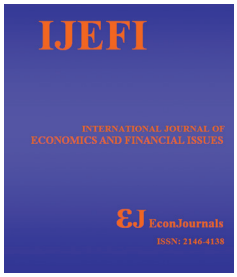

International Journal of Economics and Financial Issues

ISSN: 2146-4138

available at http: www.econjournals.com

International Journal of Economics and Financial Issues, 2024, 14(5), 262-268.

Corporate Investment, Financial Structure and Debt Maturity: New Evidence from Saudi Arabia

Faisal Alnori*

Department of Finance, Faculty of Economics and Administration, King Abdulaziz University, Jeddah, Saudi Arabia.
*Email: falnore@kau.edu.sa

Received: 21 April 2024 **Accepted:** 09 August 2024 **DOI:** https://doi.org/10.32479/ijefi.16691

ABSTRACT

There are twofold objectives in this study. The first is to examine the role of financial leverage in explaining corporate investment decisions. The second aim is to investigate the impact of corporate debt maturity structure on corporate investment levels. The sample used consists of listed non-financial firms operating in Saudi Arabia over the years 2011-2022 and the method applied is the dynamic Generalised method of moments (GMM). In contrast to the prevailing inverse relationship between leverage and corporate investment, the present study finds that financial leverage increases Saudi-listed corporation investment which does not support the agency theory views that leverage restricts firms' investment and does not accept the disciplinary role of leverage on firms' managers. Further, the study finds no evidence that debt maturity structure impacts corporate investment decisions. It is concluded that financial leverage has more impact on corporate investment than debt maturity. Important implications are offered to corporate managers, investors, and lenders.

Keywords: Corporate Investment, Leverage, Debt Maturity, Saudi Arabia
JEL Classifications: G30; G32

1. INTRODUCTION

Corporate investment decisions are vital for sustainable growth and firm value maximisation due to their relevance to firms' competitiveness, managerial efficiency, and meeting shareholders' expectations (Saeed et al., 2023; Do and Phan, 2022; Alhassan, 2019). The investment decisions of the firm are influenced largely by the owners' profit expectations, investment cost and financing choices of the company (Myers, 1977; Harcourt et al., 1967). Therefore, the importance of firms' financial choices on investment motivated the extant corporate finance literature to examine the role of corporate financial leverage on firms' investment levels (e.g., Do and Phan, 2022; Dang, 2011; Aivazian et al., 2005; Lang et al., 1996; Denis and Denis, 1993).

The theoretical development on predicting the role of corporate financing on investment is well-established. In a perfect capital market where financial frictions do not exist, Modigliani and Miller (1958) established that a firm's investment decisions are independent of its financing choices, including the choice of its capital structure (i.e. the choice between debt and equity) and the debt maturity structure of their debt (i.e. the choice between long-term or short-term debt). However, markets are not perfect for alternative frictions and imperfections in the real world (Lemmon et al., 2008). Further, recent studies demonstrated the interplay between firms' financing and investment decisions. For example, Aivazian argues. (2005) argues that due to market imperfections, conflicts of interest among shareholders, creditors, and managers regarding debt levels can result in both overinvestment and underinvestment. For instance, in low-growth firms with substantial free cash flows, leveraging can serve as a disciplinary tool by deterring managers from excessively investing in high-risk projects.

The existing literature on studying the role of financial leverage on corporate investment levels demonstrated several important

issues. These studies reported conflicting findings on financial leverage-investment linkage (see; Akguc and Rahahleh, 2021; Kuchler, 2020; Haque, 2014; Dang, 2010; Aivazian et al., 2005). Further, existing literature, which examined the role of firms' financing choices on investment levels, mostly focused on investigating the role of financial leverage on investment and hence overlooked the role of debt maturity structure (i.e. the choice between long-term and short-term debt) on explaining corporate investment. Do and Phan (2022) and Crouzet (2016) mentioned that corporate investment decisions are importantly influenced by debt maturity structure. Further, the role of debt maturity structure in corporate investment decisions and the role of financial leverage on corporate investment decisions are available in developed market settings and not well investigated in oil-based economies. Therefore, these issues motivated the presented study as presented below.

