

## Company's Characteristics and Capital Structure

# "An Empirical Study on Listed Insurance Companies in Jordan"

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Received: Jan. 12, 2016 Accepted: Feb. 23, 2016 Published: April 1, 2016

#### **Abstract**

This study examined the company's characteristics that affect the capital structure of insurance companies in Jordan. The study has employed panel regression model in investigating the capital structure of insurance companies using financial statements data of 23 companies covering the period 2010-2014. The results showed that both the static trade-off and pecking order theories are important in explaining the capital structure of insurance companies in Jordan. Company's characteristics: size, profitability, tangibility, growth and risk were statistically significant to capital structure. Based on multiple and single regression the results of the study showed a statistical significant relationship between characteristics of insurance companies and their capital structure. The results also revealed a significant negative relationship between capital structure and company's size, profitability, growth and risk while tangibility was significantly positively correlated to capital structure.

**Keywords**: Capital Structure, Insurance companies, company size, Profitability, Growth, tangibility, Debt ratio, Risk, Jordan.



#### 1. Introduction

In one way or another, entities operations are to be sfinanced. Without proper finance of fixed assets or working capital, business will not continue. The three known main sources of financing for business are: internal Cash surplus inside, new equity financing or debt obtained from banks and other debt funding sources. The concept of capital structure is known as the percentage of debt to equity for a company when financing its operations (Abor and Biekpe, 2005). It has been argued that capital structure policies are vital and always aimed to maximize the rate of return for shareholders beside other reasons such as high capabilities to fit with highly competitive environment. Company's capital structure decisions always takes in consideration its specific circumstances therefore management should decide what the suitable mixture of internal and external is financing.

The starting point of all research for capital structure theory is the contribution of Modigliani and Miller paper in 1958 which known as the MM theory, this paper was considered from the most important papers in the financing decision theory. According to Modigliani and Miller with the assumption that of no brokerage, tax and bankruptcy costs, investors can obtain debt at the same portion for company and they would tend to have the same information as management about the company's future investment opportunities. Thus a company's value will not be affected by its capital structure and therefore earnings before income tax are not related to the finance of debt (Modigliani and Miller, 1963).

Capital structure management is needed in all types of organizations particularly those in the non-financial sector; they need capital to acquire operational assets, securities or pursue new areas of business. Insurance companies are also no exception; even their main focus is somewhat different. The objective of insurance activities is to provide some protection for policy holders in times of accident throughout the minimization of the probability of loss. For this reason insurance companies are always interested in both its solvency and liquidity. In order to control risks, insurance companies follow an effective appropriate method when considering the amount of capital that is necessary to decrease sudden losses from insurance claims and other operational risk exposures.

## 2. Problem of the study

According to the trade-off theory it had been argued that, debt financing is less expensive than equity financing due to the fact that interest of debt is deductible thus the value of the firm is assumed to have a positive relationship with corporate tax shield. In real world no entity finance its capital by 100% debt because of bankruptcy costs for this reason trade-off theory assumes that, tax shield should be adjusted to for financial distress costs that a rises from high debt portions (Brounen and Eichholtz, 2001). However, Myers 1984 in pecking order theory argued that, firms tend to use internal sources of financing using new equity or raise equity as a financing mean. Thus, internal funds are used first, and when they are unavailable or depleted, they finance capital through debt. In contrast, some firms might use external debt finance firstly as in the case of using hybrid securities as convertible bonds, and then issue equity only as a last option. Hence, in contrast to trade-off theory no well-defined



leverage ratio is determined in the pecking order theory (Mary et al., 2011).

Due to this debate about the capital structure issue our study is aimed to study in depth the deferent company characteristic's that governs the capital structure in Jordanian insurance companies from a developed country perspective and provide more empirical evidence on this relationship that might defer according to each country circumstances.

## 3. Importance of the Study

The importance of the study stems from its topic due to the fact that little studies in Jordan have conducted to investigate the company characteristics and their effect on capital structure particularly the insurance companies in Jordan. Hence, our study is expected to add more literature about this topic beside other studies conducted on deferent sectors in Jordan and other similar developing countries.

