MARKETING INTANGIBLE ASSETS AND CREDIT RATINGS, EVIDENCE FROM MENA

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Abstract

This paper aims to link the level of intangible incorporeal assets to the level of debt. In my 14 years analysis (from 2002 to 2015), We have designated 600 companies from MENA countries in order to build the model. In order to identify how the excessive amounts of incorporeal resources characterizes the probability of bringing lower cost of debt, We have connected a Probit relapse study. Therefore, it has been proven that the level of incorporeal assets has an important influence on the interest rate. That is, obtaining great amounts of incorporeal assets expands the organization's odds to have more favorable credit terms and hence lower interest rate. Additional affirmation to the lenders' rights shields was included through the results, also its effect on the cost of debt.

Keywords: Credit Terms, Intangible Assets, Cost of Debt

1. INTRODUCTION

"Intangible assets are part of the fixed assets, also known as long-term assets, property or real estate investment comprise all economic values whose utility and liquidity period is longer than one year", (Baruch ,2001).

Intangible assets can be defined as the non-physical resources of the organization's future benefits; during the last two decades, intangibles started to become a significant asset in corporations' balance sheets. Volkov & Garanina (2007) refer to this type of assets as intangibles or intangible assets; however, We can also refer to intangibles as marketing assets since they are tied to the marketing area namely: trademarks, patents, goodwill, franchise, copyright etc…In this paper, We will be using these two terms "intangibles" and "marketing assets" interchangeably, marketing assets can be defined as the net book value of company's intangible assets. (Volkov, Garanina, 2007)

In today's knowledge economy, researchers such as Lev (2001) believe that intangible assets play a vital role in a firm's performance and success as they contribute to value creation. Moreover, in most leading economies, intangibles create higher fraction of the total value than tangibles do in most businesses.

According to Andrews and De Serres (2012), once a company creates strong brand equity it allows adding up a premium and sell larger quantity compared to competitors. Intangibles are important for any system and for any organization. In fact, Marketing Intangible Assets (MIAs) can allow the company to identify itself in a very efficient way. These non-unmistakable resources (i.e. goodwill, licenses, trademarks, and so on.) help the organization to spend a way less while looking for new shoppers or holding the present ones. Acquiring high levels of intangible asset, for example, a solid brand name, a solid association with providers, buyers and workers can prompt to a long haul development of any association and higher valuation. Intangible assets can be a compulsory source to accomplish advancement and profitability openings and gains. (Andrews & De Serres, 2012)

They are important from both a marketing and a finance perspective. It will help the marketing department to perform much better in providing an efficient contribution to the performance of the financial department of the firm, (Satt, 2015). No study has tackled the impact of the level of intangible assets on credit terms, since all the focus in most studies was on hard or tangible assets. Although it is true that creditors' main concern will be tangible assets, the marketing ones can have a significant starring role as well. (Boubakri & Ghouma, 2008),

After showing how important are the MIAs, and to be able to understand and to show how the MIAs can positively affect the cost of debt, we should make a clear and deep description of its main characteristics. (Boubakri & Ghouma, 2008).

The problem in many organizations is that most of them do not give importance to their MIAs; they give more importance on developing the internal organization, generating cash through fixed and current assets, etc… (Boubakri & Ghouma, 2008).

MIAs are very important because they can represent a strong competitive advantage, due to the fact that they are very hard to imitate compared to tangible assets. They also can have an important impact on the financial performance of any organization. (Boubakri & Ghouma, 2008).

Because they are hard to imitate, MIAs are not equally valued among people, and therefore, they cannot be bought or sold easily and smoothly. (Boubakri & Ghouma, 2008).

As a said of note, we can also highlight the fact that MIAs should preferably be related to the corporate strategy in order to make the organization reach and take its potential to the maximum level. In addition, to make the MIAs able to be valued in the context of the corporate strategy; since some traits such as a persistent or a motivated workforce cannot be valued financially speaking.

