The Effects of Global Economic Crisis on Capital Structure: Empirical Evidence from Tehran Stock Exchange (TSE)

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Abstract

The global economy faces crisis every so often. In recent years, the financial crisis has affected the global economy; all countries, directly or indirectly, are involved. The purpose of this research is to study the impact of the global economic crisis on the capital structure of listed companies in Tehran Stock Exchange. To test this effect, 87 companies listed in Tehran Stock Exchange during the period 2008- 2012 have been studied. In this study, earnings before interest and tax, depreciation expense, assets, research and development expenses, and global economic crisis are used as the independent variables. The book debt ratios and the market debt ratios are used as the dependent variables (the capital structure). The results suggest a significant relationship between the global economic crisis and the market debt ratios but not the book debt ratios.

Keywords: Economic crisis, capital structure, market debt ratios, book debt ratios.

1. Introduction

Financial controls have come to be a primary goal of managers in companies (Etemadi et al., 2010). In Iran, this issue has gained more importance due to the Art 44 of constitution which prescribes privatization of governmental companies and promotion of private companies accompanied by cutting some governmental support, exerting stricter controls over costs, improving companies' affordability to repay debts as well as enhancing capital returns as anticipated by shareholders (private owners and new companies). These actions may not only help privatization to fulfill optimally, but also stimulate credit payers to be sensitive to regaining profits of their loans compared to the period of time when company is controlled by the government. Further, new shareholders will seek to find some ways to ensure that the company's affordability is high enough to repay loans and interests and that

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its productivity is sufficient to control its costs in order to create value through increased share prices.

Company's survival is complicated and highly competitive marketplace undoubtedly necessities that company launch productive projects; the ones that take certain factors into account including risk and return. Finding ways to obtain financial resources needed for investments depend on company's financial structure (Barth et al., 2009).

Company's affordability to find financial resources, whether it is from the inside or outside of the country, to push its economic plans forward is a decisive factor in growing the company. Thus, financial decisions can play a vital role in public joint stock companies. Global economic crisis is a serious impediment to the decisions made by the companies. Recent global economic crisis shook many economics in the world. However, it is not a new thing in the world, and it is normal for many economies to be affected by a crisis. Indeed, the consequences depend on extent, causes and roots of the crisis (Taghavi, 2010). When economic slowdown emerged in the US, it started to spread to other financial markets of the world quickly affecting supply-demand chain in many foreign countries accompanied by massive unemployment, negative trend of incomes as well as decreased demand in the world. It affected all economies in proportionate of their respective ties with the world economy. Economies that shared the same financial market were quickly influenced by this trend. In contrast, those which had no massive ties with the world financial markets could be immune from the initial impacts of the crisis, but faced the secondary consequences instead (Soheily and MirzaeeRashno , 2013).

The economic crisis that happened during the recent decade had a profound impact on companies' ability to issue new shares to attract new financial supports from the financial institutions. Significant decrease of debts was a primary impact to which companies were subject as a result of market turbulence (Fosberg 2012).

Iran is no exempt of this rule. This research seeks to study over the relationship between the world economic crisis and Tehran Exchange Company's capital structure. This research is, indeed, a response to the question that if the crisis had any impact on Tehran Exchange companies? To find proper answer, theoretical background is reviewed. Then a proper method (including hypotheses, satirical population, data collection and data analysis) will be pursued. Finally, the findings will be posed and conclusion & recommendations will end the research.

2. Theoretical Background

2.1 Capital Structure

Bulkouee (1999) describes ‘capital structure’ as the company’s capital as it claims, which includes pubic negotiable instruments, private investments, bank debts, commercial debts, lease contracts, tax dues, pension reserve, managers’s and personnel’s severance pay, securities, obligations and other forms of debts. Generally speaking, capital structure refers to a stock of resources that are needed for financing.

Capital structure can be assessed through a number of ‘ratios’: debt to assets ratio, shareholders equity to asset ratio, debts to shareholders equity ratio, shareholders equity to debts ratio. Indeed, companies’ ranking depends highly on their capital structure, and production of goods and services relies on how the company attracts finance.

Loans and shares are defined as being two primary resources for the companies’ finance. Resources that create debts can not only increase company’s future fixed debts, but also increases leverage putting the whole company subject to higher risk. Therefore, financing through leverage methods plays an important role: when expensive or inexpensive debts is chosen by company, capital cost starts to change brining about either fresh productive opportunities or new financial crisis.