## 4. Overview of insurance industry in Jordan

The insurance industry in Jordan backs to the Kingdom's independence in 1946, when the Egyptian Orient Insurance Company started to provide insurance brokerage services. After five years later, the Jordan Insurance Company was the first Jordanian insurance company established with a capital of JD100.000, marking the first step in our insurance industry's evolution. As more companies were expected to enter the market, the need for a federation to represent the sector and its growing needs encouraged the establishment of the Association for Insurance Companies in 1956, which was also held responsible for regulating the sector. The number of companies continued to increase, and eventually the first insurance law was enacted in 1965.

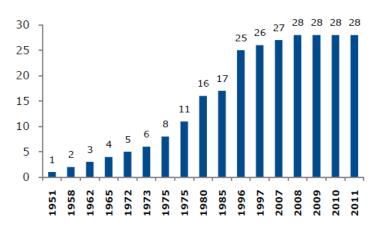
In 1984, the total of insurance companies was 17 and the Unified Compulsory Insurance Office was established in 1987 that was responsible for insuring all vehicles on behalf of insurance companies. In 1989 the Jordan Insurance Federation (JOIF) was created to replace the Association for Insurance Companies and act as the managing authority for the sector. The year 1995 witnessed a major turning point for insurance sector when new investors are allowed to enter the industry with a capital requirement not less than JD2 million. For further regulation and supervision of the sector, the Jordanian Insurance Commission (JIC) was established as an administratively and financially independent organization in 1999. The (JIC)main role was to improve insurance companies" operational efficiency and enhancing the ability to provide better services in a healthy competitive environment in addition to monitoring company's solvency and general financial health.

According to (JIC) 2012 currently there are 28 insurance companies that provide a wide range of life & non-life coverage services. In addition to the insurance companies, there are some other supplementary services insurance companies, which provide their insurance services through the following entities: Insurance Agents (589), Insurance Brokers (127), Reinsurance Brokers (22), Loss Adjusters and Surveyors (59), Third Party Administrator (1), Actuaries (16), Insurance Consultant (30), Banc assurance (16), Authorized Underwriter (10), Approved Foreign Reinsurance Brokers (34). All insurance companies in Jordan, most of which are family controlled, are listed on the Amman Stock Exchange, with the exception of



the foreign-listed American Life Insurance Co. (Metlife Alico). The insurance sector currently employs more than 2,600 people, up from around 2,500 in 2008. Figure (1) shows the number of insurance companies in Jordan through the years 1951 to 2011 (JIC, 2012).

#### Number of Insurers in Jordan

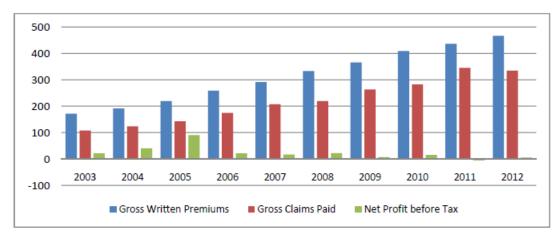


Source: Jordan Insurance Federation (JOIF)

Figure 1. number of insurance companies from 1951-2011

The insurance sector in Jordan has also been growing financially, with total premiums underwritten in Jordan grew JD 291.47 million in 2007 to JD 466.46 in 2012, reflecting a CAGR of 8.15% during (2007- 2012). The growth in recent years is attributed to the growth in written premiums in all insurance licenses, considering the growth of medical insurance business by (11%), motor insurance by (9%), fire and other damages to property insurance by (6.7%) and marine insurance by (4.9%) figure (2) shows the financial growth in insurance sector (CBJ, 2012; JIC, 2012).

#### **Jordanian Insurance Sector Growth (2003-2012)**



Source: Insurance Commission, Annual Report (2012)

Figure 2. the growth in insurance sector.