The most successful companies are those focusing on implementing the new technologies as well as the knowledge and the achievements of their employees. According to Andriessen (2004), the knowledge is replacing the capital and the labor as an efficient resource in the production process. The knowledge, which is an intangible factor, creates a clear benefit for most companies. Always according to Andriessen (2004), the management of the intangible assets differs a lot from the management of the tangible financial resources.

According to Volkov & Garanina (2007), almost 66% of American companies focus mostly on making prediction of the future profitability and future income via decisions made using their existing Intangible Assets. They do so in order to have a more accurate vision and analysis to be able to provide a business valuation to shareholders.

According to the latest news and surveys, more than 70% of the company's value is obtained from Intangible Assets. (Montresor, Perani, & Vezzan, 2014)

We are eager to analyze with a study the extent to which the components alluded above verify whether a high level of MIAs improves the credit rating components of a company. My study will be performed at large scale, including companies from all over the MENA region. To my knowledge, this will be an attempt to study the relationship between MIAs and cost of debt. It is true that the cost of debt or interest rate as a dependent variable had been tested in relation with the dividend policy, analyst following (analyst quest), (Satt, 2016) and operating cash of companies in different markets, (Satt, 2016) .However, (MIAs) remain to a certain extent an ambiguous variable that needs to be explored.

The main concern of creditors is the company's ability to pay back the money lent. Banks, financial institutions, as well as bondholders take into considerations a set of criteria before lending their money. The most important criteria among others are assets that mostly guarantee the company's payback. Companies with a high level of assets have the tendency to benefit from guaranteed loans for more favorable credit terms (i.e. low interest rate); it is true that intangible assets are different from tangible assets in the sense that they cannot be easily acquired, but they remain assets with great value when it comes to leverage. (Boubakri & Ghouma, 2007)

Although companies can trade each other's intangibles, most of these assets are generated internally and grow in value over time, (Satt, 2015). Goodwill cannot be generated over night. It reflects the strength of the long-term relationship that the company had with its various stakeholders ranging from employees to governments and nonprofit organizations. (Satt, 2015) Goodwill is one example of MIAs, but same conclusions can be drawn regarding the others.

Authors like Mansell and Prill (2012) have implicitly shed the light on a potential relationship between high value of intangibles and corporate governance. Eventually, since the acquisition of intangible assets requires long years of activity and good relations with stakeholders, they believe that high levels of intangible assets can be translated into good governance and thus improved credit terms. My main objective is to see if high levels of MIAs result in lower cost of debt in the MENA market.

Therefore my research question for this study is: Is there a high correlation between the cost of debt and the marketing asset's level? Does credit rating have an influence on the asset's level?

The remainder of this paper will be structured as follows: literature review, methodology and descriptive statistics, empirical results, limitations and conclusions.

2. LITERATURE REVIEW

Cost of Debt and Marketing Intangible Assets

Intangibles are all around the business world. What intangible assets are, have been under a considerable measure of study for over forty years and still there is no by and large acknowledged approach on the best way to gauge their esteem or what makes them to increment or reduction. In the need of a known reference to fabricate the hypothesis for intangibles, the accounting hypothesis analogies are as yet being made despite the fact that the elusive resource idea has developed to a more extensive one, intellectual capital (IC). IC still uses a accounting wording yet is considered by an administrative approach (Kothari, Mehta & Sharma, 2013).

Intangibles valuation has been a worry since the mid 60's. Hermanson utilized the expression "human asset accounting" attempting to quantify the estimation of the organization's specialists and fuse that value to financial statements. By not being possessed by the business, human resources varied from different classes introduce in money related proclamations. He rejected that approach and inferred that the principle trouble lay in recognizing a fitting model for esteeming such assets. Intangibles examine has been pertinent to administration from that point forward in light of the fact that there is the mindfulness that people, their insight and capacities are of extraordinary significance for the upper hand of the associations. According to Edvinsson (2007), Intellectual Capital can be characterized as: "The ownership of learning, connected understanding, authoritative innovation, client relationship and expert abilities that gives AFS an aggressive edge in the market" AFS speaks to Intellectual Capital as the contrast between market value and book value. Human capital has as primary

reason thinking and enhancing forms, it doesn't have a place with the association and it is lost when representatives clear out. Basic capital has a place with the association. It can be repeated and shared as innovation, developments, information, distributions, technique, hierarchical culture, structures, methods and frameworks. Customers' capital is made by relations between the customers and the association, client maintenance, benefit and misfortune per customer (Kothari, Mehta & Sharma, 2013).

