

A study of the impact of ownership structure and capital structure on financial performance of firms listed in Tehran stock Exchange.

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Abstract: The aim of this study was to investigate the impact of ownership structure and capital structure on financial performance of the firms listed in Tehran Stock Exchange. In this study, ownership structure and capital structure are as an independent variable and the assets rate of return, stock holders equity rate of return (criteria for the firm financial performance) are as a dependent variable and the criteria for measuring of the performance. In this study, the library research method used for collect data and Excel software used for data classification and after classifying the data Eveiws software was used in order to process the information and test the hypotheses. Population and Sample of this research consisted of 121firms listed in the stock exchange. The findings indicate that managerial ownership and public ownership has a significant negative impact on financial performance. Capital structure (long-term debt ratio to total assets, short-term debt ratio to total assets and total debt ratio to total assets) has a significant negative impact on financial performance.

Keywords: Ownership structure, capital structure, Financial performance

Introduction

Ownership structure has a main and special position in system of the firm .determination of ownership structure type and combination of stock holders in the firm is a tool that can control administration of the firms. We can investigate this part of administration that determines type of ownership in several parts such as distribution of ownership, ownership focusing, minor stock holders, minority and majority in firm's ownership and their percent of asset in it. combination of equity is also related to different patterns such as Institutional Investors , managerial ownership , governmental and private stock holders. Relationship between ownership structure and the firm's performance is an essential subject in financial literature of the firms. Berle and Means proposed this subject in 1932 .they proposed that there should be an opposite relationship between firm's performance and dispersion of stock holders. Demestzgb challenged their theory in 1983.he proposed that firm's ownership structure is an inner consequence of the firm's decisions that reflect impact of stock holders on stock and market. When owners of private firms decide to sell their stocks and stock holders of the governmental firm vote redistribution, in fact, they decide that change their firm's structure and most probably change it to disperse structure. The main subject of ownership structure is representation problem because benefits opposition between managers and stock holders led to cost of representation. Last investigations showed that appropriate ownership structure is different among countries and there is not a similar pattern in all the firms. Results of investigations about privatization in eastern bloc countries indicate that lack of focusing on ownership decreases performance of the private firm. Some activities about privatization have done in Iran like other countries but as we mentioned privatization experience in some countries like Iran has not been successful. Having an appropriate ownership structure is very important factor to be a successful in privatization and can pave their way for their privatization's goals. Some economic theoretician believe that each types of ownership can have an impact on firm's performance, however, managers performance control procedures, effective factors for their performance and measuring procedure for impact of each types of

ownership on firm's performance are important issues for managers, investigators and stock holders .some other investigations study impact of the ownership structure on financial performance of the firms. ownership structure subject has become much more important after investigations of Miller and Modigliani 1985. some theories about ownership structure selection proposed by other investigators that adapted their ideas by Miller and Modigliani .some of them are very significant theory such as Pecking-order Hypothesis, information Asymmetry Hypothesis, Agency Cost Hypothesis, Trade-off Hypothesis .trade –off hypothesis indicate that if the firm make an optimum capital structure with maximum value for trading there would be the optimum capital structure for the firm (Miller 1977).it means that maximum value of the firm : ultimate cost of debt equals ultimate advantages that is for financial support by debt. Pecking-order Hypothesis proposed by Myers and Majluf (1984).Myers(1984) indicate that the optimum capital structure for the firm is that one time the firm can use of debt or internal capital resource (such as Retained earnings)and rights of stock holders for financial purpose of the firm ,moreover, at first Agency Cost Hypothesis proposed by Jensen And Meckling(1976) then developed by Jensen .this hypothesis indicate that optimum capital structure is when cost of representation decreases between stock holders and managers and stock holders and creditors.

Importance of investigation about capital structure and it's impact on value of the firm are very important subject among the USA and developed countries investigators that have similar institutional feature and they have done lots of experimental investigations about this subject .capital structure and ownership structure are very important subjects in developed countries ,therefore, investigation and the study of impact of ownership structure and capital structure on the financial performance of the firms can be very useful in future. the aim of this study is investigation of the impact of the ownership structure and capital structure on financial performance of the firms listed in Tehran stock Exchange. We use multiple regression model for analyze of data .we review ownership structure and performance of the firms in section two , we introduce and measure variables in section three ,we represent results and discussion in section four and eventually section five is conclusion.

Theoretical framework of study

Ownership structure and financial performance

We should know that impact of ownership structure on performance and revenue of the firms are complex and multidimensional ,therefore, we can see some oppositions between individuals and groups such as opposition between managers and owners ,stock holders and creditors, natural and legal person ,internal and external stock holder etc.in spite of this ,one of essential dimensions of representation theory is profit inequality of managers and stock holders that is an important subject in most investigations .according to Jenson and Meckling definition (1976), representation relationship is a contract that refers owner or master can choose representative by themselves and it allows them to making decision.