In 2012, the insurance sector earned JD (5.6) million in net profit before tax, compared to a loss of JD (8.6) million in 2011. The insurance sector's returns on financial assets and investments reached JD (10.1) million, compared to JD (3.4) million in 2011, which are mainly attributed to the increase in the fair value of shares owned by some companies and the dividend income from shares owned by some insurance companies, in addition to profits earned from real estate rentals and selling. Interest income on deposits and financial assets at amortized cost reached JD (11.7) million, compared to JD (10.4) million in 2011, registering a slight increase due to the increasing value of bank deposits. The currently 28 insurance companies have total assets worth JD695 million competing for around JD400 million in gross premiums. The sector has been growing in recent years and this growth is reflected by the remarkable rise in the total assets of licensed banks which more than trebled in size from JD 14.15 billion in assets back in 2000 to JD 60.5 billion at the end of 2013 reflecting a growth rate of 328% (meaning that banks' total assets more than tripled during this period). This growth is attributed to the somewhat conservative banking policies adopted by banks in Jordan that enabled the country to withstand the global financial crisis in 2009(JIC, 2012).

is Jordanian insurance market considered highly fragmented, Herfindahl-Hirschman Index (a measure of market concentration) of 529, a median market share of 2.8%, and only 4 companies having a market share over 5%. The 7 largest insurance providers accounted for almost half of all premiums in 2009. Given these market conditions, net profit margins are characteristically low, with a median of 1.9%. Despite efforts by regulators to encourage consolidation and incentives made available on a case by case basis, no mergers have been completed in over 20 years. After increasing at a CAGR of 14.9% between 2000 and 2009, gross written premiums in Jordan grew by a further 12% in 2010, to reach JD408 million. The overall size of Jordan's insurance market is a fraction of the regional total with premiums representing a mere 2.8% of the overall value. Only Bahrain and Kuwait have smaller markets, with populations that are a quarter the size of Jordan's, underlining the significant potential for growth in the local insurance sector. General, or non-life, segments account for more than 90% of premiums in Jordan compared to much lower rates of 68% and 55% in Morocco and Egypt (JIC, 2011).

## 5. Theoretical Background

The insurance concept simply means the risk transfer technique, and it's diversified from car insurance to real estate insurance, life insurance or any other type of insurance. The main objective for insurer is to reduce the risk to some level that he can bear; hence, a premium should be paid to the insurance company for this risk spreading. Insurance premiums are determined using an actuarial techniques based on statistical data. The insurance activity is following a rule that spread the risks over all clients (AL-Najjar and Petrov, 2011). Thus, in order to distribute and control the high-risks or correlated-risks insurance providers apply a pooling method, where a group of insurance providers distribute and share their risks through jointing their all capital. This is justified by that, one company alone could not bear all risks; therefore, this method allows jointed companies to have more coverage level when spreading the risk (Chen et al. 2009).



Modigliani and Miller research in 1958 was the starting point for capital structure theory; they stated that, company total value depends on its capital structure. They pointed out firms or even individuals can obtain debt by the same interest rates, therefore both can neutralize capital structure decisions by the firm's management. Further, companies' policies for investment that determine the firm value not its level of debt used in capital structure. Nevertheless, this capital structure theory has been challenged on the ground that, capital structure seems to be relevant for the value of the firm (Tornyeva, 2013). Rajan and Zingales (1995) stated that, "Theory has clearly made some progress on the subject. We now can perceive the most important departures from the Modigliani and Miller assumptions that make capital structure appropriate for predicting firm's value. However, very little is known about the empirical relevance of the different theories."

Other theories concerning Capital Structure were aimed to explain the behavior of capital structure of firms. For example, Myers (2001) pointed out that, there is no common universal theory for debt – equity portion, and there is no reason to expect one". On the other hand Bauer(2004) stated, "However, there are several useful conditional theories, each of them helps to understand the debt-to-equity ratio structure that firms choose. These theories can be divided for two groups; either they predict the existence of the optimal debt-equity ratio for each firm or they declare that there is no well-defined target capital structure" (Tornyeva, 2013). Other most popular theories for capital structure are the static trade-off theory of Ross(1977), the pecking-order theory of Myers and Majluf(1984) and Myers(1984), and the signaling theory of Ross (1977).