Intangible assets are characterized as intangible non – fiscal assets that cannot be seen, touched or physically measured, which are made through time and additionally endeavors and are identifiable as particular assets. Intangible assets incorporate licenses, copyright, trade marks, trade names, franchise licenses, government permit, goodwill and other thing that need physical substance yet give long haul advantage to the organization. These are assets that you cannot touch or feel yet at the same time have monetary reality. There are two essential types of intangibles - Legal intangibles and Competitive intangibles. Legitimate intangibles are under the non-specific term protected innovation and create lawful property rights faultless in an official courtroom. Focused impalpable, while legitimately non-claim capable, straightforwardly affect adequacy, profitability, wastage and opportunity costs inside an association and subsequently influence cost, incomes, client benefit, fulfillment, advertise esteem and share cost. The cost of impalpable resources are methodically apportioned to cost amid the advantages valuable life or lawful life, whichever is shorter and this life is never permitted to surpass 40 years (Kothari, Mehta & Sharma, 2013).

Intangible assets are frequently recognized as the abundance of the cost of a procured organization over the estimation of its tangible net assets. As a rule, intangibles are just characterized as resources that need physical substance however which are probably going to yield future advantages. As per the FASB's (1985a) SFAC 6, standard. 25, assets are likely future financial advantages controlled by and accumulating to a specific substance therefore of past exchanges or occasions. In spite of the fact that there is by all accounts a general assertion in the accounting group that at whatever point those plausible future financial advantages need physical frame, they ought to be considered as intangible, there does not appear to be any broadly acknowledged exact meaning of immaterial resources in the accounting writing (Canibano, Covarsi & Sanchez, 1999)

A noteworthy issue with intangible assets is that they are regularly hard to recognize independently, and in this way, may not coordinate one of the key prerequisites for bookkeeping acknowledgment. It is hard to separate impalpable resources from other intangible assets and from current consumptions. In addition, intangibles are nonphysical in nature and might be considered not to take after indistinguishable examples of deterioration from unmistakable resources. Along these lines, some as Hendriksen and van Breda contend that standard valuation techniques created for unmistakable resources may not be relevant.

Tangible assets, many of which can be easily collateralized, support debt. Accordingly, the amount of tangible assets is well established as a principal driver of leverage. As investing is shifting more and more from tangible to intangible assets, it becomes crucial to understand to what extent intangible assets support debt (Canibano, Covarsi & Sanchez, 1999).

Companies' cost of debt (CoD) has many determinants, such as stock market value, economy-wide effects, firm's specific risk and current earnings. However, we cannot neglect the importance of MIAs. Building marketing assets is not an overnight process; (Andriesen, 2004) companies invest time and monetary resources to build their brands, customer equity, loyalty and perceived quality. This study is the first attempt to incorporate marketing assets as a determinant of companies' cost of debt.

We presume that levels of MIAs are an essential factor that influences the cost of debt. (Austin, 2007) Later in this paper, results reveal that a high score prompts to an appreciable decrease in the CoD.

Our hypotheses can be found below:

H1: Cost of debt financing is negatively correlated to the marketing asset's level.

We assume that the levels of MIAs can have an important impact on the cost of debt. To be able to acquire the Intangible Assets, the organizations need many years of activity as well as good relations with the shareholders. All these elements can be related to the good governance and can improve the credit terms.

H2: Credit rating is high if marketing asset's level increase.

This paper brings value to the present limited studies in enlightening the relationship between MIAs, credit ratings and cost of debt.

First, we will evaluate the corporate bond market perception on the marketing assets' level in the market and the company's performance quality. The second objective is the internalization of this issue within an international framework. Hence, the study we am conducting differs from (Boubakri & Ghouma 2008). In fact, we will better understand the mechanisms of the diverse markets of debt worldwide as well as better explain in which ways MIAs affect firms' credit ratings.