We should know that how we can focus on the appropriate ownership structure that satisfy stock holders and decrease cost of representation by well management ,because combination of stock holding specially ownership of managers in the firms is very important subject that can make cost and opportunities for the firms.

Han and suk (1998) in their studies found out that increasing internal ownership led to the increasing business ,however, internal ownership has an unfavorable effect on business profit .they also indicated that there is a positive relationship between institutional ownership and business performance and they proved that institutional ownership has an opposite impact on viewpoints of managers.

Morck and colleagues (1988) investigate relationship between range of Tobin's Q and internal ownership level they indicate that in some cases developing of internal ownership level with Tobin's Q has a direct correlation with internal correlation while in other cases there is an opposite relationship and it shows that there is a nonlinear relationship between internal ownership and financial performance of the firm.

Sadeghi and Rahimi investigated relationship between ownership structure and performance of the listed firms in Tehran stock exchange using simultaneous equation system. Theories test indicate that in Tehran stock exchange ,focus and ownership structure has no impact on performance of those firms which are listed in Tehran stock exchange in 2002-2007,however, performance of the firm has a significant and positive impact on ownership structure of the firms ,it means that favorable performance of the firm led to the much more focusing on the ownership structure.

Capital structure and financial performance

Firms are working hard, there is close competition among them and they are developing, therefore, the firms have to develop their activities by new investments and compete with those firms that are active both nationally and internationally. The firms need financial resources for investment. Managers must decide about how they can arrange capital structure. The most essential subject in capital structure is determining a favorable relationship for stocks and rate of debts, because it has direct impact on value of the firm's stock, after determining how much capital is needed for firms we should know that who can we get needed capital and in what rate (amount). There are some reasons for selection between rate of debt and using capital including impact of internal factors on capital structure that increase value of the firm.

Zeitun and Tian investigated relationship between capital structure and performance then they found out that there is a significant relationship between relation of short term liabilities to total assets, relation of long term liabilities to total assets and relation of total liabilities to total assets with assets rate of return (2007).

Berger (2002) and Milbun & Takor (2005) in their studies investigated relationship between return of assets, return of stock holders' equity as a criteria of performance and capital structure and they found out that capital structure has a significant opposite relationship with assets rate of return but it has not any relationship with rate of return of stock holders' equity.

Sajjadi and colleague (2011) investigated impact of capital structure selection on performance of listed firms in Tehran stock exchange by study of relationship between capital structure standards (short term liabilities ratio to total assets, long term liabilities ratio to total assets and total liabilities ratio to total assets) and performance accounting criteria (assets rate of return, rate of return of stock holders' equity and gross profit margin). They find out that capital structure (specifically short term liabilities ratio to total assets and total liabilities ratio to total assets) has a negative impact on measured performance by rate of return. Moreover, none of capital structure criteria has a significant impact on rate of return of stock holders' equity and gross profit margin. In totally we find out that in normal condition selection of capital structure has no impact on performance of the firms that are listed in Tehran stock exchange.

Methods

We collected financial statements of the firms that are listed in Tehran stock exchange by data resources (2007-2011). Panel and Pool data is used in this study. We collected information about variables from different resources such as audited financial statements, audit reports and Tadbir pardaz and Rah avard novin soft wares' notes about financial statements that are in Tehran stock exchange library. We used multivariable Regression testing statistical hypotheses and analyzing data. Eviews software is used for statistical analysis. Below conditions are for statistical model selection and we investigated all firms that are members of the statistical population:

There is financial information of the firm for investigation time period

Their fiscal year is the last days of month of Esfand.

They should be in stock exchange during investigations

Firms should not be the investigator or the financial intermediary

Although There were some restrictions, 121 firms are chosen as a statistical sample. Below model is used for hypotheses calculation:

$$PERFit = \beta_0 + \beta_1 LEVit + \beta_2 MaOWit + \beta_3 STATEit + \beta_4 GROWit + \beta_5 TANGit + \beta_6 FSIZEit + uit$$

PERFit: firm's financial profitability

LEVit: financial gearing

MaOWit: firm's managerial ownership i in T time

STATEit: firm's governmental ownership i in time of t

GROWit: firm's develop opportunity I in time of t

TANGit: firm's obvious asset i in time of t

FSIZEit: firm's size i in time of t

Variables measurement

Independent variables

Ownership structure

Managerial ownership: measures by rate of stock and members of the board of directors and MAOW is its sign

Governmental ownership : if the firm's governmental management is upper than 51 percent we consider mark 1 and if it is lower than 51 percent we consider 0 mark and STATE is it's sign .