The capital structure static trade-off theory claims that, a firm's optimal capital structure is affected by three elements: the tax-shield resulted from the debt use, the bankruptcy cost which known as costs of financial distress and finally the agency cost costs. The tax-shield is based on the fact that, interest costs are deducted before arriving to taxable profit while payments of dividends are not deducted before. Therefore, this privilege encourages companies to borrow debt in order to increases distributions to owners (Modigliani and Miller, 1963). Further, this theory suggests that, the optimal capital structure is reached at the point where the marginal present value for tax shield on additional debt is the same with the marginal present value for the costs of financial distress on additional debt (Bauer, 2004).

According to the trade-off theory bankruptcy costs: are those cost which directly or indirectly incurred if there is a probability that the company will default for financing is greater than zero, that result in liquidation cost, which refers to the loss of value due to liquidating the net assets of the firm. Hence, companies tend to incur more financing costs due to any potential liquidation costs (Cessar and Homes, 2003). On the other hand the agency costs are the costs of the monitoring all expenditures by the principal and bonding costs incurred by the agent and a residual loss. These costs are arising from the existed relationship between investors and managers and the relationship between debtors and investors (Jensen and Meckling, 1976). However, it is argued that, shareholders who are benefit on behalf of managers who bear the cost of these activities and thus practice moral hazard (Harris and Raviv, 1990).

It has been also argued that a conflict might arises from equity-holders incentives to invest



sub optimally in very risky projects (Jensen & Meckling, 1976). This is because equity-holders stand the greater chance of benefiting massively if the investment yield good result. However, in the unlikely event of the investment failing, debt-holders bear the majority of the consequences (Brander and Lewis, 1986). Jensen and Meckling (1976) defined agency costs as the sum of the monitoring expenditures by the principal, bonding costs by the agent and a residual loss. The three forms of agency problems are risk shifting, the underinvestment problem and the free cash flow hypothesis. Another capital structure theory is the Pecking Order Theory; this theory suggests that, companies tend to prefer a particular choice of capital in order to finance their businesses (Myers, 1984). Owing to the preference of information asymmetries among the firm and expected funders, the costs of financing might vary according to the financing options. Where the capital provider is the company earnings that mean more information than that of new equity holders, the new equity holders is expected higher rate on return for capital invested resulting in the new equity finance have more costs to the firm than financing from internal funds. Hence, the company prefers using retained earnings in financing than debt, choosing short-term debt than long-term debt and prefer debt more than equity (Amidu, 2007).

Ross (1977)argued in his Signaling Theory the effect of information asymmetries. His theory suggested that, managers always preserve the necessary relevant information about company future prospect, while investors lack this information. Therefore, investors obtain their information from managers. The theory assumes that managers only know have the information about the expected firm returns and distributions. Hence, investors explain more levels of leverage as a sign of more quality. Leverage means managers have contractual promise to honor their obligation by paying interest and principal when due, failure of which could lead to bankruptcy and the managers losing their jobs. Equity, however, is a residual claim and thus managers practice more discretion in the payment of dividend. Hence, high leverage in a firm's capital structure is perceived as a sign for more future cash flows and the confidence of managers have in their firm. Ross (1977)also argued that investors perceive larger levels of debt as a sign of higher quality and that profitability and leverage are expected to be positively related. Therefore, it is expected that a firm with little favorable prospect will avoid selling its stock and rather it might raise any needed capital by another choice, like using debt beyond the rate of normal target capital structure. The announcement of a stock offering is generally taken as a signal that the firm's prospects as seen by its management are not bright enough (Brigham et al., 2002; Tornyeva, 2013).