The methodology was inspired from the study that was conducted by (Boubakri & Ghouma, 2008), where they measured how Big Four's auditor choice affects positively firms bond ratings. Therefore, is there a high correlation between the cost of debt and the marketing asset's level? Does credit rating have an influence on the asset's level?

Table 1. Sources and Description of Variables

Variable	Description	Source
Bonds Ratings	The methodology begins by mapping the S&P bond ratings to scores between 1 to 7, where 1 speaks to the most reduced score while 7 to the highest rating. Moreover, we consider bonds ratings as a function of the company's portfolio of bonds.	F-Database
Level of Marketing assets	Level of marketing assets is the net book value of intangibles for a given year. High level of marketing assets is a Boolean indicator which value is 1 if the dollar amount of intangible assets is above the mean; otherwise, value of 0 is assigned.	World-Scope Database
Company Profitability	Ratio of company's net income to its total assets.	W-S Database
Company Size	Company's total assets, in dollars.	W-S Database
Company risk	The standard deviation of every company's net income illustrates the risk in my sample.	W-S Database
Bonds Maturity	Logarithmic maturity, in years. The ratio of class-specific issuance to the total issuance in a year measures the weight, which are then multiplied by their maturity, respectively. When added, we get the weighted average of bonds maturity.	W-S Database
Convertible Provisions	Indicator with value of 1 if companies own convertible provisions and 0 otherwise. The convertibles act as a switcher from bonds to shares for the holder of the bond.	W-S Database
Issue Size	Size of the issuance.	W-S Database
Leverage	Company's influence as the ratio of the company's debt to its equity.	W-S Database
Creditors Rights	Index with range from 0 to 4. 1= Country's restrictions enforcement beneficial creditors 2= Secured creditors make sure they receive back their investment. 3= Secured creditors collect their money before everyone else if bankruptcy occurs. 4= Secured creditors get their money back without waiting for the problems to get resolved.	Djankov et al. (2005)
Public Registry	Database produced by public authorities containing debt profiles of all borrowers. This source is accessible to every financial institution. If the country has a public registry, this indicator has a value of 1. Otherwise, it has a value of 0.	Djankov et al. (2005)
Efficiency of Bankruptcy Process	Bankruptcy costs are subtracted from the terminal value of the company. Note that when this value is discounted, we find the company's present value. The greater, the better the company.	Djankov et al. (2007)
News Circulation	Ratio of daily newspapers to the population.	Dyck & Zingales (2004)
Manufacturing	Indicator variable with value 1 if the company functions in the Manufacturing industry and 0 otherwise.	
Trades	Indicator variable with value 1 if the company functions in the Trades industry and 0 otherwise.	
Finance	Indicator variable with value 1 if the company functions in the Finance industry and 0 otherwise.	
Utility	Indicator variable with value 1 if the company functions in the Utility industry and 0 otherwise. Satt (2015)	

3. METHODOLOGY

Specifications

This research requires the use of the general specification below in order to set the relationship between bonds' ratings and marketing assets.

Bond Rating = f (Level Marketing assets, Issuer Characteristics, Issue Characteristics)

According to Satt (2015), the independent variables to conduct this study are: MIAs, Issuer Characteristics and Issue Characteristics. *Marketing Intangible Assets* will be determined as the value in dollars of the total intangible assets in a company's balance sheet. As previously explained, "High marketing assets" stand for firms holding levels of marketing assets that are higher than the average of all firms in my sample, and vice versa. The *Issuer Characteristics* represents the profitability of the studied company. Hence, the use the following: risk, as earnings variability; leverage, as the debt-to-equity ratio; size, as total assets; and finally return on assets. The *Issue Characteristics* variable includes the bonds maturity, the size of the bonds, and the convertible provision (option to exchange the bonds for shares).

