The determinants of capital structure in insurance companies Evidence from Saudi Arabia

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Abstract

The study examines the significant determinants of the insurance companies' capital structure listed on the Saudi Stock Exchange (Tadawul) from 2010 to 2018. In this study, one dependent variable capital structure is represented by leverage and six independent variables, firm characteristics variables (profitability, growth rate, risk, size, age) and macroeconomic variable (GDP). A random effect on a panel data regression model is employed as a tool of analysis. This study attempts to fill the lack of research in Saudi insurance companies to arrive at constructive suggestions that could contribute to financial structure decisions. The results show that profitability, age and risk have a statistically significant negative effect on the capital structure. Growth rate and firm size significantly positively influence the capital structure, while gross domestic product is insignificant.

Keywords: Capital structure, Insurance Companies, leverage, growth rate, risk, gross domestic product

Introduction

The capital structure decision is vital to companies, not only because of the need to maximize returns to various organizational constituencies but also because of the impact such a decision has on a company's ability to deal with its competitive environment. To understand how companies finance their operations, it is also necessary to examine the determinants of their capital structure decisions.

The insurance sector can play an essential role in financial and economic development by introducing risk management to reduce the impact of large losses and the amount of capital needed to cover these losses, encouraging additional investment, output, innovation, and competition (Ali and Tausif, 2019).

The insurance industry in Saudi Arabia was reformed in the year 2004, playing the cornerstone role in the Saudi financial services sector by providing reliable risk transfer mechanisms and serving as a conduit to channel funds from policyholders to investment opportunities, thus being a key enabler of a healthy Saudi economy (Ansari, 2011).

Insurance companies in Saudi have faced particular challenges in formatting their financial structure. As some companies have restructured their capital to cover losses, other nine insurance companies listed on the Saudi stock market since the beginning of 2018 have structured their capital

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by changing capital to improve the level of financial solvency and amortization of some of the accumulated losses (Al-Shalhoub, 2018). Based on analytical concepts through the analysis of the insurance companies, this study will answer the question: what determines a capital structure in insurance companies in Saudi Arabia?

This study aims to determine whether the investigated firm characteristics variables (profitability, growth rate, risk, size, age) and macroeconomic variable (GDP) had any impact on the capital structure in insurance companies in Saudi Arabia.

The study contributes in several ways. First, various Saudi studies have investigated the capital structure determinants only for the non-financial company (Alzomaia, 2014; Omet et al., 2015; Sbeiti, 2010). To the best of our knowledge, no similar studies have focused on the determinants of Saudi insurance companies' capital structure. Second, the study filling an important gap in understanding capital structure decisions for insurance companies in Saudi.

We organize this study as follows: Section two presents a review of the current literature; Section three outlines the model and explains the research methodology, Section fourth reports the results and analyzes the essential determinants of the capital structure of the insurance companies in Saudi, and finally, Section five concludes basing on the findings and offers recommendations for the sake of researchers and policymakers.

Literature Review

Capital Structure Theories

Investigating the determinates of capital structure has been one of the most contentious issues in the finance literature since Modigliani and Miller introduced their capital structure irrelevance prepositions, he assumed that corporate financial policy is irrelevant, a firm's total market value is independent of its capital structure (Modigliani and Miller, 1958). Several theories have been developed, since that time, suggesting several factors that might determine a firm's capital structure decision: Trade-off Theory, Pecking Order Theory, market timing theory (Abeywardhana, 2017).

The trade-Off theory focused on the trade-off between debt tax shields or tax-saving and bankruptcy costs; it assumed that the trade-off between the tax shield benefits of debt and the costs of financial distress is expected to produce the optimal level of debt that maximizes the value of the firm (Graham, 2000). Assuming that capital market is perfect, pecking order theory predicts that managers will follow a pecking order, using up internal funds first, then using up risky debt, and finally resorting to equity, on the absence of investment opportunities, firms retain profits and build up financial slack to avoid having to raise external finance in the future (Myer, 1984).

The theory of market timing of capital structure explains that firms time their equity issues in the sense that they issue new stock when the stock price is perceived to be overvalued and buy back their shares when there is undervaluation, this fluctuation in the price of shares affect the corporate financing decisions and finally the capital structure of the firm (Luigi and Sorin, 2009).