Many previous accounting literatures were aimed to investigate the issue of capital structure and the deferent characteristics of firms that effect capital structure. Harris and Raviv(1991)investigated in their survey capital structure determinants, the study aimed to find the important determinants. The empirical results of their work revealed that, leverage ratio is increased by fixed assets, non-tax shield, growth of the firm and size while this ratio is decreased by volatility, research and development costs, advertising costs, bankruptcy and profitability. Similarly, (Yusuf et al., 2015; Khrawish and Khrawish, 2010) reached partially similar results after they proved that, capital structure is influenced by firms size, liquidity and profitability. In contrast Al-Qudah, 2014 found profitability has mixed effect on capital



structure when market to book ratio has positive effect.

Previous research identified a number of potential characteristics that influence capital structure. The results of these studies so far has not, however, sorted out which of these are important in various contexts. Many studies have highlighted specific characteristics of companies and industries that influence leverage ratio. Most of these studies were jointly approved that leverage is increases with fixed assets, non-tax shields, growth and size. Corporate performance represented by profitability is considered one of the major determinants of firm's capital structure. Pecking order theory highlighted this relationship, by stating that companies generally prefer internal funding rather than external. Titman and Wessels (1988) and Barton et al., (1989) argued that firms characterized by high return rates and tend to maintain lower debt ratio since they are able to generate such funds from internal sources. However, most research found a negative relationship between profitability ratio and debt financing (Rajan and Zingales, 1995; Booth et al., 2001; Al-najjar, 2011).

Another factor that effect capital structure is firm size, Ahmad et al.,(2010) has identified size, and profitability and liquidity are main characteristics of firms that influence capital structure. Big companies are more diversified and therefore have less variance in returns, and hence enable them to have high debt ratio (Titman and Wessels, 1988). In contrast, small sized firms bear more costs to resolve information asymmetries with debtors, thus, may report low debt ratio (Castanias, 1983). Tangibility of assets is also considered an important factor effect leverage ratio. The degree to which the firm's assets are tangible is assumed to affect the firm ability for pertaining greater liquidation value (Kinde, 2013). Companies that have high amount of tangible assets tend to achieve high leverage ratio due to the lower borrowing interest rates. Thus, companies with assets of high liquidation borrow at lower rates due to high debt ratio in capital structure (Gharaibeh and al-najjar, 2007).

With reference to the pecking order theory, growth of company is an influence of external financing due to internal generated earnings. Companies with high market value have more growth opportunities and hence have more ability to obtain external debt. Auerbach (1985) argued that, leverage ratio is generally related to growth of firm due to the deducted tax of interest payments. The risk level is also considered effective capital structure determinant. The level of risk is also considered to be one of the primary determinants of firm's capital structure (Kale et al., 1991). Firms with tendency to high agency and bankruptcy costs have greater incentive to lower their (Abor and Biekpe, 2005; Tornyeva, 2013).

## 6. Methodology and Hypothesis of the study

Based on previous discussion the main hypothesis of the study is:

H1: There is no significant relationship between company characteristics and capital structure.

The following sub hypotheses are derived from the main hypothesis:

- H1-1: There is no significant relationship between company profitability and debt ratio.
- H1-2: There is no significant relationship between company size and debt ratio.



- H1-3: There is no significant relationship between company tangibility and debt ratio.
- H1-4: There is no significant relationship between company growth and debt ratio.
- H1-5: There is no significant relationship between company risk and debt ratio.

## 6.1 The model of the study

The model employed in the study follows Abor and Biekpe model of 2005. The dependent and independent variables are shown in table 1 below:

Table 1. Model variables

Variable	Variable	type	Variable Description
	Notation		
Debt Ratio	DR	Dependent	Leverage (Total debt/Total assets)
Profitability	PROF	independent	EBIT/ total assets
Size	SIZE	independent	Size of the firm (log of total assets)
Tangibility	TANG	independent	Fixed tangible assets/ total assets
Growth	GROW	independent	Growth in Total Assets
Risk	RISK	independent	the squared difference between the firm's
			profitability and the mean profitability

$$DR = \alpha + \beta_1 PROF + \beta_2 SIZE + \beta_3 TANG + \beta_4 GROW + \beta_5 RISK + E$$

#### 7. Data sources

Primary Data of the model are gathered from Amman stock exchange annual reports for the available of 26 effectively traded insurance companies with a total of (120) observation for the period from 2010-2014. Secondary data are collected from journals, text books and any other useful sources.