Seven distinct ordering categories are used to rate the bonds, such as for instance in the ratings of the S&P. We will thus recur to the Ordered Probit Model according to the seven rankings

Variables and data sources

Six hundred companies were selected—from the MENA region to construct my sample (W-S Database), with the data from years 2002 to 2014. My sample was a convenient one since it was made up of companies that are easy to reach knowing the lack of data provided by the MENA corporations. More information is provided in Table 2. The appendix shows the proposed mapping of S&P's AAA to D to my domain of definition from 1 (lowest) to 7(highest). Refer to Ashbaugh, Collins & LaFond (2006) for the method of conversion. F-Database provided us with the bonds ratings data. (Satt, 2015).

Table 2.1. Descriptive statistics for marketing assets

Descriptive statistics of the level of marketing assets in the Mena region. The period used is from 2002 to 2015, including 600 companies (bonds issued) from 23 Mena countries. Panel A shows the above-the-mean observation's number. Panels B and C show similar statistics for each industry and country, respectively (Satt, 2015).

Panel B. Sample description by countries

Country	Random Number	Percent
Algeria	21	0,0350
Bahrain	42	0,0700
Egypt	67	0,1117
Iran	6	0,0100
Iraq	2	0,0033
Jordan	12	0,0200
Kuwait	23	0,0383
Lebanon	8	0,0133
Yemen	6	0,0100
United Arab Emirates	80	0,1333
Libya	8	0,0133
Morocco	18	0,0300
Oman	23	0,0383
Azerbaijan	18	0,0300
Sudan	13	0,021667
Qatar	48	0,0800
Saudi Arabia	48	0,0800
Syria	14	0,0233
Tunisia	28	0,0467
Turkey	60	0,1000
Mauritania	13	0,0217
Cyprus	24	0,0400
Georgia	18	0,0300
	600	1,0000

Panel A: Sample description over the years

Years	Number	Percent
2002	23	0,0383
2003	32	0,0533
2004	32	0,0533
2005	34	0,0567
2006	33	0,0550
2007	22	0,0367
2008	34	0,0567
2009	57	0,0950
2010	43	0,0717
2011	40	0,0667
2012	55	0,0917
2013	65	0,1083
2014	63	0,1050
2015	67	0,1117
	600	1

Panel C. Sample description by industries

Industry	Number	Percentage
Oil and Gas	23	0,0383
Basic Materials	23	0,0383
Industrials	76	0,1267
Consumer Goods	25	0,0417
Healthcare	23	0,0383
Consumer Services	98	0,1633
Telecommunication	89	0,1483
Utilities	43	0,0717
Financials	126	0,2100
Technology	74	0,1233
	600	1

Marketing Assets

Marketing assets can be defined as the net book value of company's intangible assets. In fact, high levels of marketing assets give positive signal to the creditor concerning the company's solvency. The I/B/E/S *(Thomson Financials owns the Institutional Brokers' Estimate System (I/B/E/S), a database that comprehending data of activities analysts. The I/B/E/S presents a data entry for each forecast and each recommendation announcement by each analyst belonging to a participating brokerage house. A single observation pictures definite recommendation or forcast issuance, from the brokerage house to some determinate firm)* acted as my source when retrieving statistics of marketing assets. Given various determinants that can be found in Table 1, "High level of marketing assets" stands for the above-average intangibles level. Regression results show that an increase in the score conveys a decrease in the cost of debt.

The issuer and issue variables acted as control variables in order to further explore bonds ratings. Their data were retrieved from W.S Database. Table 1 provides more details. (Satt, 2015)

We launched a portfolio approach when calculating the provision of convertibles, size of issuance and bonds ratings, based on research papers of (Anderson, Mansi & Reeb, 2003), (Boukhari & Ghouma 2008) and (Satt, 2015). Yearly company's issues were dually compiled. The weights we utilized in the computations were represented by the ratio of the size of issuance to the total issues. These computations involved the provision of convertibles, the size of issuance and the average bonds ratings of every year from 2002 to 2015. (Satt, 2015)

The bond rating's proposed formula is:

Prob. (Bonds Ratings=X) = F (b_1 . Marketing assets + b_2 . Company Profitability + b_3 . Company Size + b_4 . Company Risk + b_5 . Bonds Maturity + b_6 . Convertible Provisions + b_7 . Issue Size + b_8 . Leverage + Institutional variables + Year Dummies+ Industry Dummies + ei); Where X belongs to {1, 2, 3, 4, 5, 6, 7}

4. EMPIRICAL RESULTS

My model's variables descriptive statistics are collected in Panel A (Table 3). The mean for the credit rating variable is 5.212, which is an A- in terms of S&P ranking.