The determinants of capital structure in non-financial companies

Titman and Wessels (1988) introduced a factor-analytic technique for estimating the impact of unobservable attributes on the choice of corporate debt ratios. The result found that debt levels are negatively related to the "uniqueness" of a firm's business line and indicated that transaction costs

might be important determinants of capital structure choice. Debt at short-term ratios was shown to be negatively related to firm size, possibly reflecting the relatively high transaction costs small firms face when issuing long-term financial instruments.

Sbeiti (2010) investigated the capital structure determinants in three GCC countries and the effect of their stock markets' increase on firms' financing choices in these markets during the period 1998-2005. The result found that liquidity, tangibility and profitability are negatively and significantly related to the leverage ratios; At the same time, the firm size is positively and significantly related to a leverage ratio of firms operating in the countries investigated, growth opportunities are related positively to book leverage and negatively to market leverage in all three countries.

Faris (2010) examined the determinants of the capital structure choice of Jordanian industrial companies from 2004-2007. The results explained a significant positive relationship between the firm size, asset structure, tangibility, growth rate, and non-tax shield and the degree of leverage, and there is a significant negative relationship between earning rate (ROA) and leverage. In contrast, there are no significant relationships between assets structure/liability, the number of age firms, and risk as independent variables and degree of leverage.

Lim (2012) studied the determinants of financial service firms' capital structure in China over 2005-2009. The results found that leverage ratio increases with firm size and decreases with profitability, non-debt tax shields, earnings volatility, and non-circulating shares.

Ba-Abbad and Ahmad Zaluki (2012) explained the determinants of the capital structure of Qatari listed companies from 2004 to 2008. The results reveal that company size and profitability have a dominant role in explaining the variation in the total debt ratios of Qatari companies. Company size, company assets structure, and company profitability play an essential role in defining the variation in the long-term debt ratios of Qatari companies. However, only company size has a dominant role in explaining the variation in the short-term debt ratios of Qatari companies.

Fernandez et al. (2013) aimed to study the determinants of the capital structure of Oman corporate from 2006 to 2011. The study found that the higher the cash flow, the greater the companies' amount will be taken as debt. As profitability decreases, firms tend to become more debt intensive. Moreover, if the firm becomes operationally more efficient in productivity, it prefers to take more debt. It also found that as the size of the firm increases, it becomes more leveraged.

Mwangi et al. (2014) investigated the relationship between capital structure on non-financial companies' performance listed in the Securities Exchange of Nairobi during 2006-2012. The study results showed that financial leverage had a significant negative association with firm performance measured by return on equity (ROE) and return on assets (ROA).

Alzomaia (2014) studied determinants of listed firms' capital structure in Saudi Arabia from the year 2000 to the year 2010; the study suggested that size and growth opportunities are positively related to leverage, whereas tangibility, profitability, and risk are negatively associated with leverage.

Omet et al. (2015) reported the leverage ratios of listed Saudi and Palestinian non-financial firms. They examined whether the differences in their ratios' determinants are due to firms-specific factors or country-specific differences during the period 2006-2012. The results indicated that factors like asset structure and firm profitability affect both firms' capital structure.

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Njoroge and Nasieku (2016) tried to investigate the effect of growth and liquidity and profitability, on the capital structure of internet service providers in Kenya between 2009 and 2013. The study established that profitability and growth positively affect the capital structure decision, whereas liquidity and size of the firm negatively affects the capital structure

M'ng et al. (2017) studied the determinants of public listed companies' capital structure on the Singapore Stock Exchange, Bursa Malaysia, and Thailand Stock Exchange from 2004 to 2013. The results found that profitability has a significant negative influence on the capital structure for Malaysia and Singapore but insignificant for Thailand, firm size has a significant positive influence on the capital structure for all countries, the tangibility of assets has a significant positive influence on the capital structure for Singapore and Malaysia, while insignificant for Thailand. The depreciation of total assets indicates a negative influence on capital structure across all three countries.

Amraoui et al. (2018) investigated the capital structure impact on a firm's performance in Morocco for eight years from 2009 to 2016. The results conclude that out of seven variables, there are four more significant ones, which are: return on asset, asset tangibility, size, and liquidity; all of them have a negative impact, except for size is positively significant.