The present study is motivated to solve three important issues that are noticed in the existing literature. First, the conflicting conclusions on the linkage between corporate financial leverage and investment levels. Second, there are still limited studies that consider both financial leverage and debt maturity when studying corporate investment behaviour. Third, the mentioned two elements have not been examined by using a sample of listed corporations that operate in an oil-driven economy, such as Saudi Arabia. Therefore, the present study aims to solve the mentioned research issue.

Saudi Arabia is a significant and unique economy worldwide being one of the G-20 members. Saudi Arabia has the largest oil reserves of crude oil and plays a key role in regulating oil production levels to maintain stability in global oil markets (Shaddady and Alnori, 2024; Alnori et al., 2022; Bugshan et al., 2021). Saudi Arabia's capital market is the largest in the Gulf Cooperation Council as well as in the Middle East and North Africa regions. Recently, the country has undertaken ambitious reforms in its financial markets, including the liberalization of capital markets to foreign investors (Shaddady and Alnori, 2024). Therefore, research on Saudi-listed corporations' investment decisions is important for both local and foreign investors.

After employing the dynamic system GMM and using a sample consisting of listed non-financial firms operating in the Saudi stock exchange over the years 2011-2022, the present study results show that financial leverage increases Saudi corporations' investment levels. This negative linkage between financial leverage and Saudi firms' investment is inconsistent with most prior studies, which document a negative relation between leverage and corporate investment (Akguc and Rahahleh, 2021; Kuchler, 2020; Haque, 2014; Venkatarman and Rajkumar, 2024; Dang, 2011; Aivazian et al., 2005; Zidi and Hamdi, 2024). Further, the present study findings do not support the agency theory views that leverage restricts firms' investment and does not accept the disciplinary role of leverage on firms' managers. In addition, the study finds no evidence that debt maturity structure influences corporate investment choices. Overall, the findings of this study showed that financial leverage has more impact on corporate investment than debt maturity.

The remainder of this paper continues as follows: section 2 reports the literature review and the hypothesis development. Section 3 presents the data and method applied. Section 4 reports the results and finally, section 5 concludes.

2. LITERATURE AND HYPOTHESIS DEVELOPMENT

2.1. Leverage and Corporate Investment Nexus

The pioneering work of Modigliani and Miller (1958) suggested that corporates' investment decisions are associated with three critical factors: Profitability, cash flow and net worth. Subsequently, researchers have made remarkable attempts to explain the behaviour of corporate investments by introducing further relevant factors, such as leverage, debt maturity, ownership structure, and firms' growth (e.g., Aivazian et al., 2005; Kang et al., 2000; Denis and Denis, 1993; Myers, 1977).

Corporate investment and leverage nexus can be explained in two theoretical thoughts. The first one is the underinvestment hypothesis developed by Myers (1977). This theory proposes that firms with significant debt levels are at a higher risk of avoiding growth opportunities due to debt overhang matters (Myers, 1977). More specifically, firms with substantial leverage usually refrain from investing in positive net present value projects (NPV) because the profits from these projects mainly benefit the holders of debt. This phenomenon is referred to as the liquidity effect, which is noticeably examined in the existing literature (Alnori, 2023; Aivazian et al., 2005). Nonetheless, market frictions and imperfections exist in the real world and corporate investment decisions are linked to financing choices (Kang et al., 2000).

In addition to the underinvestment theory which predicts a negative effect of leverage on corporate investment, the agency theory provides another view in explaining the role of leverage on corporate investment. This view is known as the over-investment hypothesis, which arises from the agency theory introduced by Jensen and Meckling (1976) and Jensen (1986). More specifically, a conflict of interest between the firms' shareholders and owners may result from corporate investment decisions. This is because managers may prioritize expanding the firm and potentially neglect shareholders' interests. To counter this issue, shareholders may restrict the firms from accessing excess cash by pushing managers to rely on borrowing (Alnori, 2020, Alnori and Alqhtani, 2019). However, this increases firms' interest payments and therefore constrains the firm's ability to invest in profitable projects (i.e., positive NPV projects). Thus, there could be a negative association between corporate debt levels and investment due to the problem of over-investment (Kuchler, 2020).

Empirically, Denis and Denis (1993) examined how firms' leverage levels impact corporate investment. Denis and Denis (1993) found that firms' large usage of debt significantly hinders their investment decisions, which aligns with the underinvestment theory developed by Myers (1977). Further, Lang et al. (1996) explored that there is negative linkage between firms' debt levels and their future growth, and this relation is strong among firms with low Tobin's Q. This

implies that firms with high growth prospects are not restricted by their leverage when making investments.