Mudiliani and Miller were the first to study capital structure in 1985. They discussed whether using debts can have an impact on company’s value and capital cost? They found that this impact is positive and can change the capital cost average to some extent.

Through the regression Fama and French analyzed the periodical differences of shares yield average on market risk, size of company, financial leverage, net book value shareholders equity and interest: price ratio (E/P). They found that market risk and size of company have no relationship with shares yield average. However, shares yield average has a reverse relationship with financial leverage net book value and has a direct relationship with financial leverage net book value. This has been called a puzzle.

2.2 Economic Crisis

Crisis is a term originating from the Greek term “Krisis” which both means ‘crisis’ and ‘critique’ simultaneously. Crisis, in English language, means decision-making or a point/time that a decision is made. Ericson defines ‘crisis ’ as “facing or experiencing an unbearable situation which is beyond controls and resources that a person possess.”

Larry Smith, chairman of Crisis Institution, defines it as “a notable turbulence in an organization which is covered by media with the public being curious to know more about it.” Such an event can bring about certain political, legal, financial and governmental consequences for organization (Rashid Beigi, 2011).

Another definition indicates that crisis is a massive imbalance situation within economic markets, either in the inside or in the outside of the country, which may have been due to some internal or external factors (Hassanzadeh and Kiavand 2010, p. 85).

Another definition says: crisis is an economic situation where sizable part of capital loses its value. Economic slow-down and unemployment can be regarded as an inevitable consequence of economic crisis.

Followings are some of crisis scars:

1. It is a destructive phenomenon which makes things that were not important so much valuable.

2. It has a consuming effect.

3. It makes the decision-making within a limited time very difficult and the data needed for decision-making is incomplete under such circumstances.

4- It makes the process of responding very different and confuses the decision – making unit.

5- It imposes time limitations, confusion, stress and turbulence.

2.2.1 Crisis Cycle

In pre-capitalist era, crisis mainly arose because of some external factors such as flood and drought. However, in the capitalist system, this may happen because of some internal factors as well. Market system keeps facing crisis because system's nature is based on conflicts and imbalances. That is why we observe a crisis may produce itself. A time span from one crisis to another crisis is called "cycle". Cycles have four steps: crisis, economic slowdown, recovery and flourish.

Crisis is the first and foremost part of a cycle which destroys a number of productive forces making many enterprises go bankrupt. By passage of time, crisis starts to reach slow-down step. Although it is a step towards better situation, but interest rates are still meager, industrial productions and commercial activities remain limited, wages are low and unemployment is notable. Reduction of costs and creation of competition which results in a fierce battle to seize higher portion of market drive businesses to engage in production once more and to make use of all technical means to attain their goals. Accordingly, demand is stimulated pushing the whole economy into a recovery step. In this step, businesses start to renovate their fixed assets; commerce gains a new life and production reaches to the levels

that had once in pre-crisis time, unemployment is relaxed and interest rates, wages and prices start to creep up. This trend continues until the production can be estimated as better than even pre-crisis time. It is called flourish step in which production starts a new life once more, but interest rate cuts plays the role of an impediment pushing the whole economy towards another crisis (Soheily and MirzaeeRashno, 2013).

Everloski (2012) assessed the risks of financial markets before and during the recent world economic crisis. He studied over tail risk in shareholders' equity level inter-bank loans, and foreign currency market among EU member states using Garch test. He found that significant financial risks threatened financial markets across Europe both before and amid a crisis, although the analysis indicated that inter-bank loans showed more sways than shareholders' equity, currency market.

In his research titled "capital structure and economic crisis", Fosberg (2012) studied the effects of world economic crises on companies' capital structure. His analysis demonstrated that economic crisis and slow-down during the first decade of 21st century stimulated sizeable changes in companies' capital structure, particularly in proportion of their debts to capitals which had, on average, been increased 5.5 percent between 2006 to 2008. As soon as crisis destructive effects started to relax later in 2010, companies' capital structure was back to normal. When the scars of slow-down in companies began to wear off it was soon observed that the 5.1 percent change was almost completely due to economic crisis.

Sharj Moro (2011) provided an overview of financial crisis history, first in the US, finding that financial crises had the same nature.

Kheirollahi and Behshour (2014) reviewed world economic crisis. They found that these crises arose as a result of large – scale cheating acts.