Acar (2018) to identify the firm-specific determinants of the capital structure of non-financial firms in Turkey during the period from 2009 to 2016. The result showed that profitability, size, non-debt tax shield, tangibility, and liquidity are significant determinants of the capital structure. Size is the most robust one. Whereas growth and volatility are found insignificantly related to leverage.

Yousef (2019) investigated the determinants of capital structure in the context of the Gulf Cooperation Council (GCC) and the United Kingdom (UK) real estate sectors. The results found that firm size was positively correlated to a significant level with various debt measurements for both the GCC and the UK sample, profitability and the retained earnings to total assets ratio, on the other hand, correlated negatively to a significant level for both samples.

Sakr and Bedeir (2019) studied the firm-level determinants of Egyptian publicly-traded nonfinancial firms' capital structure over the period starting from 2003 to 2016. The findings revealed that profitability, size, tangibility, liquidity, growth, business risk, and financial flexibility are significant firm-level determinants.

The determinants of the capital structure of insurance companies

Ahmed et al. (2010) investigated the impact of firm-level characteristics on Pakistan's life insurance companies' capital structure during the period 2001 to 2007. The result indicated a significant positive relationship between size and risk with leverage and a significant negative relationship between profitability, liquidity, and age with leverage. But growth and tangibility have an insignificant relationship with leverage.

Najjar and Petrov (2011) studied the effect of specific firm characteristics on capital structure in Bahrain; from 2005 to 2009, the study founded that there is a strong relationship between firm characteristics (firm size, revenue growth, and liquidity) and observed capital structure, as represented by the debt ratio. However, profitability and revenue growth are not statistically significant.

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Hassan (2012) investigated the determinants of capital structure in Nigerian listed insurance firms from 2001 to 2010. The result found that tangibility and growth positively correlate with leverage, whereas size, age, and profitability are negatively correlated with leverage.

Sharif et al. (2012) aimed to study capital structure decisions in Pakistan's insurance companies during 2004 to 2009. The study's outcomes advocate that profitability, age, and earnings volatility have an inverse relation with leverage and are significant. Liquidity also has an inverse relationship with the debt ratio, but it is not significant. Alternatively, size and growth opportunities have a direct relationship with leverage, but the only size is significant.

Gatsi and Gadzo (2013) focused on the determinants of insurance companies' capital structure in Ghana from 2005 to 2011. The results suggested that firm characteristics and some macroeconomic variables are the major determinants of capital structure in Ghana's insurance sector. The risk of the insurance companies showed a strong significant positive relationship with leverage.

Tornyeva (2013) investigated the determinants of insurance companies' capital structure in Ghana, covering 2002-2007. The results showed that both Firm size and growth have a positive relation to leverage; profitability negatively relates to leverage.

Ansong and Ekow-Asmah (2013) studied the nature of insurance companies' capital structure in Ghana from 2002 to 2011. The results suggested that there is debt in the capital structure in the insurance sector of Ghana, and these debt structures short term debt take a higher proportion, also found that the proportion of equity capital is lesser than debt capital and no difference in the debt capital practice among the insurance companies.

Shala et al. (2014) analyzed the determinants of capital structure among insurance companies in Kosovo; during 2009-2012, the debt ratio is considered a dependent variable. In contrast, company size, growth, life, fixed assets, and liquidity ratio were independent variables. The results found that these variables are in a positive relationship with the debt ratio.

Vinasithamby (2014) analyzed the determinants of 28 Listed Banks Finance & Insurance Companies' capital structure in the Colombo Stock Exchange from 2008 to 2012. The results showed that tangibility, profitability, growth, and liquidity are negatively related to the debt ratio, while the size is related positively. A non-debt tax shield is not significantly related to the debt ratio.

Anthonyn and Odunayo (2015) examined the major determinant of quoted composite insurance companies' capital structure in Nigeria for a period 2008 - 2014. The results explained that tangibility, growth, and liquidity have a negative impact on leverage while risk, return on asset, and size have a positive influence on leverage

Guruswamy and Adugnaw (2016) examined the determinants of selected insurance companies' capital structure in Ethiopia during 2005-2014. The results showed that age, business risk, management efficiency, economic growth rate, and inflation are positively related to capital structure, but firm growth negatively relates to capital structure. However, liquidity, size, and tangibility of assets had an insignificant impact on capital structure.

