

# Privatization and Firm's Performance in Iran

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## Abstract

During the last two decades, privatization has been one of the most important programmes of developed and developing governments. In Iran, privatization is projected as an important economic policy to reach higher efficiency in economy. The aim of this study is comparative investigation of the effect of privatization on firm's performance during the period 1999 to 2011 regarding modern and traditional performance evaluation measurement. To do so, privatized firms are considered as research population and putting some conditions, 71 firms are selected to be studied. Privatization is captured by free float as independent variable. In this study, traditional performance evaluation measurements are Return of Assets (ROA), Return of Equity (ROE), Return of Sale (ROS) and Operating Income (OI), and modern performance evaluation measurements are Economic Value Added (EVA), Tobin's Q and Market Value Added (MVA). The results of the study show that privatization affects firm's performance based on EVA, MVA, Tobin's Q, ROE, OI but not based on ROA and ROS. In addition, the results show that there is difference between the effects of privatization on firm's performance with respect to modern and traditional performance evaluation measurement.

**Keywords:** Privatization, Firm's Performance, Modern and Traditional Performance Evaluation Measurement.

## Introduction

During the last two decades, a globalization of markets for capital has taken place. One effect of this is an increased portion of foreign investments on most national stock markets (Jonnergard and Rreman, 2004). The theoretical literature dealing with the relationship between

privatization and efficiency has been growing over the last 20 years. The theoretical results are ambivalent about the impact of ownership changes on efficiency. Privatization was launched in the countries of Central and Eastern Europe, the former Soviet Union and China to promote enterprise restructuring, with the ultimate goal to improve the operating performance of enterprises. A vast majority of the empirical studies has found positive effects of privatization on indicators of performance and restructuring on average (Sprenger, 2011).

Governments implement privatization policies to achieve the following goals: (1) to reduce national budget deficits and the stock of national debt, (2) to foster financial market development, and (3) to increase efficiency. Concerning the first objective, the privatization of state-owned enterprises mitigates government expenditure in the form of subsidies. Moreover, if after privatization former state-owned enterprises become and remain more profitable, they can also help increase tax revenues. Further, experience has shown that privatization revenues do not increase government spending, because they are considered a once and for all yield and are designate to reduce national debt. As to second objective, current experience is consistent with a positive impact of privatization policies on financial market development. Empirical analyses show that privatization has contributed to the growth of stock market capitalization and trading all over the world. The third aim assumes that privatization policies contribute to increase efficiency given that a huge amount of resources is moved from government control to market allocation. However, such a 'popular' belief may be due to ideological faith in the virtues of economic liberalism rather than to a proper assessment of the impact of the firm's ownership on productive and allocative efficiency (Cavaliere and Scabrosetti, 2008).

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In Iran, the first governmental company in the title of Meli Bank was established. So after, variety of firm governmental companies was established and this trend stepped up in 1970s because of high oil revenues. The main reasons of increasingly establishing governmental firms were economic and technological development in one hand and weakness of private sector for establishing infrastructures and engage gigantic economic activities in other hand. More than three decades, there had not been an opportunity for private sector to engage in Iran economic especially in big industries. In Iran, privatization policy has started to reach economic growth in 1989 in the light of first cultural, social and economic development plan. During 1979-1989, 8034 Billion Rials amounting to 5 percent of gross national product was sold to private sector. This trend increased in second cultural, social and economic development plan. However, this trend was not promising. During implementation of third cultural, social and economic development plan and in the contemplation of article 15, government established privatization organisation.

Establishment of privatization organisation resulted in an evolution of privatization in country. The turning point in this regard was passing principle policy 44 in 1994. Article III of principle policy 44 emphasizes on change of government role as an owner to supervisor of private sector and transmitting 80 percent of firms involved in principle policy 44 to private or non-governmental agencies through Tehran Stock Exchange.

Considering the importance of this issue, the aim of this study is comparative investigation of the effect of privatization on firm's performance during the period of 1999 to 2011 regarding modern and traditional performance evaluation measurement.