Miller (1977), Damoun and Senbet (1988) and Howakimian (2011) conducted a research on capital structure. One of their notable findings was that shareholders' equity yield ratio had a positive, significant relationship with debts: increased debts led to increased shareholders' equity yield ratio.

Soheily and MirzaeeRashno (2013) studied the relationship between the world economic crisis and Iran's economic growth. They found that the world economic crises have had a significant negative impact on Iran's economy. The world economic crisis slowed Iran's economic growth up to 4.44 percent in the short – term and 10.11 percent in the long term period.

Zayer and Shafiee (2008) assessed the impacts of world economic crises on Iran's tax revenues through regression (VAR) for a span of ten years. He found that considering the

down- sloped trend in internal gross production indices, oil revenues, government spending, foreign commerce and capital market in 2008, Iran would face a harder economic crisis in 2009.

Mashayekh et al. (2008) reviewed US economic crisis and its consequences. According to him, the consequences include a decrease of stock exchange index and share price in the world, an increase of bank interests as a result of the lack of confidence by financial institutes and their inability to pay facilities ,as well as massive unemployment.

In his study titled 'world economic crises formation and spread and its effects on Iran's economy ' , Izadi (2008) studied different facets of economic crisis as well as how it spreads across the world. He underlines that Iran's financial markets are in isolation of world markets. He identified that when oil prices decreases, Iran's revenues starts to decline and it can be the most important effects of world crisis.

Heybati and Zandieh (2010) conducted a study titled 'hyper reactivity of Iranian market investors to world financial crisis news'. They evaluated their behaviors within April 2008 to April 2010 based on two separate hypotheses: hyper reactivity and instability. Their results indicated conformity between the shareholders return and the two hypotheses; therefore, increase of instability in share market and increase of hyper reactivity in some industries were proved.

Moghareh Abed (2010) evaluated the impact of world economic crisis on Tehran shares market within July 2006 to August 2009. He used DFGM test in his study. His findings indicated that the world crisis has crept into Tehran shares market and that it affected the industry by lowering the industry indices, but exerted no impact on financial middling

Taghavi et al. (2010) studied the impact of western economic crisis on Tehran Exchange for the span of 2005 to 2009 using Arch Garch and ICSS algorithm. They found that western economic crisis exerted no impact on Tehran Exchange and that the sways had been very meager in that period.

Namazi and Parisaee (2004) studied the effect of the capital structure of Tehran Exchange companies on return and risk. They classified companies into two categories: those using credits as means of financing and those using shares (issuing shares) for that purpose. Through t test in reliability of 95%, they found that means of financing can exert no significant impact on shares return.

Ahmadi (2001) studied the relationship between capital structure and different means of financing in both short-term and long-term periods through debts and return of Tehran Exchange companies. Altogether, 50 companies were selected from 13 industries. Simple

regression and correlation coefficient results indicated that no logical conclusion can be drawn as to being a significant relationship between capital structure ratio and return ratios. However, it seems that the relationship cannot be absolutely rejected.

3. Research Methodology

This research is an experimental study in terms of the relationship among its variables and an experimental-comparative study in terms of its objective. Multivariate regression analysis was conducted to analyze the data and hypotheses. For this purpose, findings and hypotheses were tested after library and field studies and after all variables had been calculated through Excel (data gathering and sorting), Eviews (testing data panel) and STATA (variance heterogeneity test and self-correlation test). Figure 1 shows the statistical methodology of this research.