Ownership structure : measures by financial gearings ,represented by relation of total debt to total assets (TDA), long term debt ratio to total asset(LDA), short term debt ratio to total asset(SDA)

Dependent variable: financial performance: measured by assets rate of return(ROA),rate of return of the stock holders equity (ROE),control variables: GROWit- develop opportunity that measured by percent of changes in total assets.

TANGit –tangible asset ratio to total assets calculates tangible asset

SIZE it – total assets logarithm calculates firm's size

Model reliability

Durability of the study variables should be test before testing of the study models with Panel data and time series. Durability of the variables is very essential because when the variable is not durable we would have some problem in regression analysis.in this study we used Levin, Lin chu t and 13Phillips-Perron for testing of the variables durability. Null hypothesis indicate that these variables are not durable .because we found out a significant level for Levin, Lin chu t and Phillips-Perron and that is lower than 0/05 for them . we can conclude that for each variable Null hypothesis is false,in the other words, the variables of the test are durable and we would not have a problem in regression analysis.

Table 1. stationary test variables

	Phhillips-perron test		Test Levin, lin &chu	
Significance level	Statistics	Significance level	Statistics	Symbol
0/0003	195/800	0/000	-23/2429	ROA
0/000	205/827	0/000	-108/725	ROE
0/000	224/851	0/000	-58/4422	TDA
0/000	263/250	0/000	-1204/91	LDA
0/000	310/929	0/000	-90/0415	SDA
0/0093	173/247	0/000	-46/3166	TANG
0/0004	129/709	0/000	-19/9939	SIZE
0/000	270/368	0/000	90/6770	MAOW
0/000	219/933	0/000	-16/9293	GROW

According to the Table 2 ,significant level of the Limer F test for ROA model is lower than %5 ,however, we calculate model using Panel data and we use Pool model for REO model because significant level is upper than %5 .

Table 2. F test Limer

Test results	Sig	d.f .	F Statistic	Model
Panel	0/000	120,479	7/417929	ROA
Pooled	0/4862	120,479	1/000840	ROE

Table 3 represents result of Hasman test for selection of the random effects for models, statistic of the Hasman test for ROA model is lower than %5 and because of that we use random effects for regression model.

Table 3. Hausman test

Test results	Sig	d.f.	Chi-square test
Random effects	0/5558	6	4/906613

First hypothesis test

The study of the impact of the ownership structure on measured financial performance by stock holders equity rate of return and assets rate of return

Table 4 shows results of the study of impact of the measured ownership structure by governmental and managerial ownership indicators on measured financial performance by assets rate of return (model 1) and stock holders equity rate of return (model 2). First hypothesis indicate that ownership structure (governmental and managerial) has a significant impact on assets rate of return. It is obvious that ownership structure has a negative and significant impact on assets rate of return. Coefficient that obtained in model 1 indicate that increasing of the governmental and managerial ownership led to the decreasing of the assets rate of return. Every control variables (develop opportunity, firm size, tangible assets) has also a significant impact on assets rate of return. In model 2, ownership structure that is measured by the rate of return of the stock holders equity, none of the significance level of the independent and control variables coefficients are not significant, however, first hypothesis that is ownership structure has a significant impact on firm's performance and it approves with 95 percent probability.

In totally, managers have power and they can make decisions in governmental firms that is result of innovation and capital of the private section, they decide about economy of a country and make plans for institutions that are not good for stock holders or even national economy. Adolf brel and Kardiner minz mention that managers extend sizes of the firm because of developing their own profit, even it is non economical and not favorable for stock holders. We can see this phenomenon when assessment of the performance and awards of the managers are appropriate to firms sizes. When annual rewards of the managers are according to accounting numbers, they are much more motivated and they can manage profit and accounting numbers very well, moreover, two main elements have impact on that types of ownerships: first managers ownership and second financial gearing. As a result because of the management ownership, managers ownership and rate of the firm gearing increase more than the past and as we mentioned they are main reason of wonderful changes in performance.

This result is equal to some Iranian investigations such as Namazi and Kermani, Sadeghi and Rahimi. It also is equal to some foreign investigation such as Fama and Jenson, Taoli and colleague but it is not equal to Al faroq and colleague investigations.