Table 3. Summary Statistics

(*Panel (A) illustrates the descriptive statistics, Panel (B) illustrates the correlation analyses, and panel (C) gives a mean test comparison using the T-test and the Wicoxon-Mann-Whitney tests. Factors examined are: Bond Ratings with a range from 1 (lowest) to 7 (highest). Level of Marketing Assets: indicator with value of 1 for above-average level of marketing assets of a firm and 0 otherwise. Firm Profitability: return on assets. Firm Size: as total assets. Firm Risk: net income's standard deviation. Bonds Maturity: the average maturity of a portfolio of a firm's bonds. Weights identified as the ratio of issuance size to total issuances. Convertible Provisions: indicator with value 1 if there is convertible option offer and 0 otherwise. Issue Size: size of the issuance in dollars. Leverage: debt to equity ratio. The stars that appear in the tables mean the following: *** for a significance that is lower than 1%, ** and * are for a significance that is lower than 5% and 10% respectively*)

Panel A. Descriptive Statistics

Variable	Observations	Mean	Standard Deviation
Bonds Ratings	600	5.212	0.342
Level of Marketing Assets	600	0.431	0.544
Firm Profitability	600	2.322	23.341
Firm Size (millions U.S Dollars)	600	56.8	12.33
Firm risk	600	12,232.3	74,454.1
Bonds Maturity (in years)	600	5.45	0.467
Convertible Provisions	600	0.044	0.345
Issue Size	600	23,665.5	675,443
Leverage	600	564.677	345.399

Issuer characteristics variables descriptive statistics are now presented. The level of *MIAs* has a mean of 0.431. Around 43% of the sample firms have a level of their marketing assets that is higher than the average of all firms included in the sample under study. The return on assets average is 2.32. The firm's size mean is 56 million dollars.

Moving to the *issuance characteristics* variables, bonds maturity average is 5.45 years. Convertible bonds option average is 4.4%, i.e. 4.4% of the firms provided bondholders with this option.

Panel B1 (Table 3) illustrates the correlation between *bond rating* and collectively the level of *MIAs*, the *issue characteristics* variables, and the *issuer characteristics* variables. This relation was previously explained in the "Specifications" part. Results show a strong correlation of my variables

with respect to bond ratings, *the firm size*, the *convertible option*, the *firm performance and* the level of *MIAs*. The result we obtained is that there is a positive correlation to the bonds rating, at 1% significance level. While for the firm leverage, we found that there is a positive correlation at 5% level. And for the bonds maturity, we found that there is a negative correlation with the bonds maturity at 1% significance level. The *issue size* and the *firm risk* did not significantly correlate with the *bonds ratings*.

We will now recur to the tests of mean comparison for the analysis of my first hypothesis. First groups of firms have their total dollar amount of their marketing assets above the mean. A second group includes the remaining firms. The T-test confirms the hypothesis since the mean of Group 1 (4.62) is greater than the mean of Group 2 (4.00).

Moreover, the T-Test and the Wilcoxon-Mann-Whitney test prove that the two means difference is significantly different from zero (at a significance level of 1%). Therefore, high marketing assets group enjoys higher credit ratings. Knowing that the assumptions of the Wilcoxon-Mann-Whitney test are underlined under these three points. Firstly, the measurement scale is ordinal. Secondly, the sample is randomly chosen from the population. Thirdly, the mutual independence between samples and the independence within sample should be met (Statistic Laerd).