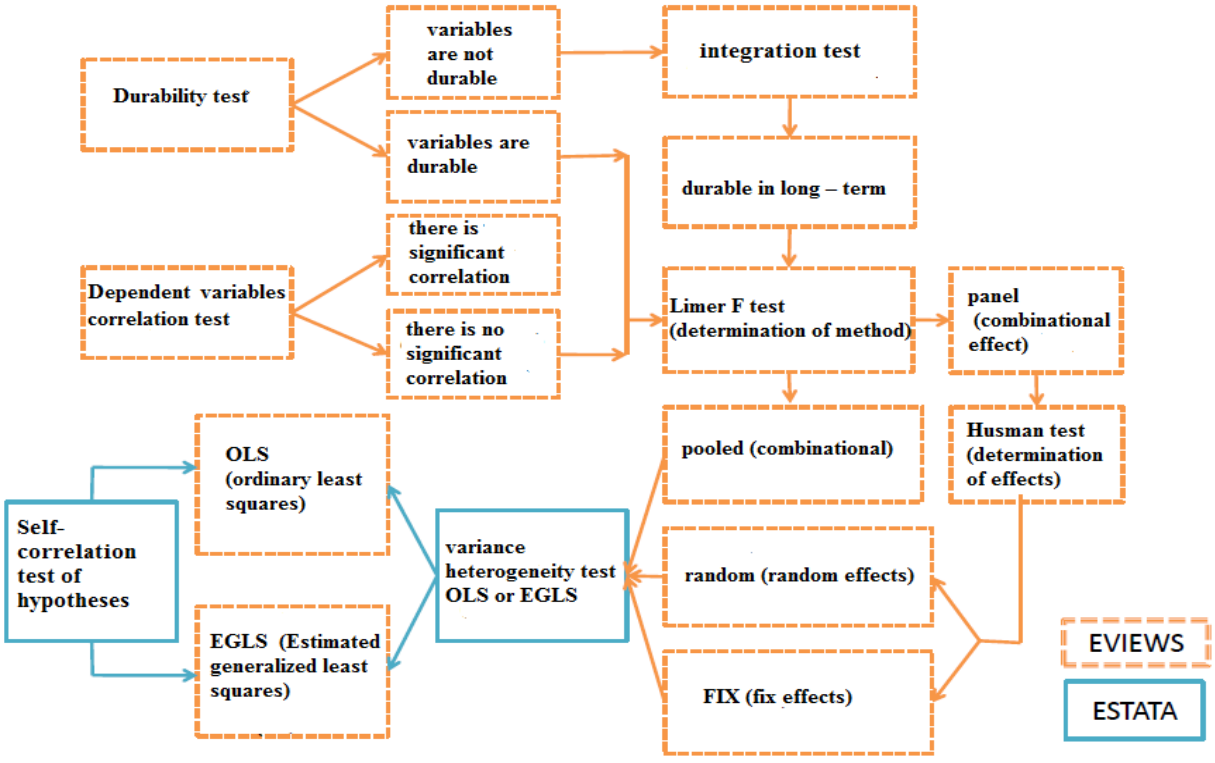

Figure 1. Statistical methodology for panel data test using STATA and EVIEWS

This research obtains its data from Tehran Exchange databases using RahavardNovin software and magazines.

3.1 Statistical Population and Samples

Since this research seeks to evaluate the effects of world economic crisis on capital structure of Tehran Exchange companies, all companies of Tehran Exchange within the recent five years form our statistical population. Thus, sampling was conducted using systematic method based on the following conditions:

- Financial data of companies should be available
- The companies should have conducted all their transactions through Tehran Exchange ,and suspension of transactions must not exceed six months
- Financial data must have been drawn from the company's financial statements. Group consolidated financial statements must not be used.

87 companies were selected based on the above mentioned conditions as research (non-statistical) samples.

3.2 Research Variables

Variables of this research fall into two broad categories:

3.2.1 Dependent Variable

A dependent variable is the one which is affected by independent variable. Here in this research capital structure is dependent variable. Book debt- market debt ratio of companies will be used too.

3.2.2 Independent Variable

This research's independent variable is world economic crisis. To get an insight into its effects, other variables are also used including size of company, earnings before interest and tax, research & development spending, depreciation cost, assets and machineries and dummy variable. It is noteworthy that world economic crisis was ongoing in 2008 as indicated in the previous studies (Soheily and MirzaeeRashno, 2013; Kheirollahi and Behshour ,2014 ; Fosberg, 2012).

3.3 Hypotheses and Tests

3.3.1 Formation of Hypotheses and Models

This research puts two main hypotheses forward:

Hypothesis 1:there is a significant relationship between world economic crisis and market debt ratio of companies.

Model 1 (Fosberg 2012)

$MDR_{i,t} = \beta_1 + \beta_2 ASSETS_{i,t-1} + \beta_3 EBIT_{i,t-1} + \beta_4 PPE + \beta_5 DEPER_{i,t-1} + \beta_6 R\&D_{i,t-1} + \beta_7 DEC_{i,t-1} + \varepsilon_{it}$

Hypothesis 2: there is a significant relationship between world economic crisis and companies' book debts ratio.