Al Singlawi and Aladwan (2016) examined the company's characteristics that affect insurance companies' capital structure in Jordan during 2010-2014. The results revealed a significant negative relationship between capital structure and its size, profitability, growth, and risk, while tangibility was significantly positively correlated to capital structure.

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Research Methodology and Design

In this study, a quantitative research approach has been used to accomplish the research objectives and investigate the capital structure determinants of Saudi Insurance Companies. We discuss here our sample, population, and research methodology. Then we present the model specification and its variables, and the hypothesizes of the study.

To collect the required data, we use secondary resources. The issued reports of the selected listed insurance companies for 2010–2018 were identified using the Saudi Stock Exchange website (Tadawul). The sample consists of 28 firms out of all the 32 listed insurance companies. The companies that were excluded either started recently or exited trading in the market before 2018. A panel data regression analysis is used as a tool of analysis for the study.

From the research overview and the established hypotheses, the authors have built a research model as follows:

LEV_t = $a + \beta_1 PROF_t + \beta_2 GROS_t + \beta_3 SIZE_t + \beta_4 AGE_t + \beta_5 Risk_t + \beta_6 GDP_t + \varepsilon_t$ (1) where: LEV = Firm Leverage a = Constant coefficient $\beta_1 - \beta_6 = \text{Regression coefficients for measuring independent variables}$ PROF = profitability GROS = growth rate SIZE = firm size AGE = age of the firm Risk = risk GDP = gross domestic product t = time period from 2010-2018 $\varepsilon_t = \text{error term}$

Table1 explores the measurement of variables and the previous related Empirical studies.

Variable	Description	measurement	Reference		
Dependent	variables				
LEV	Leverage	Total debt/Total assets	Al Singlawi, O., and		
			Aladwan, M. (2016), Shala et		
			al. (2014), Najjar and Petrov		
			(2011), Gatsi and Gadz		
			(2013), Hassan (2012), Sharif		
			et al. (2012)		
Independent variables					
PROF	Profitabilit	return on assets =	Anthony and Odunayo		
	У	Net profit (loss) for the	(2015), Najjar and Petrov		
		period/total assets	(2011)		
GROS	Growth	Percentage change in	Al Singlawi, O., and		

Table1: Measures of the determinants of capital structure in insurance companies

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Variable	Description	measurement	Reference		
	rate	total assets	Aladwan, M. (2016), Hassan		
			(2012), Vinasithamby (2014)		
Size	Size	Natural logarithm of	Al Singlawi, O., and		
		Total assets	Aladwan, M. (2016), Shala et		
			al. (2014), Anthony and		
			Odunayo (2015), Tornyeva		
			(2013),		
Age	Age	Number of years since	Gatsi and Gadzo (2013),		
		the firm's foundation	Ahmed et al. (2010), Sharif, et		
			al. (2012)		
Risk	risk	The standard deviation	Al Singlawi, O., and		
		of return on assets	Aladwan, M. (2016),		
			Tornyeva (2013),		
GDP	Gross	annual gross domestic	Guruswamy and Adugnaw		
	domestic	product rate	(2016)		
	product				

Regarding table 1, and After reviewing relevant and related literature, the researcher hypothesizes that profitability, growth rate, size, age, risk, and GDP were expected to influence capital structure measured by leverage in insurance companies in Saudi. The following hypotheses were formulated and tested to achieve the objectives of the study.

H1: There is a significant relationship between leverage and Profitability

H2: There is a significant relationship between leverage and Growth rate.

- H3: There is a significant relationship between leverage and size.
- H4: There is a significant relationship between leverage and age.

H5: There is a significant relationship between leverage and risk.

H6: There is a significant relationship between leverage and gross domestic product.

Empirical results and data analysis

This research used panel data to analyze the determinants of the capital structure of the insurance company of Saudi. We use First descriptive statistics to demonstrate the features of dependent and independent variables of the research. Following this, we conduct a correlation analysis to derive an overview of each pair of variables' relationships. Subsequently, linear regression was performed as the main analysis to identify the determinants of Saudi insurance companies. We choose the random-effects model based on the Hausman specification test.

Descriptive Statistics

This research section condensed the descriptive statistics outcomes of dependent variables (leverage) and independent variables (PROF, GROS, SIZE, AGE, RISK, GDP) for selected Saudi Insurance companies during 2010 - 2018.

