (Eskerod et al., 2018).

Myers and Majluf postulated that there is no "ideal debt-toequity ratio" in 1984." This hypothesis is based on the idea that managers have asymmetric information about investors, which influences their preference for raising capital. According to the pecking order theory, corporations prefer using internally generated funds (retained earnings, for example) to finance investment possibilities and other operations, and they only turn to external sources of funding when their own resources are insufficient. Search for a buyer. The premise of this idea is that businesses favor various funding sources that take into account their respective expenses. Retained earnings are ranked first, followed by debt and debt of last resort (Agyei, Sun, and Abrokwah), 2020. A company's decision about its debt-toequity ratio is governed by its desire to communicate with investors rather than by the idea of the optimal ratio, claims Ross's (1977) Signaling Theory. Profitable businesses may try to mislead the market by exaggerating their prospects for future growth and increasing debt beyond the appropriate level in an effort to raise the stock price. Even while the management makes every attempt to mislead the public, they actually think that the greater cost of debt issuance will prevent less profitable businesses from using more leverage than those with superior performance.



### LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The goal of the study is to pinpoint important variables and investigate how capital structure and stock returns affect the financial performance of oil and gas businesses listed on the Pakistan Stock Exchange (PSX). Company's capital structure and methods of returning profits to shareholders have a significant impact on its performance and can positively or negatively affect internal and external performance factors. The capacity of firms is greatly impacted by their capital structure and stock return policies, which also have a positive or negative impact on performance metrics both within and outside. The general thesis of this study has occasionally come to light due to the world's worsening economic and financial crisis. The study focuses on data acquired from oil and gas companies listed on the PSX and examines capital structure and the impact of share earnings on financial performance while taking into account Pakistan's current situation. An evaluation of how shareholder returns affect the capital structure and economic health of the firms involved in Pakistan's oil and gas industry (Nawaz & Ahmad, 2017). The authors develop two hypotheses based on the issues at hand and the goals to be met, namely:

### CS and SR

The word "capital structure" refers to the long-term, shortterm, and debt-to-equity ratios that make up the permanent pattern of financing. A successful business is more likely to use debt instead of internal resources (Ferrarini, Hinojales, & Scaramozzino, 2017; Myers, 2015; Suto, 2003). Without demanding long-term commitments, short-term loans help with present financial demands (Peavler, 2017). The expense of servicing short-term debt is less onerous for the company. An aggressive liquidity strategy combines higher levels of frequently low-cost short-term loans with less long-term capital, according to Weinraub and Visscher's (2020) work on leverage. Despite a lower cost of capital, there is now more risk associated with short-term liquidity. They found that total debt and debt had a positive short-term connection. Long-term debt is a desirable source of leverage for established business organizations due to its asset foundation, and many deposit-taking institutions require collateral. The ability of large financial institutions to lend to SMEs has been considerably reduced, the European Commission reported (2017), reducing their ability to grow and perform financially. Pelham (2016) asserts that longterm debt gave small enterprises a competitive edge over larger ones. The results demonstrated a direct, favorable, and considerable influence on stock performance. The assumption made was that there was a research gap that needed to be investigated and debated.

 $H_1$ : There is a significant effect of Capital Structure and Stock Return.

### FP MEDIATES BETWEEN CS & SR

Marius et al. (2015) examined how business performance affected SR & CS. The ROA method was used to gauge the success of the company, and the initial and closing stock prices as well as the capital structure's long-, short-, and debt-to-equity ratios were used to gauge stock return. The results demonstrated that financial performance had a major impact on stock capital structure and stock outcomes in big companies with lots of assets. As a result, it was generally agreed upon by theories and earlier studies that firm performance had a major impact on stock return. Thus, the second hypothesis put out in this study reads as follows:

H2: The relationship between capital structure and stock returns is mediated by firm performance.