The empirical evidence on the negative role of debt on corporate investment, as predicted by the over-investment hypothesis is mixed. For example, Aivazian et al. (2005) examined the role of debt overhand on corporate investment for a sample consisting of Canadian corporations. The results of the study performed by Aivazian et al. (2005) showed a significant negative relation between leverage and corporate investment and supported the agency theory of corporate leverage role on disciple firms' managers. In addition, another study performed by Aivazian et al. (2008) confirmed that corporate leverage hurts investment. Moreover, Dang (2011) examined the role of leverage on UK firms' investment decisions over the years 1996-2003 and confirmed that leverage decreases UK firms' investment levels. Further, in the emerging markets context, Haque (2014) investigated the role of debt on corporate investment using a sample consisting of 400 listed firms in Pakistan over the years 1998-2011. The results of Haque's study reported a negative impact of debt on corporate investment due to the disciplinary role of debt on firm managers as predicted by the agency theory. Further, another study on the role of debt on corporate investment is performed by Kuchler (2020). In this study, a sample of firms operating in Denmark is used and the results showed that firms with larger amounts of debt have a lower investment compared to firms with lower amounts of debt levels. Further, using a sample of GCC[1] firms during the period from 2000 to 2014, Akguc and Rahahleh (2021) examined the role of corporate leverage on Sharia-compliant and conventional firms' investment levels. Their results demonstrated that leverage hurts corporate investment levels and this negative impact is stronger for Shariah-compliant firms. However, this study did not consider the influence of corporate debt maturity structure on corporate investment levels.

After considering the majority of existing studies that investigate the role of corporate leverage on corporate investment decisions, it has been found that existing literature is silent on studying the mentioned relationship in oil-based economies, Such as Saudi Arabia. Therefore, the present study offers a different perspective on investigating leverage-corporate investment linkage, by incorporating debt maturity structure, by analysing a sample consisting of listed corporations in Saudi Arabia.

Most empirical studies which examined the impact of leverage on corporate investment levels demonstrated that leverage reduces corporate investment (Akguc and Rahahleh, 2021; Kuchler, 2020; Haque, 2014; Dang, 2010; Aivazian et al., 2005). These results which confirmed that leverage reduces corporate investment levels are attributable to the underinvestment (Myers, 1977) and the overinvestment (Jensen, 1986) views driven by the agency theory. Accordingly, the present study predicts that corporate leverage should be negatively related to Saudi firms' investment levels. This is because leverage is expected to reduce agency problems by reducing firms' managerial waste and disciplining the firms' managers, as predicted by Jensen (1986).

1 Gulf Cooperations Countries.

2.2. Debt Maturity and Corporate Investment

Besides the capital structure and corporate investment nexus, there are still limited empirical studies that attempt to investigate the role of debt maturity structure on corporate investment behaviour. Using a sample of UK firms, Dang (2011) examined the role of corporate debt maturity structure on the investment decision. His results found that debt maturity structure, measured by long-term debt over total debt, increases corporate investments significantly. Similarly, this positive association between long-term debt usage and corporate investment levels is found in the study performed by Jungherr and Schott (2021) on US corporations. In addition, Deng and Fang (2022) applied another approach to examining how debt maturity structure can influence corporate investment. More specifically, they studied the role of debt maturity heterogeneity on investment after considering different monetary policies. Given a certain level of debt, Deng and Fang (2022) claimed that companies with a higher proportion of long-term debt are susceptible to defaulting on their external debt obligations, leading to increased costs for obtaining external financing. Consequently, such firms exhibit lower responsiveness to monetary policy stimuli when it comes to making investment decisions. another study that investigates the importance of corporate debt maturity structure on investment levels was performed by Hong et al. (2023). In this study, a sample consisting of Compuste firms was analysed and the results showed that longer debt maturity increases corporate investment levels significantly. Hong et al. (2023) concluded that debt maturity impacts corporate investments more importantly than leverage. Furthermore, one of the view studies that examined the role of debt maturity on corporate investment was performed by Do and Phan (2022). In this study, a sample of Vietnam's listed firms over the years 2010-2019 was analysed. Do and Phan (2022) found that debt maturity, measured by long-term debt, significantly reduces corporate investment choice.