Table 4. test the first hypothesis

Method		Panel regression (random effects)		Pooled regression
Model→	ROA		ROE	
Variables	coefficient	Sig	coefficient	Sig
MaOW	-0/1473	0/8360	-33/2455	0/8730
SOEs	-0/9684	0/0247	-134/7027	0/3351
GROW	0/0400	0/0001	0/4621	0/8902
TANG	-0/2744	0/4950	-7/80003	0/9449
SIZE	-0/5148	0/0718	-28/3039	0/5710
total	16/9493	0/0302	918/6235	0/5000
F	4/643492			0/277617
Sig	0/000363			0/925410

Second theory test

The study of the impact of capital structure on financial performance measured by assets rate of return and stock holders equity rate of return

Table 5 shows results of the study of the impact of the capital structure measured by the short term debt ratio to total assets, the long term debt ratio to total assets and total debt to total assets on financial performance measured by assets rate of return (model 1) and stock holders equity rate of return (model 2). Capital structure has a significant impact on assets rate of return in the second hypothesis (model 1). As we see in Table result, long term debt ratio to total assets that is one of the capital structure part, has a negative and significant impact on assets rate of return. In the other words, increasing of the long term debt ratio to total

assets led to decreasing the assets rate of return. firm's size is one of the control variables that has a negative and significant impact on the assets rate of return . development opportunity has a significant and positive impact on financial performance. Capital structure has no significant impact on stock holders equity rate in model 2 ,because none of control and independent variables coefficient is not lower than %5 ,however, second hypothesis or capital structure has a significant impact on the firm's financial performance and this hypothesis approve.

Debts and stock holders equity are main resources of economical units financial secure ,making important decisions about capital structure,ratio arrange to each parts of the capital structure such as many management dividing is influenced by many factors and these factors are influenced by initial features and financial resources features including securities or are influenced by some other internal and external factors that are related to firm's operations and commercial environment conditions. One of essential profit of the debt in the firm capital structure is profit that is impact of tax financial secure by debt, because this type of financial secure have interest and it includes in tax that firm pays, as a result , the firms pays low tax and because of that some firms prefer financial secure by debt. Firm capital structure is a constant financial secure of the firm that shows by long term debts and stock holders equity. financial structure includes short and long term debts and stock holders equity ,however, capital structure is a part of a financial structure . result of this study is equal to Berger,Fesberg and Fosh and Anderson investigations but this is not equal to Sajjadi and colleague investigations.

Table 5. The second hypothesis test

Method		Panel regression (random effects)		Pooled regression
Model→		ROA		ROE
Variables	COefficient	Sig	COefficient	Sig
TDA	-0/523501	0/1941	33/37140	0/8157
LDA	-2/308349	0/0039	232/5883	0/4104
SDA	-0/377518	0/5441	-114/5641	0/5239
GROW	0/042323	0/0000	0/653420	0/8459
TANG	0/102779	0/8110	11/64402	0/9367
SIZE	-0/733165	0/0128	-38/89349	0/4376
total	22/54648	0/0055	1144/210	0/4054
F		5/610846		0/244814
Sig		0/000011		0/961334

Conclusion

In this study we investigate the impact of the ownership structure and capital structure on the firms financial performance. we consider Financial gearing as a capital structure indicator and managerial and governmental owners stock percent is also considered as a ownership structure indicator. Results of the first hypothesis test indicate that ownership structure has a significant impact on financial performance , although type of the impact is an opposite type. regard of this subject that when rate of managers ownership increase , it can happen that those managers who are owner of the firm trying to act just for their own profit but against minor stock holders and creditors of the firm ,eventually, firm performance decrease. Jensen and Mack link idea is different, they believe that when managers ownership is constant and powerful, they try much more to improve firm performance. Although some experimental investigations related to the capital structure have done in the US capital market and some other developed countries such as the UK and Japan , capital structure subject has it's own special place in economic market of the developing countries. there are two reasons that are like an obstacle for that subject .first : role of the economic units in developing process is not very important for developing economies. second : almost in the last two decades, in some developed countries, economic units had some restrictions to choose the best options of the needed capital secure resources. some of those restrictions were governmental economic sovereignty and lack of competition among those economic units that were in private section, lack of developing of the market and finite financial secure resources. conclusion about second hypothesis is capital structure (short term debt ratio to total assets, long term ratio to total assets and total

debts ratio to total assets) has a significant negative impact on financial performance of the listed firms in Tehran stock exchange (assets rate of return, stock holders equity rate of return). In totally, we conclude that ownership structure and capital structure has a significant negative impact on financial performance of the listed firms in Tehran stock exchange. We suggest that other investigators use other criteria along with these criteria in future investigations and results of them compare with this investigation and other similar investigations. In this study we consider just two variables of the ownership structure but investigators can use of other variables such as firm ownership, family ownership or external ownership.

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