### CONCEPTUAL MODEL

Stakeholder theory, agency theory, signaling theory, and pecking order theory are the underlying or supporting theories of the current study that link variables with one another. Examples of theories include the Pecking Order Theory (Myers & Majluf, 1984), the Agency Theory (Jensen and Meckling, 1976), the Stewardship Theory (Boyd, 1995), the Recourse Dependence Theory (Pfeffer and Salancik, 1978), the Stakeholder Theory (Edward Freeman, 1984), and the Signaling Theory (Ross, Myers & Mailuf, 1984 - 1977)

### CONCEPTUAL FRAMEWORK



Figure 1: Conceptual Framework

### RESEARCH METHODOLOGY

The present study based on applied, descriptive and quantitative in nature because results come in numerical and to describe the variables of the study by using different statistical tests and formulas. Secondary data collected from the annual reports of oil and gas companies 2017-20. The deductive and quantitative approach used to



check the effect of variables by reviewing past literature and theories (Bryman & Bell, 2015; cited by Hussain & Rehman 2012). A total of 16 oil and gas businesses that are listed on the Pakistan Stock Exchange have been taken into account for this research. The data gathered from the intended sample size of 10 oil and gas businesses in Pakistan were used to accomplish the main goal of this study. All oil and gas companies selected as a sample for data gathering by using purposive sampling technique based on data availability companies and also based on the efficient performance level (Sufian, 2009 and Ali, Akhtar & Ahmed, 2011). Statistical Package for Social Science (SPSS) software used to calculate the validity, reliability of the data. Different tests in the regression have been used to find out the result of the data collected for the present study including ANOVA test, coefficient test, and Correlation test. Test statistic and reliability statistics have also been checked. Model summary has been made.

# MEASUREMENT OF VARIABLES

Table: 1: Measurement of Variables						
Variables	Formulas	Source				
Capital Structure						
<ul><li>Debt to Equity Ratio</li></ul>	Long term debts/Owner's equity	Ali & Faisal, (2020)				
• Short Term Ratio	Short term debt / (Short term debt + Equity)	Nawaz, Ahmad, (2017)				
• Long Term Ratio	Long term debt / (Long term debt + Equity)	Nawaz, Ahmad, (2017)				
Debt to Equity	Total debt/ Total shareholder Equity	Umar (2012)				
Firm Performance						
• ROA	Net Income / Total Equity	Umar (2012)				
Stock Returns	Ending stock price – Initial stock price / Initial stock price	Weinraub (2020)				

### RESULTS OF THE STUDY

The fourth chapter of the current study presents all the analysis and tests that have been applied on the collected data. The data checked through descriptive statistics. Different tests through SPSS like Coefficient test table of

both standardized and unstandardized coefficient applied on the data. The model summary is showed with the help of a table "Table of ANOVA test" to determine the influence that independent variable (capital structure) and mediating variable (firm performance) had effect on the dependent variable (stock return) in the regression study.

Table 2: Descriptive Analysis

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	N	Min	Max	Mean	SD
CS	50	-25.57	28.21	.6938	5.9
					21
SR	50	14	.57	.0801	.11
FP	50	16	.21	.0616	.07

In this Descriptive Statistics box, the mean for the capital structure is .6938 the mean for the stock return is .0801 and the mean for the financial performance is .0616. The standard deviation for the capital structure is 5.94221, the standard deviation for the stock return is .10870 and the standard deviation for firm performance is.07563 (when rounded). The number of participants in each condition (N) is 50.

Table 3: Regression Analysis for Mediation of Firm Performance between Capital Structure and Stock Return

Variable B SEB <b>B</b> R <sup>2</sup>	$\Delta R^2$			
Step 1				
Constant.078 .015				
CS 1.42 0.03 . 0.20	0.20			
Step 2				
Constant				
CS .002009 .022				
FP .948 .41 .162	.660			

\*\*\*P value > 0.000 F-Test 17.902

The effect of financial performance and capital structure on stock returns is displayed in Table 3. The capital structure explained 20% of the variance in stock return in Step 1 with an R2 value of .20 and F (1, 48) = 0.99, p .001. The results showed that capital structure significantly (p = .142, p.001) predicted stock return. Step 2's R2 value of.43 demonstrated a 43% variation in the stock return between the capital structure and firm performance with F(2, 47) =17.90, p.001. The results showed that capital structure (Beta = -.009, p.001) and firm performance ( =.660, p.001) both positively predicted stock return. The R2 change value of.41 revealed that there was a 41% difference in variance between models 1 and 2 with F 34.13, p.001, and the



regression weights for capital structure then decreased from model 1 to model 2 (.142 to -.009) but remained significant, More specifically, the capital structure affects stock return both directly and indirectly.