## Literature Review

Jonnergard and Rreman (2004) investigated the effects of a privatization of ownership on the activities of corporate boards. Their results show that board activities in terms of range of activities and engagement in the decision process increased during the 90s. They found no relationship between change in ownership identity and board activities, instead the increase in activities seemed to be a general phenomenon, while ownership change was firm specific.

Cavaliere and Scabrosetti (2008) surveyed the theoretical literature on privatization and efficiency by tracing its evolution from the applications of agency theory to recent contributions in the field of political economy. Their theoretical results regarding the relation between privatization and efficiency do not lead to any definitive conclusion. They argue that privatization may increase productive efficiency when restructuring takes place whereas its effects on allocative efficiency still remain uncertain.

Perotti and Oijen (2001) investigated whether privatization in emerging economies has a significant indirect effect on local stock market development through the resolution of political risk. They present evidence suggesting that progress in privatization is indeed correlated with improvements in perceived political risk. Their analysis further shows that changes in political risk in general tend to have a strong effect on local stock market development and excess returns in emerging economies. They conclude that the resolution of political risk resulting from successful privatization has been an important source for the rapid growth of stock markets in emerging economies.

Clarke *et al.* (2005) provide evidence that although bank privatization usually improves bank efficiency, gains are greater when the government fully relinquishes control, when banks are privatized to strategic investors, when foreign banks are allowed to participate in the privatization process and when the government does not restrict competition.

Omran (2007) studied the relationships between privatization, state ownership, and bank performance in Egypt and indicates that following privatization, some profitability and liquidity ratios for privatized banks decline significantly, but other performance measures are virtually unchanged. His results indicate that the relative performance changes of privatized banks were better than those of mixed banks with majority state ownership but worse than those of banks with other ownership forms (private, state-owned, and mixed private ownership). However, the study finds a strong evidence to support the theory and previous empirical findings that banks with greater private ownership perform better.

Okten and Arin (2006) test the effects of privatization on productive and allocative (market) efficiency using a rich panel data set of 22 privatized cement plants from Turkey in the 1983-99 period. They find that ownership effects are

sufficient to achieve improvements in labour productivity. However, their results on allocative efficiency are dependent on changes in the competitive environment. They also indicate while all plants seem to improve labour productivity through work force reductions, plants privatized to foreign buyers also increase their capital and investment significantly.

Banerji and Errunza (2005) studied privatization under moral hazard and adverse selection. They show that if the fraction of efficient investors is either insignificant or productivity differences between efficient and inefficient investors are negligible, the government would offer a pooling contract and sell the same fraction of equity to both types of investors. The lower the productivity difference, the greater the equity stake offered to investors. On the other hand, if the fraction of efficient investors is significant or productivity differentials are large, the optimal policy consists of a dual method of privatization in which it offers two methods of privatization to outside investors. The first method consists of a sale of 100% equity together with a subsidy and charges higher price. Under the second option, the investor pays a smaller price but buys less than 100% equity without any subsidy. Efficient investors opt for the first method while inefficient investors prefer the second. The dual privatization method screens investors and provides them with maximum incentives to invest while minimizing the risk of post-privatization bankruptcy.

Huang and Wang (2011) explored the effect of ultimate privatization on the performance of Chinese listed companies. Ultimate privatization is defined as the incidence of transferring the ultimate control of a state-owned company from the government to private owners. Using a sample of 127 Chinese listed companies that have had controlling blocks transferred from the government to private owners, they show that firm performance improved significantly following this transfer. In addition, they indicate that gains in profitability and efficiency are more prominent when the new controlling shareholder is an "outsider", one who does not own shares in the company prior to the transfer of control.

Omran (2009) examined the post-privatization corporate governance and find that the state gives up control over time to the private sector, but still controls, on average, more than 35% of these firms. He also documents a trend in private ownership concentration over time, mostly to

the benefit of foreign investors. He shows that firm size, sales growth, industry affiliation, and timing and method of privatization play a key role in determining private ownership concentration. Ownership concentration and ownership identity, in particular foreign investors, prove to have a positive impact on firm performance, while employee ownership concentration has a negative one. The higher proportion of outside directors and the change in the board composition following privatization have a positive effect on firm performance.