Most existing empirical literature did not incorporate corporate debt maturity structure (i.e., the choice between long-term and short-term debt) when studying leverage-investment nexus. This issue is obvious in existing literature performed in emerging market settings, except Do and Phan (2022). As shown by Hong et al. (2023) debt maturity impacts corporate investment levels more importantly than leverage. Therefore, the second aim of this study is to investigate the role of corporate debt maturity structure on corporate investment decisions using a sample of non-financial firms operating in the Saudi Arabian listed exchange (TASI).

Following existing studies performed in the developed markets (Hong et al., 2023; Deng and Fang, 2022; Dang, 2011), the present study hypothesised that debt maturity is important and relevant to corporate investment levels. This importance of corporate debt maturity in explaining firms' investment levels is also the case in emerging market settings (Do and Phan, 2022). However, as reviewed above, the direction of the relationship between debt maturity and corporate investment is not clear, since existing literature demonstrated mixed outcomes. Accordingly, the present study hypothesised that long-term debt is expected to be positively or negatively related to corporate investment levels.

3. DATA AND EMPIRICAL DESIGN

3.1. Data

The present study utilized data from all non-financial corporations listed on the Saudi Main Stock Exchange between 2011 and 2022. The analysis commenced in 2011 due to missing data before 2010 and to separate the analysis from the global financial crisis period (Alnori, 2023). The data is sourced from Thomson Reuters DataStream. All data used are annual and excluded financial industries, such as insurance and banks due to regulatory influence on their financial decisions (Park et al. 2013). All missing observations on corporate investment-related measures, leverage and debt maturity structure are excluded. Following most existing corporate finance studies, all variables applied in the analysis are winsorized at the 1st and 99th percentiles to mitigate outliers' impact[2] (Alnori, 2023; Bugshan et al., 2021; Alnori and Alqhtani, 2019). The final sample comprises 103 listed firms, yielding 1309 observations, forming an unbalanced panel.

3.2. The Variables

To investigate the influence of corporate leverage and debt maturity on investment levels, the present study applies a set of variables justified by existing literature (Do and Phan, 2022; Akguc and Al Rahahleh, 2022; Alhassan, 2019; Awartani et al., 2016; Dang, 2011; Aivazian et al., 2005). These variables are corporate investment, leverage, debt maturity, growth and operating cash flows. The definitions of the mentioned variables are presented in Table 1.

This table exhibits the definitions and abbreviations of all employed variables. Corporate investment (INV) is the dependent variable. All firms-related variables are taken from Thomson Reuters DataStream over the years 2011-2022.

3.3. Methodology

To examine the influence of financial leverage and debt maturity structure on corporate investment levels, the study applied the system generalized method of moments (GMM) developed by Arellano and Bond (1991). Most empirical studies, which examined the role of leverage on corporate investment levels, applied pooled ordinary least square. However, according to Do and Phan (2022) and Aivazian et al. (2005), OLS estimator bias can persist due to correlation with lagged individual effects. Consequently, pooling regression and random-effect models yield biased estimators. The fixed-effect estimator eliminates individual effects by transforming data into deviations from the individual effect, but the bias remains since lagged investment, included as a regressor, correlates with the individual effect. Therefore, the study employs lagged values of the regressors as instruments and applies The GMM specification. Initially, the data is differenced to remove individual effects, and then GMM is utilized. This addresses potential bias arising from the correlation between investment and the mean of the error term. The following equation presents the empirical model used in the present study:

$$INV_{it} = \beta 0 + \beta 1\, INV_{it-1} + \beta 2 LEV_{it} + \beta 3\, DM_{it} + \beta 4 Q_{it} + \beta 5 OCF_{it} + \epsilon_{it} \quad (1)$$

$$INV_{it} = \beta 0 + \beta 1\, INV_{it-1} + \beta 2 LEV_{it} + \beta 3\, DM_{it} + \beta 4 Q_{it} + \beta 5 OCF_{it} + \beta 6\, year_t + \epsilon_{it} \quad (2)$$

$$INV_{it} = \beta 0 + \beta 1\, INV_{it-1} + \beta 2 LEV_{it} + \beta 3\, DM_{it} + \beta 4 Q_{it} + \beta 5 OCF_{it} + \beta 6\, year_t + \beta 7\, ind_t + \epsilon_{it} \quad (3)$$

Where:

$INV_{i,t}$: is the firm investment at time t.