### DISCUSSION AND CONCLUSION

The current study intend to focus the impact of CS and FP on SR of oil and gas sector of Pakistan in which three dimensions of capital structure variable were taken in which debt to equity ratio (DER), short-term debt ratio (STR) and long-term debt ratio (LTR) and financial performance includes return on asset (ROA), and lastly stock return. This research was conducted to investigate whether is there any influence of capital structure on stock return while considering firm performance as mediating variable in oil and gas sector of Pakistan and are they practicing any of these dimensions in their work activities. To find out, the current study collected the data which was secondary in nature by using the data provided in the listed companies on PSX. Oil and gas companies have been considered as sample by using purposive sampling technique based on data availability because data is collected from the annual reports of 10 oil and gas companies listed on PSX from 2017

Therefore, different tests were conducted to determine the impact of independent variable (capital structure) on dependent variable (stock return) while considering firm performance as mediating variable. As it is discovered in the literature of the study by many researchers that capital structure are productive in nearly all relative aspects necessary to be considered. To forecast the better future of oil and gas companies with respect to stock return is checked through conducting various secondary analysis tests. Many other factors were also used as independent variables for stock return whereas the above implementation was the foundation of all. In the current study the researcher has developed two hypotheses in which the first one is that "There is a significant effect of Capital Structure on stock return of oil and gas companies in Pakistan" and the second is "The ROA factor has a positive effect on stock return of oil and gas companies in Pakistan" that were further carried by literature and analyzed by running different tests on statistical software to ensure the accuracy of the developed hypotheses.

As the current findings show, the relationship between the independent variable (capital structure) and the dependent variable (return on equity) is positive and significant (Ahmad, 2017; Nawaz, 2017; Umer, 2012). Other researchers

suggest that capital structure and company performance have a beneficial impact on shareholder returns. (Rahman, 2020). However, most of the findings show that capital structure affects firm value, and moreover, using institutional ownership and capital structure also improves firm value. The results also show that the impact of capital structure on firm value is mediated by financial performance. This means that the more a company becomes an effective monitoring tool, the more valuable it becomes (Nurazi, Zoraya & Wiardi, 2020)). As the researchers explained above, capital structure and corporate performance have a significant positive impact on shareholder returns for oil and gas companies.

As a result of the implications, capital structure and corporate performance play an important role in shareholder returns for Pakistani oil and gas companies. Correspondingly, the results show that the dimensions of capital structure (debt to equity ratio, shortterm debt ratio, and long-term debt ratio) affect the stock return of oil and gas sector. Hence the study revealed that dimensions of capital structure have positive significance on stock return, as obtained by the secondary data collected through the annual reports of 10 oil and gas companies based on the availability of data from the listed oil and gas companies on Pakistan Stock Exchange (PSX). The application of capital structure is the most crucial element in the financial performance of oil and gas sector. Each dimension of capital structure needs primary concentration in order to enhance the financial performance and to extend the oil and gas sector of Pakistan. Valid statistical analysis on collected authentic data by using secondary data collection method declared desired results concerning financial performance of oil and gas companies.

### LIMITATIONS AND FUTURE DIRECTION

The current study consists of a number of limitations due to lack of time and financial and non-financial resources. Due to time limitations oil and gas companies in all over Pakistan cannot be taken as population. There are other dimensions of capital structure with respect to research question and research problems that cannot be explored. The report of the current researcher advocates that the aspects of capital structure and stock return are to be given main attention including all the other areas specifically to improve the financial performance of oil and gas companies of Pakistan. In order to enhance the financial performance of insurance companies the



managers and employees must have a good understanding about the capital structure policies either through training or by applying other methods to ensure the successful implementation of these practices in all the areas of oil and gas companies' financial activities including the best way of controlling financial transactions.

Since the current study has some limitations regarding the facets of capital structure and stock return as the study investigated their impact on one of the financial institutions and ignored other institutions. The role of capital structure in non-financial institutions may also need to be investigated. There are many other practices and events that affect the stock return that can be taken as a gap for the study. Moreover, the study skipped some of the dimensions of capital structure and stock return that can be used.