Panel B1. Correlation between the level of marketing assets and Bonds Ratings

Variable	Bonds Ratings	Level of marketing assets	Firm Profit	Firm Size	Firm risk	Bonds Maturity	Convertible Provisions	Issue Size	Leverage
Bonds Ratings	1.000								
Level of marketing assets	0.1106 (0.0010)***	1.000							
Firm Profitability	0.1180 (0.0007)***	0.0798 (0.0110)**	1.000						
Firm Size	0.1374 (0.0000)***	0.0040 (0.0041)**	-0.1700 (0.0147)	1.000					
Firm risk	0.0109 (0.0000)***	-0.0431 (0.1107)	-0.0189 (0.4084)	0.4170 (0.0000)***	1.000				
Bonds Maturity	-0.1040 (0.0000)***	0.0381 (0.1704)	-0.0041 (0.9001)	-0.1108 (0.0003)***	-0.0370 (0.1810)	1.000			
Convertible Provisions	0.1814 (0.0000)***	0.0108 (0.0300)*	0.0409 (0.1413)	-0.0940 (0.0070)***	0.0198 0.3930	0.0084 (0.0497)**	1.000		
Issue Size	0.0480 (0.1090)	-0.0111 (0.0431)	0.0007 (0.8700)	0.0108 (0.4431)	0.1000 (0.0000)***	-0.0701 (0.0311)**	-0.0174 (0.0170)	1.000	
Leverage	0.0800 (0.0131)**	-0.0043 (0.0001)***	-0.0083 (0.8110)	0.1040 (0.0017)***	0.0001 (0.9978)	-0.1144 (0.0010)***	-0.0039 (0.1113)	0.0040 (0.9993)	1.000

Mean Comparison Tests Using the level of marketing assets as Factor

Group	Observations	Mean	T-Test (P < t)	Wilcoxon-Mann-Whitney (P > |t|)
High level of Marketing assets = 0	189	4.001	(0.0007)***	(0.0037)***
High level of Marketing assets = 1	411	4.621		

Table 4 collects the estimation of bonds ratings using the Ordered Probit method. There is a significant positive impact of the level of marketing assets, firm size and profitability with respect to bonds ratings (+0.2 at a significance level of 1.1%). Moreover, we notice that the convertible bonds option is the only issue variable that significantly and positively affects the bonds ratings of firms. The other control variables have been found to positively affect bonds ratings. The creditors' rights affects positively (+0.3) the bonds ratings at significance level of 4.5%. Scores of creditor's rights have been found to be proportional to bonds ratings. Hence, we managed to confirm both of the hypotheses.

The correlation between the bond ratings and the institutional regulations (as illustrated in Panel D below) shows that the creditors' rights are significantly correlated to the bonds ratings. The two variables seem to move in the same direction.

This means that as the creditors' rights protection in a given country increase, the bonds ratings for the firms, which operate in that country increase also. This could be of great benefits to the firms if the government or the institutional authorities decide to strengthen the creditors' rights since an increase in the firms' ratings will originate a relative decline of the cost of issuing bonds. As a result, firms can affect this decrease in financing costs on the selling prices (pricing their products less and keeping the same profit margins). In a highly competitive market, this strategy could work on an international level but on a domestic level, all the firms will share the benefit of enhancing the creditors' rights protection equally and the competitive advantage will vanish. On an international scale, countries with higher creditors' rights protection will benefit from relatively lower costs of issuing bonds when they are compared to countries with low or no creditors' rights protections.

Table 4. The Effect of High Levels of MIAs on Bond Ratings

Bond ratings Ordered Probit Regression output table. The variables that are listed below are: Bond Ratings with a range from 1 (lowest) to 7 (highest). Level of Marketing Assets: indicator with value of 1 for above-average level of marketing assets of a firm and 0 otherwise. Firm Profitability: return on assets. Firm Size: as total assets. Firm Risk: net income's standard deviation. Bonds Maturity: the average maturity of a portfolio of a firm's bonds. Weights identified as the ratio of issuance size to total issuances. Convertible Provisions: indicator with value 1 if there is convertible option offer and 0 otherwise. Issue Size: size of the issuance in dollars. Leverage: debt to equity ratio. The stars that appear in the tables mean the following: *** for a significance that is lower than 1%, ** and * are for a significance that is lower than 5% and 10% respectively. (Satt, 2015).