$INV_{i,t-1}$: is the lag investment for firm t.

LEV_{it}: is the firm's financial leverage.

DM_{it}: is the firm debt maturity structure.

Q_{it}: is the firm's growth.

OCF_{it}: is the firm operating cash flows.

$Year_t$: year dummy variable.

Ind_{it}: industry dummy variable.

ϵ_{it}: *is the error term.*

4. RESULTS

4.1. Summary Statistics

Table 2 presents the summary statistics for corporate investment and various independent variables used in the study. The average corporate investment, measured by the mean, was 0.15 during the study period. This indicates an average of 0.15 growth of the Saudi firms' investment levels over the years 2011-2022. Further, the median value for firms' investment variables is 0.10, indicating that firms show overall growth in their investment in property plants and equipment. The summary statistics, presented in Table 2, indicate that the cross-sectional dispersion for corporate investment is 25%. The maximum and minimum values for corporate investment show a large range between Saudi firms' investments, since the maximum value for firms' investment is

Table 1: Variables definitions and measurements

Variable	Acronyms	Measure
Corporate investment	INV	(propriety plants and equipment - propriety plants and equipment$_{-1}$ + depreciation)/propriety plants and equipment$_{-1}$
Leverage	Lev	Total debt/total assets
Debt maturity	DM	Long-term debt/Long-term debt+short-term debt
Growth	Q	Market Capitalization/Total Assets
Operating cash flow	OCF	Net cash flows from operating activities/total assets$_{t-1}$

Table 2: Descriptive statistics

Variable	Obs.	Mean	Median	Standard Deviation	Min	Max
INV	1,309	0.151	0.109	0.258	−0.740	0.883
LEV	1,309	0.369	0.336	0.221	0.015	1.02
DM	1,046	0.519	0.600	0.345	0	1
Q	1,218	0.939	0.742	0.767	0.079	4.66
OCF	1,138	0.074	0.070	0.094	−0.204	0.383

2 The study also conducted the analysis without adjusting the variables at the first and 99th percentiles, yielding comparable findings.

0.88, while the minimum is −0.74. The large difference across Saudi corporations' investment levels is similar to prior studies performed in developed in emerging markets (Do and Phan, 2022; Akguc and Al Rahahleh, 2022; Awartani et al., 2016; Dang, 2011; Aivazian et al., 2005).

The mean and median values for the variable financial leverage (denoted LEV) are 0.36 and 0.33 respectively. This indicates that, on average, 36% of Saudi firms' total assets are financed by debt. Further, the mean value for the variable debt maturity structure (DM) is 0.51, which indicates that approximately 51% of Saudi firms' total debt consists of long-term debt. These mean and median for firms' debt maturity structure are similar to prior studies performed in the Saudi context (e.g., Alnori, 2023). In addition, the firm's growth (Q) mean and median are equal to 0.93 and 0.74 respectively and show a large cross-sectional dispersion at 0.74. In addition, the corporate operating cash flows (OCF) show a similar mean and median (at 0.07) and standard deviation of 0.09.

Variables summary statistics over the years 2011-2022. The definitions of all variables are reported in Table 1.

4.2. Correlation

The correlation matrix for the independent variables of interest shows that multicollinearity is not a significant concern for our regression model, as the correlations between the variables are not high. According to Bugshan et al. (2023), correlations above 0.7 indicate potential multicollinearity issues. To further verify this, we conducted a multicollinearity test. The results indicated that the variance inflation factor (VIF) was below 10, confirming that the level of multicollinearity is acceptable and does not pose a problem in interpreting our results (Saeed et al., 2023).

4.3. Regression Results and Discussion

Table 3 summarises the regression analysis results on the impact of leverage and debt maturity on firms' investment levels. Table 3 column 1 reports the model reported in Equation 1. Column 2 presents the model reported in equation 2 which controls for time-fixed effects, while the model reported in equation 3 presents the results of equation 3 which controls for both time and industry-fixed effects. Overall, the results do not show large variations across the three-regression performed in Table 4, as discussed below.