Further the present study endorse that the managers and employees must embrace the capital structure enactment for the sake of advancing stock return. It is also recommended that the areas of capital structure and stock return must be paid sufficient attention for the sake of viewing financial performance of oil and gas companies in Pakistan one step ahead as they are significantly and positively correlated. As long as the researcher has preferred to generally consider capital structure along with three dimensions to check their impact on stock return while considering firm performance as mediating variable. The present study advised some future prospects for the analyst i.e., each dimension of capital structure can be used separately to investigate their impact on stock return. Additionally, the future investigation can be performed on other financial institutions like investment companies along with non-financial institutions.

Additionally, the subsequent analysis can be carried out by concentrating on the additional research that is advised to use samples or various company sectors as a comparison, such as the financial sector, trade, service, and investment sectors, as well as the agricultural, mining, property, and real estate sectors.

## IMPLICATIONS OF THE STUDY

Understanding how capital structure and firm performance affect stock returns is vital for finance directors and managing directors who are striving to fund the firm's assets. This study demonstrated the critical role that capital structure and business performance analyses play in increasing a company's stock returns. The study's variables reflect the most important and pressing issues

with regard to the impact of the oil and gas industry's capital structure and company performance on stock return. The current study specifies the acknowledgement and grasp about the implementation of capital structure and the appropriate attentions towards the application of all dimensions which will result in boosting financial performance of oil and gas sector in Pakistan.

#### REFERENCES

- Alheet, A. F., & Hamdan, Y. (2020). How Strategic Decision Making in the Manufacturing Industry Is Influenced by Corporate Governance?. *Academy of Entrepreneurship Journal*, 26(1), 1-13.
- ALI, A., & FAISAL, S. (2020). Capital Structure and Financial Performance: A Case of Saudi Petrochemical Industry. The Journal of Asian Finance, Economics, and Business, 7(7), 105-112.
- Ali, H., Shafique, O., Khizar, H. M. U., Jamal, W. N., & Sarwar, S. (2021). CORPORATE GOVERNANCE AND DETERMINANTS OF COST ASYMMETRIC BEHAVIOR: EVIDENCE FROM PAKISTAN. *PalArch's Journal of Archaeology of Egypt/Egyptology*, *18*(1), 984-1008.
- Almaqtari, F. A., Hashed, A. A., Shamim, M., & Al-ahdal, W. M. (2021). Impact of corporate governance mechanisms on financial reporting quality: a study of Indian GAAP and Indian Accounting Standards. *Problems and Perspectives in Management*, 18(4), 1.
- Al-Tamimia, R. A. H. (2020). Impact of Corporate Governance on Financial Performance of Banks in Iraq. *corporate governance*, 13(7).
- Angkasajaya, G. M., & Mahadwartha, P. A. (2020). The Impact of Capital Structure Towards Firm Performance Moderated by Corporate Governance in LQ-45 Company in BEI at 2013-2018.
- Bayu, K. B., &Hunde, D. A. (2020). Corporate governance and its effects on financial performance of banks evidence from selected private commercial banks in Ethiopia. *Journal of Economics and International Finance*, 12(4), 187-195.
- Braune, E., Sahut, J. M., & Teulon, F. (2020). Intangible capital, governance and financial performance. *Technological Forecasting and Social Change*, 154, 119934.
- Budiharjo, R. (2019). Effect Of Environmental Performance And Corporate Governance Structure On Financial Performance. International Journal of Academic Research in Accounting, Finance and Management Sciences, 9(2), 11–22.