Dependent Variable = Bonds ratings	Expected Sign	Model
Level of Marketing assets	+	0.302 (0.011)**
Firm Profitability	+	0.012 (0.0003)***
Firm Size (billions of U.S Dollars)	+	90.2 (0.000)***
Firm risk (millions of U.S Dollars)	-	-503 (0.223)
Bonds Maturity	-	-0.634 (0.122)
Convertible Provisions	+	0.0986 (0.0001)***
Issue Size	-	3.66×10^9 (0.443)
Leverage	-	-0.0000 (0.216)
Creditors Rights	+	0.311 (0.0001)***
Public Registry	+	1.454 (0.0000)***
Bankruptcy Efficiency	+	0.0077 (0.0001)***
News Circulation	+	0.455 (0.009)*
Manufacturing		0.422 (0.653)
Trades		0.008 (0.466)
Finance		0.665 (0.0001)***
Utility		0.788 (0.0032)*
N		600
Pseudo R²		15.33%
LR – Chi²		244.51
Significance		(0.0000)***

Panel D. Correlation between the Bonds Ratings and the Institutional Variables

Variable	Bonds Ratings	Creditors' Rights	Public Registry	Efficiency of Bankruptcy Process	News Circulation
Bonds Ratings	1.000				
Creditors' Rights	0.1443 (0.0001)***	1.000			
Public Registry	0.1567 (0.0000)***	-0.1558 (0.0001)***	1.000		
Efficiency of Bankruptcy Process	0.0165 (0.3679)	0.5664 (0.0000)***	-0.4432 (0.0000)***	1.000	
News Circulation	0.2334 (0.0000)***	0.4432 (0.0000)***	-0.1677 (0.0000)***	0.1120 (0.0000)***	1.000

It has been found that the level of cash resulting from operating activities positively affect bond rating, (Satt, 2015). Also, it has been demonstrated that high levels of analysts following impact the credits ratings for firms, and same conclusions were driven when we tested for analysts' recommendations and cost of debt, (Satt, 2014). The findings suggest that, in the MENA region, the bond ratings are significantly impacted by the level of marketing assets. High levels of marketing assets allow the firm to enjoy a relatively high bond rating vis-a-vis of low levels of marketing assets firms. Creditors' asking for lower premiums

diminishes the costs for incurring debts the costs for incurring debts (in the form of bonds).

The Ordered Probit Regression approves another argument. The results imply that the higher the creditors' rights protections in a given company, the higher the probability that the bonds ratings will increase. The results suggest a 0.3 increase at 4.5% significance level. These results, along with the correlation results, and the research that have already taken place

(Boubakri & Ghouma, 2008), (Satt, 2015) and (Satt, 2016) support the fact that higher creditors' rights protections leads to higher bonds' ratings and, therefore, a lower cost of debt.

LIMITATIONS

The level of representativeness of my sample strikes as the main limitation. The F-Database acted as my main source of bonds ratings data, while the W-Database as of marketing assets levels. Combining them limited my sample to 600 observations only.

CONCLUSION

Previous studies mostly focus on tangible assets. However, intangible assets are built on a long run, and thus form an essential part of companies' identity. This paper brings value in enlightening the relationship between Marketable Intangible Assets (MIAs) and credit ratings. Actually, this paper is the first in attempting to see if MIAs should be considered as a determinant in companies' credit ratings.

Based on a T-Test and Wilcoxon-Mann test analysis as well as an Ordered Probit Estimation, empirical data collected from 600 companies from the MENA region show that there is a significant impact of intangible assets on credit ranking and lower cost of debt. In addition, different other independent variables were found to be significantly correlated: positively for firm performance, firm size, firm profitability, convertible option and leverage; negatively for bonds maturity, issue size and firm risk.

Another interesting insight gained from this study is the importance of creditor's rights protection. On an international scale, countries with higher creditors' rights protection will benefit from relatively lower costs of issuing bonds when compared to countries with low or no creditors' rights protection.

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