The results show that lag. Investment has a positive impact on the firm investment, which indicates that last year's investment levels play an important impact in the current year corporate investment decision. This positive impact is statistically significant. This significance confirms the dynamic nature of corporate investment, which confirms the usage of the dynamic GMM specification as confirmed by Do and Phan (2022) and Aivazian et al. (2005).

The financial leverage coefficient is positive and statistically significant at 99% significant level and this strong significance level remains the same across all regression performed. This indicates that leverage increases corporate investment levels. This negative leverage-investment linkage does not accept the view that corporate leverage restricts corporate investment decisions and therefore does not accept the underinvestment theory developed by Myers (1977). Further, the positive nexus between financial leverage and Saudi firms' investment levels does not accept the over-investment hypothesis, which arises from the agency theory, due to the disciplinary role of debt, introduced by Jensen and Meckling (1976) and Jensen (1986).

Table 3: Correlation

Variable	INV	LEV	DM	Q	OCF	
INV	1					VIF
LEV	0.04	1				1.06
DM	0.02	0.03	1			1.02
Q	0.18	-0.23	0.04	1		1.35
OCF	0.22	-0.11	0.12	0.47	1	1.30

Table 4: Regression analysis results using dynamic system GMM

Variables	(1)	(2)	(3)
Lag. Investment	0.076**	0.041*	0.046*
	(0.02)	(0.03)	(0.03)
Leverage	0.389***	0.440***	0.385***
	(0.13)	(0.12)	(0.13)
DM	0.047	0.034	0.044
	(0.04)	(0.04)	(0.04)
Q	−0.037*	−0.035	−0.041
	(0.02)	(0.02)	(0.02)
OCF	0.269**	0.287**	0.275**
	(0.12)	(0.12)	(0.13)
Constant	0.136***	0.388***	0.406***
	(0.05)	(0.07)	(0.12)
Time dummies	No	Yes	Yes
Industry dummies	No	No	Yes
Observations	805	805	805
Number of firm	103	103	103
AR test (1)	0.00	0.00	0.00
AR test (2)	0.78	0.81	0.83
Hansen test (P-value)	0.00	0.00	0.00
Sargan test (P-value)	1	1	1

AR (1) and AR (20 tests refer to the Arellano-Bond test which is the average of the autocovariance in the residuals. The Sargan test is for the overidentification restriction in the system GMM estimator. Standard errors in parentheses. ***P<0.01, **P<0.05, *P<0.1

In relation to the existing empirical literature, the positive relationship between financial leverage and Saudi firms' investment decisions is not consistent with most prior studies, which showed that leverage decreases corporate investment (e.g. Akguc and Rahahleh, 2021; Kuchler,2020; Haque, 2014; Dang, 2011; Aivazian et al., 2005), and inconsistent with Do and Phan (2022) who showed that the relation between leverage and investment is not significant for listed corporations in Vietnam.

Regarding the nexus between corporate debt maturity and Saudi-listed corporations' investment, the results indicate that corporate debt maturity has no significant impact on Saudi Firms' investment decisions and this insignificant relation remains the same across all regressions applied. This insignificant relation indicates that Saudi firms' choice between long-term or short-term debt does not have an impact on investment levels. This insignificant linkage is not in line with prior studies performed by Jungherr and Schott (2021), Do and Phan (2022), and Dang (2011). Further, the insignificant nexus between debt maturity and Saudi-listed firms does not

accept the notion that debt maturity has more effect on corporate investment than financial leverage proposed by Hong et al. (2023) since the present study reported the opposite.

Corporate growth (denoted Q) reduces corporate investment levels but this negative relation is statistically weak. The majority of existing studies consider the firm's growth as an important factor when studying corporate leverage and investment levels (Akguc and Alfahahleh, 2021; Kuchler, 2020; Haque, 2014; Dang, 2011; Aivazian et al., 2005). However, the present study results highlight a weak relationship between corporate growth and investment levels, which does not accept Myer's (1977) underinvestment hypothesis. The weak relationship between corporate investment and growth can be explained by the different economic structures of Saudi Arabia and the still-developing bonds market (Alnori, 2020).