Table 2 shows descriptive statistics of 252 observations over 2010-2018; it explores mean, standard deviation, minimum, maximum, and No of Observations.

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	LEV1	PROF	GROS	SIZE	AGE	RISK	GDP
Mean	0.715940	0.005335	0.138857	5.987665	8.035714	0.047750	3.776667
Median	0.729200	0.014850	0.053205	5.934300	7.000000	0.044742	3.650000
Maximum	0.951000	0.139700	2.001601	7.129600	33.00000	0.068221	10.00000
Minimum	0.032100	-0.168200	-0.565332	5.152400	1.000000	0.038844	-0.740000
Std. Dev.	0.142941	0.051575	0.299427	0.369382	4.987106	0.009265	2.800454
Skewness	-1.635294	-0.987322	2.688211	0.852614	2.638407	1.069095	0.718571
Observations	252	252	252	252	252	252	252
Cross-sections	28	28	28	28	28	28	28

Table 2: Descriptive analysis

Based on Table 2, the average rate of leverage for the selected insurance companies in Saudi Arabia is 71.59% during the study period; this means that the companies depend on debt to finance assets by 71.59%. This percentage considers a high bit for insurance companies. Moreover, the standard deviation of leverage is 14.29%, which indicates that the riskiness financing assets with debt are 14.29%. As measured by the total debt ratio for a sample, the maximum and minimum leverage ratios are 0.951 and 0.032, respectively.

The average profitability ratio of the selected insurance companies in the Saudi Arabia shows a very low percentage of profitability (0.53%), the maximum and minimum profitability ratios are 13.9% and -16.8, respectively, this indicates that some insurance companies face financial losses and must adjust their positions to face these losses. The average, maximum and minimum gross rate are 13.88%, 2 and -0.565 respectively; a negative growth rate (-0.565) indicates that some companies have reduced their assets and others have increased their assets.

The average size of the companies, measured as the natural logarithm of total assets, is 5.98, which is the center of the distribution of insurance size value among selected insurance companies, it varies between 7.12 as maximum, and 5.93 as a minimum. The average age of insurance companies is 7.03 years, which indicates the recent establishment of the insurance industry in Saudi Arabia. Risk, for the the insurance companies that measured by standard deviation of return on assets ranged between a maximum of 0.068 up to a minimum of 0.038; the average risk is 0.477.

The average gross domestic product, which is select as a variable for macroeconomic impact on the choice of financing activities, is 3.77; it varies between 10 as maximum and -0.74 as a minimum. Moreover, in 2017 the GDP was the only negative.

Correlation results

Correlation measures the strength and direction of the linear relationship between two or more variables. Table 3 displays the correlation coefficients between the independent variables of the insurance companies; the purpose is to examine the existence of multicollinearity problem before running the regression model.

Variables	PROF	GROS	SIZE	AGE	RISK	GDP
PROF	1					

Table 3: Summary of the correlation analysis

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GROS	-0.09474	1				
SIZE	0.362325	-0.06015	1			
AGE	0.20584	-0.18211	0.518969	1		
RISK	-0.19082	0.273042	-0.20819	-0.36499	1	
GDP	-0.25812	0.152219	-0.23173	-0.37594	0.486805	1

From Table 3, we observed that the values of the correlation coefficients between the independent variables reveal weak relationships among them. This result shows that there is no multicollinearity problem.

Unit root test

To check whether the main variables of the regression model (1) are stationary, we carried on the Levin, Lin and Chu root test for panel data; the results in Table 4 show that all variables are stationary at level throughout the study period. Therefore, the regression can be done.

Variable	Statistic	Prob
LEV1	-5.419	0.000
PROF	-11.21	0.000
GROS	-12.313	0.000
SIZE	-9.5	0.000
AGE	-7.12	0.000
RISK	-10.83	0.000
GDP	-6.35	0.000

 Table 4: Results of the unit root test at level

Hausman test

We use the Hausman test to choose between the fixed and random-effects model. The null hypothesis of the test is that the random-effects model is preferred to the fixed-effects one. Hausman test reported a chi-square value of 0.000000 with a p-value of 1.00, implying that the chi-square value was statistically insignificant. Hence the researcher did not reject the null hypothesis and applied the models using random effects.