- PeiZhi, W., & Ramzan, M. (2020). Do corporate governance structure and capital structure matter for the performance of the firms? An empirical testing with the contemplation of outliers. *Plos one*, *15*(2), e0229157.
- Pereira, A. F. A., Stocker, F., Mascena, K. M. C. D., & Boaventura, J. M. G. (2020). Corporate Social Performance and Financial Performance in Brazilian Companies: Analysis of the Influence of Disclosure. *BBR. Brazilian Business Review*, 17(5), 540-558
- Peterson, W., Gijsbers, G., & Wilks, M. (2003). An organizational performance assessment system for agricultural research organizations: concepts, methods, and procedures.
- Pintea, M. O., Pop, A. M., Gavriletea, M. D., & Sechel, I. C. (2020). Corporate governance and financial performance: evidence from Romania. *Journal of Economic Studies*.
- Post, C., & Byron, K. (2015). Women on boards and firm financial performance: A meta-analysis. *Academy of management Journal*, *58*(5), 1546-1571.
- Putra, I. G. C., Wedasari, D., & Rahmasari, G. A. P. W. (2020). The Effect of Intellectual Capital and Corporate Governance on The Performance of Village Credit Institutions. International Journal of Applied Business and International Management, 5(3), 35-40.
- Rahman, A. B. A., & Ibrahim, M. B. (2020). Effect of Corporate Governance and Capital Structure on Corporate Performance in Malaysian Listed Companies: A Conceptual Approach. Sustainable Business and Society in Emerging Economies, 2(1), 37-46.
- Rahman, H. U., Rafique, M., Akbar, Z. A., & Aidoo, E. S. (2020). Impact of corporate governance practices on financial performance: evidence from non-financial sector of Pakistan. *International Journal of Electronic Finance*, 10(1-2), 1-22.
- ROBERT, K., RICHARD, K., & RONO, P. THE EFFECT OF CAPITAL STRUCTURE ON FINANCIAL PERFORMANCE OF FIRMS IN KENYA: EVIDENCE FROM FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE.
- Robiyanto, R., Putra, A. R., & Lako, A. (2021). The effect of corporate governance and intellectual capital toward financial performance and firm value of socially responsible firms. *Contaduría y administración*, 66(1), 10.
- Robiyanto, R., Putra, A. R., & Lako, A. (2021). The effect of corporate governance and intellectual capital toward financial performance and firm value of socially

- responsible firms. Contaduría y administración, 66(1), 10.
- Soelton, M., Ramli, Y., Anggraini, D., & Khosasi, D. (2020). Implementing good corporate governance to engage corporate social responsibility in financial performance.
- Song, Y., Wang, H., & Zhu, M. (2018). Sustainable strategy for corporate governance based on the sentiment analysis of financial reports with CSR. Financial Innovation, 4(1), 2.
- Taouab, O., & Issor, Z. (2019). Firm Performance: Definition and Measurement Models. *European Scientific Journal*, *15*(1), 93–106.
- Ullah, M., Afgan, N., & Ahmad, S. (2019). Effects of Corporate Governance on Capital Structure and Financial Performance: Empirical Evidence from Listed Cement Corporations in Pakistan. *Global Social Sciences Review*, 4(3), 273-283.
- VU, T. M. T., TRAN, C. Q., DOAN, D. T., & LE, T. N. (2020). Determinants of Capital Structure: The Case in Vietnam. The Journal of Asian Finance, Economics, and Business, 7(9), 159-168.
- Waheed, A., & Malik, Q. A. (2021). Institutional Ownership
  Board Characteristics and Firm Performance: A
  Contingent Theoretical Approach. International
  Journal of Asian Business and Information
  Management (IJABIM), 12(2), 1-15.
- Waheed, A., Zhang, Q., Rashid, Y., & Zaman Khan, S. (2020). The impact of corporate social responsibility on buying tendencies from the perspective of stakeholder theory and practices. *Corporate Social Responsibility and Environmental Management*, 27(3), 1307-1315.
- Wang, P., & Muhammad, R. (2020). Corporate Governance and Financial Performance of the Firm: The Mediating Role of Capital Structure. *Journal of Global Business and Trade*, 16, 49-65.
- Wang, Y., Abbasi, K., Babajide, B., &Yekini, K. C. (2019). Corporate governance mechanisms and firm performance: evidence from the emerging market following the revised CG code. *Corporate Governance:* The International Journal of Business in Society.
- Zainuddin, Z., &Mananohas, O. A. (2020). The Effect of Debt Policies, Profitability, Managerial Ownership Structure, and Liquidity on Dividend Policy. *The* Indonesian Journal of Accounting Research, 23(3).