The operating cash flow variable (OCF), is positively and significantly related to corporate investment levels, indicating that Saudi-listed firms with higher operating cash flows are more likely to invest more than firms with lower operating cash flows. The strong positive association between operating cash flows and corporate investment is in line with several existing studies (e.g. Akguc and Alrahahleh, 2021). However, the positive relationship between operating cash flows and corporate investment, found in the present study, is inconsistent with Do and Phan (2022) and Le et al. (2017).

5. CONCLUSION

This study extended existing empirical literature on understanding the nexus between corporate financial leverage and investment including several substantial dimensions, including the inclusion of corporate debt maturity structure when studying the impact of leverage on investment, the usage of an oil-based economic setting, and the treatment of endogeneity issues. The present study examined the mentioned leverage-investment relationship using Saudi corporations due to their unique economic structure and being one of the substantial economies worldwide.

Using a panel of Saudi publicly traded corporations over the years 2011-2022 and after employing the GMM specification, this study investigates whether financing considerations, as explained by financial leverage and corporate debt maturity structure, impact corporate investment decisions. The results find that financial leverage has a strong positive impact on corporate investment, indicating that firms with higher leverage levels can increase their investment levels. This positive impact of leverage on corporate investment is not in line with most prior empirical studies which reported a negative linkage between financial leverage and corporate investment. This positive relation between leverage and corporate investment does not support the agency's theory view that corporate debt restricts their ability to make profitable investments and restricts managers from investing.

The results of this study find that the choice between long-term or short-term debt has no significant impact on corporate investment decisions. This confirms that the debt maturity structure does not affect Saudi firms' investment decisions. Prior studies suggested that debt maturity structure has a more important influence than leverage on corporate investment decisions. However, the findings of this study conclude that financial leverage has a more important role in Saudi firms' investment, than debt maturity structure.

Despite the limitations of this study, there are important implications that can be derived from this study's findings. More specifically, firm managers should consider that increased leverage can provide firms with the required capital to pursue more investment opportunities, leading to potential growth and expansion. However, managers should be aware of the financial risks included in debt usage. Further, firms' managers should be aware of the importance of considering cheaper internal financing, compared to costly external debt, when making corporate investment decisions. Firms' investors should understand the short-term and long-term impact of corporate debt financing on a firm ability to maximise shareholder wealth and firm value maximisation. Further, corporate lenders such as banks should utilise the monitoring role of debt financing on firms when providing short-term or long-term debt financing to firms. Finally, an interesting view for future research can be based on the current study. More specifically, future research may investigate how the recent COVID-19 affects leverage and debt maturity impacts on corporate investment.

REFERENCES

Aivazian, V.A., Ge, Y., Qiu, J. (2005), The impact of leverage on firm investment: Canadian evidence. Journal of Corporate Finance, 11(1-2), 277-291.

Akguc, S., Al Rahahleh, N. (2021), Shariah compliance and investment behavior: Evidence from GCC countries. Emerging Markets Finance and Trade, 57(13), 3766-3791.

Alhassan, A. (2019), Oil price volatility and corporate decisions: Evidence from the GCC region. Emerging Markets Finance and Trade, 55(9), 2057-2071.

Alnori, F. (2020), Cash holdings: Do they boost or hurt firms' performance? Evidence from listed non-financial firms in Saudi Arabia. International Journal of Islamic and Middle Eastern Finance and Management, 13(5), 919-934.

Alnori, F. (2023), Financial shock and the United States multinational and domestic corporations leverage. Cogent Economics and Finance, 11(1), 2210364.

Alnori, F., Alqahtani, F. (2019), Capital structure and speed of adjustment in non-financial firms: Does sharia compliance matter? Evidence from Saudi Arabia. Emerging Markets Review, 39, 50-67.

Alnori, F., Bugshan, A., Bakry, W. (2022), The determinants of corporate cash holdings: Evidence from Shariah-compliant and non-Shariah-compliant corporations. Managerial Finance, 48(3), 429-450.

Alnori, F.S. (2023), What do we know about corporate debt maturity structure in Saudi Arabia? Journal of Applied Finance and Banking, 13(6), 257-276.

Arellano, M., & Bond, S. (1991), Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. The review of economic studies, 58(2), 277-297.

Awartani, B., Belkhir, M., Boubaker, S., Maghyereh, A. (2016), Corporate debt maturity in the MENA region: Does institutional quality matter? International Review of Financial Analysis, 46, 309-325.