Regression Analysis

To examine the determinants of Saudi Insurance companies' capital structure, the researcher used a regression analysis to test the relationship between the dependent and independent variables.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	-0.017829	0.094928	-0.187816	0.8512
PROF	-0.419329	0.122841	-3.413602	0.0008
GROS	0.083896	0.018218	4.605064	0.0000
SIZE	0.153651	0.013555	11.33550	0.0000
AGE	-0.005446	0.003063	-1.777656	0.0767
RISK	-1.650097	0.797007	-2.070366	0.0395
GDP	0.000114	0.002392	0.047820	0.9619

Table 5: Results of the random-effects regression

Based on the regression results in Table 5, there is evidence that profitability, growth rate, size, age, and risk are all statistically significant with leverage at a level of significance 1%, 1%, 1%, 10%, and 5%, respectively. At the same time, the gross domestic product was insignificant.

The regression results show that profitability has a negative impact on leverage for Saudi Insurance companies. That is to say that profitable insurance companies prefer to finance new investment opportunities with internally generated funds. This result is in the same line of the theory of pecking order and agency theory of capital structure and also agrees with previous empirical studies in insurance companies that show a negative relationship between profitability and leverage, such as (Tornyeva, 2013; Ahmed et al., 2010; Vinasithamby, 2014; Hassan, 2012 and Sharif et al., 2012).

The positive coefficient of growth rate indicates that a stronger companies' growth rate of an assets use a higher debt ratio. Hence Saudi growing insurance companies usually search out for external funds to maintain their growth. This finding is consistent with pecking order theory and also agrees with previous empirical studies in insurance companies that show a positive relationship between growth rate and leverage, such as (Hassan, 2012; Sharif et al., 2012; Tornyeva, 2013 and Shala et al., 2014).

The regression results show that company size has a positive impact on the leverage in Saudi Insurance companies. This refers that the debt ratio is higher for large companies and lower for small ones, and the larger companies will be more levered by debt financing due to having lower bankruptcy risk and the ability to issue debt at lower costs, diversify their risk, and take the benefit of tax shields. This finding is in line with trade-off theory and agency theory and with previous empirical studies in insurance companies, such as (Sharif et al., 2012; Tornyeva, 2013; Vinasithamby, 2014; Anthonyn and Odunayo, 2015).

The negative coefficient of age implies a negative relationship between age and debt ratio in Saudi Insurance companies. This result indicates that mature life insurance companies are preferred to utilize a small portion of the debt in the capital structure. The companies can raise their funds internally because when the company continues to operate for a long period, it can raise more funds to run its operations, while the new insurance companies have to rely more on debt. This finding is consistent with previous empirical studies in insurance companies (Ahmed et al., 2010; Sharif et al., 2012).

The risk has a negative effect on leverage for Saudi Insurance companies; this supported that risky insurance companies or a high probability of default insurance companies should not be levered; this may be because the increase in risk is potentially associated with increased bankruptcy risks. The result follows the prediction provided by the trade-off theory that companies with more risky earnings should have less debt as they face higher financial distress costs from fixed commitments to debt; it agrees with previous empirical studies in insurance companies (Al Singlawi and Aladwan, 2016)). However, it is inconsistent with the pecking order theory.

The regression results of the gross domestic product, which is taken as a macroeconomic variable in this study, demonstrate an insignificant positive relationship between this variable and leverage; therefore, it is not a significant determinants of insurance companies' capital structure. The result is consistent with past studies, which investigate that when countries encounter economic development,

they have constant growth and their financial institutions are stabilized (Guruswamy and Adugnaw, 2016; Gatsi and Gadzo, 2013)

Conclusion and Recommendation

The capital structure remains an important and significant issue for academicians and corporate managers. This study attempted to investigate the determinants of the capital structure of 28 Insurance companies listed on the Saudi Stock Exchange during 2010-2018. According to the findings, profitability, age, and risk have a significant negative relationship with leverage, while growth rate and size have a significant positive relationship with leverage. However, the gross domestic product has an insignificant relationship with the leverage of Saudi insurance companies. Based on the study results, the important determinants of the capital structure of insurance companies in Saudi are Profitability, age, size, growth rate, and risk.

The study provided useful contributions in the field of determinants of the capital structure in the insurance companies in Saudi Arabia, and the researcher recommends adding other detailed studies in the field of financing decisions to cover the shortage in the insurance industry and to contribute to improving the conditions of some insurance companies facing financial problems.

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