Model 2 (Fosberg 2012):

$BDR_{i,t} = \beta_1 + \beta_2 ASSETS_{i,t-1} + \beta_3 EBIT_{i,t-1} + \beta_4 PPE + \beta_5 DEPER_{i,t-1} + \beta_6 R\&D_{i,t-1} + \beta 7 DEC_{i,t-1} + \varepsilon it$

Breakdown of the above two models are indicated in the following table:

Table 1.Research's variables

Manner of calculation	Definition	Abbreviation	Variable
long – term book debts ÷ company's total market value which is the total assets – shareholders' equity net value+ shareholder's equity market value	market debt ratio	MDR	Dependent
long-term book debt value ÷ total assets	book debt ratio	BDR	
total amount of monies relating to properties and machineries	Assets and machineries	PPE	Independent
net value prior to tax and interest deductions ÷ total assets	earning before tax and interest	EBIT	
natural logarithm of total assets	Size of company	ASSETS	
total tangible and intangible fixed asset depreciation ÷ total asset	Depreciation	DEPER	

development and research spending ÷ total assets	Development and research spending	R&D	
in the event of world economic crisis, each year equates 1; otherwise it will equate 0	world economic crisis dummy variable	DEC	

4. Research Hypotheses Testing

Following statistical steps must be carried out prior to testing hypotheses:

1. Presenting descriptive statistics which are relevant to research variables.

2. Conducting durability tests of variables using Lion, Linn and Choi method.

3. Conducting Kao accumulation test for evaluating the long-term relation of the variables of each model.

4. Evaluating the correlation between independent variables using Spearman correlation table.

5. Conducting variance heterogeneity test for the purpose of selecting EGLS method.

6. Carrying out self-correlation test to assess self- correlation of research models.

7. Doing Flimer (Chao) test for assessing whether Panel or Pooled 8 are applicable for testing hypotheses

8. Carrying out Husman test for evaluating whether Fix and Random effect can be used (if models are panel)

9. Doing OLS or EGLS to conduct final testing on hypotheses (Tobrerizi and Piri, 2012).

4.1 Descriptive Statistical Evaluation

Table 2 indicates descriptive values of research variables for the studied period. Amendments and evaluations led to the selection of 87 companies.

Table 2- Descriptive statistics of variables using EVIEWS

SD.	min.	max.	median	average	definition	abbreviation

17477.15	000.	137614.1	000.	6176.64	depreciation	DEPER
152.04	0.000	3154	0.27	9.73	machineries	PPE
18.47	-8.438	384.93	0.149	1.14	earning before tax and interest	EBIT
1.788	6.83	19.61	12.68	12.83	Size of company	ASSETS
0.39	0.000	7.89	0.024	0.065	development and research spending	R&D
0.93	0.000	15.42	0.07	0.22	book debt ratio	BDR
4.06	0.000	82.7	0.07	0.42	market debt ratio	MDR

4.2 Variables Reliability

Common methods that are used in econometrics are based upon this assumption that the model's variables are all durable. If so, or if they are of the same root, 't' and 'F' tests shall not be of relevant reliability. Lion, Linn and Choi test results confirm that all variables of this research are durable excluding PPE and ASSETS which are dependent variables of the research. Kao accumulation test was used to find whether these variables remain durable in long-term period.

Table 3. Durability test for researches with reliability of 95% using EVIEWS

variables	Lion, Linn, Choi		
	F	P(VALUE)	Results
DEPER	-4.56010	0.000	durable
PPE	25.0424	1.000	durable
EBIT	-1.91797	0.0276	durable
ASSETS	3.41276	0.9997	durable
R&D	-16.5859	0.000	durable
MDR	-13.4418	0.000	durable
BDR	-13.2430	0.000	durable

4.3 Kao Test

Kao test was used to test variables for having long-term relations with each other. It is noteworthy that this test must be used for all models that use non-durable variables. Table 4 shows this relationship:

Table 4. Board accumulation test results (KAO test) using EVIEWS

Dependent variables	Models	KAO test results		
		F	P(VALUE)	Results
MDR	First model	-5.7	0.000	Long-term relationship is ongoing
BDR	Second model	-5.9	0.000	Short-term relationship is ongoing

4.4 Spearman Correlation Table

Correlation means how two variables are related to each other. Generally speaking, correlation coefficients range between +1 and -1. Therefore, this relationship may sometimes be positive or occasionally negative. Table 5 shows that there is no significant correlation between independent variables (right left) of this research:

Table 5. Results of variable correlation test (spearman) using EVIEWS

		ASSETS	DEPER	EBIT	PPE	RD
ASSETS	Correlation	1				
	Probability	-----				
DEPER	Correlation	0.16	1			
	Probability	0.0005	-----			
EBIT	Correlation	0.009774	0.053027	1		
	Probability	0.8389	0.2698	-----		
PPE	Correlation	-0.389603	-210965	0.220446	1	
	Probability	0.0000	0.0000	0.0000	-----	
RD	Correlation	-0194587	-0.024585	-0.345612	0248486	1
	Probability	0.0000	0.6091	0.0000	0.0000	-----

4.5 Variance Heterogeneity Test and Self-Correlation of Hypotheses

Table 6 confirms variance heterogeneity for all hypotheses as well as their self-correlation. As it was mentioned earlier, EGLS have been used to settle the heterogeneity and AR (1) for settling the self-correlation.

Table 6. Self-correlation and variances heterogeneity test results using STATA

Hypotheses	Variances heterogeneity test			Self-correlation test		
	F	P(VALUE)	results	F	P(VALUE)	Results

Hypothesis1	2318.7	0.000	heterogeneity does exist	18.499	0.000	Self-correlation does exist
Hypothesis2	1194.81	0.000	heterogeneity does not exist	13.758	0.000	Self-correlation does exist

4.6 Research Hypotheses

Hypothesis 1: there is a significant relationship between world economic crisis and book debt ratio of companies

Hypothesis 2: there is a significant relationship between world economic crisis and market debt ratio of companies

4.7 Testing Hypotheses in the State of Board State

In this section, hypotheses are tested using regression model. Filmer test was used to find whether the hypotheses are of POOLED or of PANEL. Then Hosman test was applied to select a model out of the two models: fixed and random effects models. Following are the results:

Table 7- Results of Filmer and Hosman test using EVIEWS

Hypothesis	Limer F			Hosman		
	F	P	Results (model determinatoin0	Chi - square	P	Results (model determinatoin0
Hypothesis 1	1.97	0.000	PANEL	66.30	0.000	Constant effects
Hypothesis 2	2.28	0.000	PANEL	77.99	0.000	Constant effects

EGLS		EGLS		Variables
Hypothesis 2		Hypothesis 1		
Probability	Coefficients	Probability	Coefficients	
0.0003	1.17	0.0048	1.12	Depreciation
0.000	0.05	0.0000	0.14	Assets and machineries
0.000	-0.43	0.0000	-1.10	earnings before interest and tax
0.000	-0.17	0.000	-0.17	assets
0.000	0.10	0.0048	-1.32	Development and research spending
0.23	-0.01	0.006	-0.05	world economic crisis dummy variable
0.000	2.42	0.000	2.76	Constant variable
0.000	0.45	0.0005	0.66	AR(1)
0.92		0.88		Coefficient of determination
0.89		0.84		Amended coefficient of determination
34.15		21.19		T value
0.000		0.000		F probability

1.92	1.82	Durbin Watson

5. Results and Findings

According to tables 6 and 7, all research models face the challenge of heterogeneity and self-correlation. Therefore, EGLS is used to test all hypotheses of the research. Table 8 contains the results.

Hypothesis 1

F value (0.00) indicates that this model is overall significant; i.e. it is possible to judge about the results that have been obtained as to acceptation or rejection of the model. Watson Durbin value (ranging between 1.5 and 2.5) proves that the hypothesis 1 has no problem of self-correlation. In addition, results of coefficient of determination show that near 0.84 of the changes in market debt ratio has been affected by the independent variables.

The variable ‘depreciation cost’ has a positive, significant relationship with market debt ratio, as evidenced by the regression coefficient (1.12).

The variable ‘assets and machineries’ has a positive, significant relationship with market debt ratio, as evidenced by the regression coefficient (0.14).

The variable ‘earning before tax and interest’ has a negative, significant relationship with market debt ratio, as evidenced by the regression coefficient (-1.10).

The variable ‘assets’ has a negative, significant relationship with market debt ratio, as evidenced by the regression coefficient (-1.17).
The variable ‘research and development spending ’ has a negative, significant relationship with market debt ratio, as evidenced by the regression coefficient (-1.32).

The variable ‘world economic crisis dummy variable’ has a negative, significant relationship with market debt ratio, as evidenced by regression coefficient (-0.05).