## 8. Empirical results

#### 8.1 Descriptive Statistics

Table 2 shows the descriptive statistics for the study variables. The average leverage of insurance companies (measured by total debt / total capital) was 0.5806. This is an indication that, on the average, leverage accounted for about 58% the capital structure and the remaining 42% accounted for by equity. This means that, their operating assets and non-operating assets are being financed 58% by debt holders and 42% is financed by shareholders. Size, measured as the natural logarithm of total assets had a mean of 7.365. Tangibility of assets, determined as fixed assets divided by total assets had a mean and median of 0.0948. This shows on average that operating assets approximately only about 10% of the total assets for the sector. The non-operating assets contribute by about 90% due to its financial nature. This relatively low percentage of fixed assets could be justified by the non-productive nature of insurance sector.



Table 2. Descriptive Statistics of model variables

	Minimum	Maximum	Mean	Median	Std. Deviation
PROF	501	.175	.00176	.00176	.083037
DR	.137	1.168	.5806	.57939	.173153
SIZE	6.827	7.973	7.365	7.36553	.257607
TANG	.007	.426	.09487	.06332	.095965
GROW	5.827	6.973	6.36383	6.32713	.254344
RISK	429	.309	.01906	.03958	.121290
N	120	120	120	120	120

The profitability for companies under study was measured by ROA. This ratio mean result was 0.00176. This is an indication that, the return on asset of the sampled insurance companies is on average about2%. The mean result of risk was 0.01906. This shows that the insurance sector has a low risk rate with about 2%. The mean of growth was 6.36%. This is an indicator for availability of investment opportunities in this sector. This explains the large demand for the establishment of new insurance companies lately.

#### 8.2 Correlation results

Table 3 shows the results of correlation between the debt ratio as a dependent variable and the different independent variables of the study. The results in table 3 provide preliminary evidence for the significant effect of all independent variables on the dependent variable.

Table 3 Correlation of independent variables with dependent variable

Independent variable	PROF	SIZE	TANG	GROW	RISK
Coefficient	-0.377(**)	-0.378(**)	0.264(**)	-0.398(**)	-0.447(**)
Sig.	0.000	0.000	0.002	0.000	0.000

<sup>\*</sup> Correlation is significant at the 0.05 level (2-tailed).

## 8.3 Regression and results discussion

The results of multiple and simple regression between debt ratio (DR) and the five independent variables are presented in Table 4 & 5. The model results of multiple regressions in table 4 prove that the model was fit for the main hypothesis of the study.



Table 4 multiple regression results

Model	R	R Square	Adj R	F	Sig.
1	0.536	0.287	0.256	9.193	0.000

a Predictors: (Constant), RISK, TANG, SIZE, PROF, GROW

The **F value** was **9.193** with a **Sig**. less than **5%**, therefore we reject the main null hypothesis and accept the alternate one that is, there is a jointly statically significant effect of independent variables (profitability, size, tangibility, growth and risk) on leverage ratio (debt ratio).

Additional simple regression was applied by the researchers to investigate the independent effect of each variable. The simple regression was employed to capture the effect of each variable independently as assumed in the sub hypotheses. Table 5 simple regression results show that the model fitness for all variables was statically significant with an **F value** of **19.570**, **19.715**, **8.854**, **22.191** and **29.574** respectively with significance less than 5% for all sub models. The same table 5 shows that the t value for four variables was negative this mean there is a statistical significant negative relationship between profitability, size, growth and risk with leverage ratio. Tangibility was the only variable that appears statistically positively related to leverage.