Bugshan, A., Alnori, F., Ananzeh, H. (2023), Corporate net working capital: Evidence from Shariah compliance. International Journal

of Emerging Markets.
Bugshan, A., Alnori, F., Bakry, W. (2021), Shariah compliance and corporate cash holdings. Research in International Business and Finance, 56, 101383.
Crouzet, N. (2016), Default, debt maturity, and investment dynamics. In: 2016 Meeting Papers, Society for Economic Dynamics. Vol. 533. Society for Economic Dynamics. p1635-1682.
Dang, V. A. (2011), Leverage, debt maturity and firm investment: An empirical analysis. Journal of business finance & accounting, 38(1-2), 225-258.
Deng, M., Fang, M. (2022), Debt maturity heterogeneity and investment responses to monetary policy. European Economic Review, 144, 104095.
Denis, D.J., Denis, D.K. (1993), Managerial discretion, organizational structure, and corporate performance: A study of leveraged recapitalizations. Journal of Accounting and Economics, 16(1-3), 209-236.
Do, T.V.T., Phan, D.T. (2022), Debt maturity structure and investment decisions: Evidence of listed companies on Vietnam's stock market. Cogent Economics and Finance, 10(1), 2024358.
Harcourt, G. C., Karmel, P. H., & Wallace, R. H. (1967), Economic activity. Cambridge Books.
Haque, A. (2014), Role of financial leverage in determining corporate investment in Pakistan. The Business and Management Review, 5(3), 226.
Hong, C.Y., Hou, K., Nguyen, T.T. (2023), Debt Maturity Structure and Corporate Investment. Fisher College of Business Working Paper No: 2022-03. p3.
Jensen, M.C., Meckling, W.H. (1976), Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics, 3(4), 305-360.
Jensen, M. C. (1986), Agency costs of free cash flow, corporate finance, and takeovers. The American economic review, 76(2), 323-329.
Jungherr, J., Schott, I. (2021), Optimal debt maturity and firm investment. Review of Economic Dynamics, 42, 110-132.
Kang, J.K., Shivdasani, A., Yamada, T. (2000), The effect of bank relations on investment decisions: An investigation of Japanese takeover bids. The Journal of Finance, 55(5), 2197-2218.
Kuchler, A. (2020), Leverage, investment, and recovery from a financial crisis: The role of debt overhang. Studies in Economics and Finance, 37(1), 143-159.
Lang, L., Ofek, E., Stulz, R. (1996), Leverage, investment, and firm growth. Journal of financial Economics, 40(1), 3-29.
Le, D.H., Nguyen, M.H., Ta, T.P., Le, M.A. (2017), Impact of debt maturity structure on firm investments of Vietnam listed companies in the construction industry. Pan-Pacific Journal of Business Research, 8(2), 36-45.
Lemmon, M.L., Roberts, M.R., Zender, J.F. (2008), Back to the beginning: Persistence and the cross-section of corporate capital structure. The Journal of Finance, 63(4), 1575-1608.
Modigliani, F., Miller, M.H. (1958), The cost of capital, corporation finance and the theory of investment. The American Economic Review, 48(3), 261-297.
Myers, S.C. (1977), Determinants of corporate borrowing. Journal of Financial Economics, 5(2), 147-175.
Park, S. H., Suh, J., & Yeung, B. (2013), Do multinational and domestic corporations differ in their leverage policies?. Journal of Corporate Finance, 20, 115-139.
Saeed, A., Alnori, F., Yaqoob, G. (2023), Corporate social responsibility, industry concentration, and firm performance: Evidence from emerging Asian economies. Research in International Business and Finance, 64, 101864.
Shaddady, A., & Alnori, F. (2024), ESG practices and bank efficiency: new evidence from an oil-driven economy. International Journal of Islamic and Middle Eastern Finance and Management, 17(2), 233-251.
Venkatarman, A., Rajkumar, A.D. (2024), Cross-sectioning sustainable supply chain governance: A bibliometric analysis. International Review of Management and Marketing, 14(3), 34-46.
Zidi, M., Hamdi, H. (2024), A panel-corrected Standard Error (PCSE) Framework to estimate capital structure and banking performance within the Tunisian context. International Journal of Economics and Financial Issues, 14(2), 196-202.