Hence, the above mentioned results prove that all above variables have significant relationship with the hypothesis 1. Its estimative model is as follows:

$MDR_{i,t}$ = 2.76 - 0.17$ASSETS_{i,t-1}$ -1.10 $EBIT_{i,t-1}$ + 0.14$PPE_{i,t-1}$ + 1.12$DEPER_{i,t-1}$ - 1.32 $R\&D_{i,t-1}$ - 0.05 $DEC_{i,t-1}$

Hypothesis 2

F value (0.00) indicates that this model is overall significant; i.e it is possible to judge about the results that have been obtained as to acceptation or rejection of the model. Watson Durbin value (ranging between 1.5 and 2.5) proves that the hypothesis 2 has no problem of self-correlation. In addition, results of coefficient of determination show that near 0.89 of the changes in market debt ratio has been affected by independent variables.

The variable 'depreciation cost' has a positive, significant relationship with book debt ratio, as evidenced by the regression coefficient (1.١٧).

The variable 'assets and machineries' has a positive, significant relationship with book debt ratio, as evidenced by the regression coefficient (0.٠٥).

The variable 'earning before tax and interest' has a negative, significant relationship with book debt ratio, as evidenced by the regression coefficient (-٠.٤٣).

The variable 'assets' has a negative, significant relationship with book debt ratio, as evidenced by the regression coefficient (-٠.17).

The variable 'research and development spending' has a positive, significant relationship with book debt ratio, as evidenced by the regression coefficient (1.10).

The variable 'world economic crisis dummy variable' has a negative, significant relationship with book debt ratio ,as evidenced by the regression coefficient (-0.01).

Hence, above mentioned results prove that all above variables have significant relationship with the hypothesis 2 excluding the dummy variable .Its estimative model is as follows:

$BDR_{i,t}$= 2.42 - 0.17$ASSETS_{i,t-1}$ - 0.43$EBIT_{i,t-1}$ + 0.05$PPE_{,t-1}$ + 1.17$DEPER_{i,t-1}$ + 0.10 $R\&D_{i,t-1}$

6. Discussion & Conclusion

Recent economic crisis proved that current international financial system was highly vulnerable. Today's markets are interwoven into each other; the economies that have more advanced foundation and means, they are less vulnerable.

A proper insight into financial data of capital structure is helpful for investors to understand the overall situation. Therefore, our analysis here can help the investors who aim the Iranian market for investment. Generally speaking, there are two modes of finance: internal finance and external finance. In former mode, companies make use of their net profit [which is the outcome of company's operation]. In the latter mode, companies resort to external resources such as borrowing; in this way, they must not only bear heavy interests but must pay the costs that are incurred as a result of lender's overseeing. Thus, the former mode is a more desirable alternative for the companies. When an economic crisis arises, companies' affordability for borrowing drifts reduces. Under such circumstances, company's performance can guarantee its survival. Indeed, capital structure is affected by the mode of finance that a company may choose. As it is evident by this research results, companies that gain more, face less debts.

This research was conducted using data which had been obtained from Tehran Exchange companies. Results demonstrated that there was a significant relationship between its independent variable (world economic crisis) and market debt ratio of companies. However, such meaningfulness was not confirmed in the relation to the companies' debt ratio and these results, particularly the impact of world economic crisis on companies' capital structure, conform to the results obtained by the research of other authors (Fosberg, 2012).

Generally, this analysis revealed that the Iranian companies' capital structure has been affected by the world economic crisis, which requires more attention by policy-makers and authors to be shifted to capital structure.

7. Research Limitations and Recommendations

Sine this research uses systematic omission method instead of statistical sampling, analysts are recommended to be cautious in generalizing its results [usually samples and statistical population are not used in these sorts of studies].

It seems that there is a global need to adopt actions in the international level to thwart spread of economic crises. Considering the fact that economic crisis has international impacts, financial regulations are mainly national and different from one economy to another. Most of the plans already put forward to counterbalance economic crises, including US economic Emergency Economic Stabilization Act and European and Asian programs have mainly been of national and domestic nature. Therefore, we can observe a gap: lack of international coordinated program to relax economic crises and a proper monitoring system for capital movements among economies. It is essential to be sensitive about how to finance companies. Such decisions can play a central role in overcoming an economic crisis. Thus, policy makers need more insight in arriving at the decisions.

Following recommendations can be helpful for future researches:
- Assessment of how world economic crisis may affect capital cost of Tehran Exchange companies.
- Assessment of how world economic crisis may influence the quality of auditing in the Iranian companies.

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