These results indicate that, insurance companies with larger size have high rate of probability of default and hence use less debt funds. In other words, large Jordanian insurance companies are less dependable on external funding than smaller ones due to the fact that they are able to reduce the risk of bankruptcy and their high ability to use internal financing. Such negative association can also be justified by the trade-off between agency costs and expensive debt financing (Jensen and Meckling, 1976; Grossman and Hart, 1982; Titman and Wessels, 1988; Bhaduri, 2002; and Yusif et al., 2015). Companies whom in general show growth have the probability to suffer variations which conceive more risks and more agency problems. Thus, avoiding such probabilities, firms are required on decrease reliance on debt as they grow to avoid such problems (Myers, 1977; Zeitun and Tian, 2007; Bhaduri, 2002; Al-Najjar, 2011; and Yusif et al., 2015).

Table 5. simple regression results of independent variables

			Adjusted R					
variable	R	R Square	Square	Sig.	F	В	t	Sig.
PROF	0.135	0.142	0.377	19.570	0.000	-0.786	-4.424	0.000
SIZE	0.136	0.143	0.378	19.715	0.000	-0.254	-4.440	0.000
TANG	0.062	0.070	0.264	8.854	0.004	0.477	2.976	0.004
GROWTH	0.151	0.158	0.398	22.191	0.000	-0.271	-4.711	0.000
RISK	0.193	0.200	0.447	29.547	0.000	-0.636	-5.436	0.000



Regarding tangibility, the positive relationship indicates that insurance companies mostly rely on external debt to finance their tangible asset. This result is similar to those results that are obtained by (Harris and Raviv, 1991; Rajan and Zingales, 1995; Bevan and Danbolt, 2000; Omet and Nobanee, 2001; Huang and Song, 2002; Antoniou et al., 2002; and Buferna et al., 2005). Further, this positive relationship is based on the argument that fixed assets can be used as collateral to increase the bargaining power for obtaining long-term debt (Hall et al., 2004; Khrawish and Khrawish, 2010). The results also showed a negative and statistically significant relationship between profitability and leverage. This is consistent with previous research of (Titman and Wessel, 1988; Rajan and Zingales, 1995; Anthoniou et al., 2002; Bevan & Danbolt, 2002; Barton et al., 1989; Booth et al., 2001; Pandey, 2001; Um, 2001; Al-Sakran, 2001; Chen, 2004). This result means that insurance profitable firms prefer internally generated funds. This evidence supports the assumptions of pecking order theory which argued that profitable companies prefer internal financing rather thanexternal financing (Tornyeva, 2013).

The regression results also revealed a significant negative relationship between risk of firm and leverage ratio which is agreed with the suggestions of the pecking order theory and trade-off theory, due to the fact that providers of debt consider a firm's future returns as protection for debt (Mehran, 1992), the more the firm risk the more negative effect on debt. These results are consistent with (McConnell and Petittit, 1984; Subadar et al. 2010; Yusif et al., 2015) who are also showed a negative relationship with leverage ratio. This evidence however, support both the trade-off theory (more volatile cash flows increase the probability of default) and the pecking order theory (issuing equity is more costly for firms with volatile cash flows).

#### 9. Conclusion

Similar to other studies our aim was to provide empirical evidence on company characteristics namely, size, profitability, tangibility, growth and risk; that influence the capital structure decisions of insurance companies in Jordan. The analysis of the study was applied on a sample of 26 insurance companies listed in Amman stock exchange for the years 2010 to 2014. The hypothesized variables; size, profitability, risk, and growth was found significantly negatively correlated to leverage in contrast only tangibility factor was found significantly positively correlated with leverage.

These mixed results showed that, Jordanian insurance companies whom large in size and profitable prefer internal financing rather than external debt. Further, these companies generally have more growth opportunities therefore equity is also preferable option for financing than debt. In contrast, the results revealed that if the company tangible assets ratio is high then the debt funds are the best choice rather than equity or any other internal financing option. Finally, our results agreed with the suggestion of pecking order theory and trade-off theory concerning firm risk, our results proved that companies in favor for debt when they exhibit low risk probabilities.

However, some of the study variable results have varied levels of significance. Although they are statistically significant but further research is needed to determine their relevance in



explaining the capital structure decisions for insurance companies in Jordanian environment.

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