Otchere (2009) presents evidence that shows that privatized banks in developed countries have experienced significant improvements in operating performance. The improvement in performance remains significant after controlling for persistence in bank performance. A comparison of the performance of privatized banks in developed and developing countries suggests that privatization has encouraged excessive risk taking among privatized banks in developing countries, with the consequence that those banks carry large non-performing assets than their counterparts in the developed countries. He also observes that consistent with the competitive effects hypothesis, investors view privatization announcements as foreshadowing bad news for rival banks.

Tsamenyi *et al.* (2010) analyze the performance of two large privatized companies in Ghana. They conclude that, overall the performance of both organisations improved after privatization under all the performance dimensions examined. These improvements were also accompanied by certain organisational changes, including changes in the accounting and control systems.

Sprenger (2011) describes the ownership structure in the Russian industry at the end of the mass privatization program in 1994 and its subsequent evolution and finds collusion among workers makes them more reluctant to sell shares to outsiders. Firms in financial distress show a higher incidence of insiders selecting the option of privatization leading to high insider ownership. He finds no evidence of a sequencing in privatization according to the performance of firms before privatization.

Bortolotti *et al.* (2002) examined the financial and operating performance of 31 national telecommunication companies in 25 countries that were fully or partially privatized through public share offering. They find that the financial and operating performance of telecommunications companies improves significantly

after privatization, but that a sizable fraction of the observed improvement results from regulatory changes alone or in combination with major ownership changes rather than from privatization alone.

Afshari (1996) investigated the effects of privatization in the first social and economic development plan in Iran. His results show positive changes in operational performance of firms especially increasing firm's sales.

Almasi (2002) investigated the effect of privatization on financial performance of firms listed in Tehran Stock Exchange. His results show that financial performance of firms has not changed after privatization.

Talebnia and Mohammadzadeh (2005) explored the effect of privatization on stocks return of firms listed in Tehran Stock Exchange. Their results show that privatization has not a significant effect on stock return in firms listed in Tehran Stock Exchange.

## Hypothesis Development

H<sub>1</sub>: Privatization affects firm's economic performance according to traditional performance evaluation measurements.

H<sub>1-1</sub>: Privatization affects firm's ROA.

H<sub>1-2</sub>: Privatization affects firm's ROS.

H<sub>1-3</sub>: Privatization affects firm's ROE.

H<sub>1-4</sub>: Privatization affects firm's OI.

H<sub>2</sub>: Privatization affects firm's economic performance according to modern performance evaluation measurements.

H<sub>2-1</sub>: Privatization affects firm's EVA.

H<sub>2-2</sub>: Privatization affects firm's Tobin's Q.

H<sub>2-3</sub>: Privatization affects firm's MVA.

H<sub>3</sub>: There is a difference between the privatization effects on firm's economic performance according to modern and traditional performance evaluation measurements.

H<sub>3-1</sub>: There is a difference between the privatization effects on firms economic performance according to ROA and EVA.

H<sub>3-2</sub>: There is a difference between the privatization effects on firms economic performance according to ROS and EVA.

H<sub>3-3</sub>: There is a difference between the privatization effects on firms economic performance according to ROE and EVA.

H<sub>3-4</sub>: There is a difference between the privatization effects on firms economic performance according to OI and EVA.

H<sub>3-5</sub>: There is a difference between the privatization effects on firms economic performance according to ROA and Tobin's Q.

H<sub>3-6</sub>: There is a difference between the privatization effects on firms economic performance according to ROS and Tobin's Q.

H<sub>3-7</sub>: There is a difference between the privatization effects on firms economic performance according to ROE and Tobin's Q.

H<sub>3-8</sub>: There is a difference between the privatization effects on firms economic performance according to OI and Tobin's Q.

H<sub>3-9</sub>: There is a difference between the privatization effects on firms economic performance according to ROA and MVA.

H<sub>3-10</sub>: There is a difference between the privatization effects on firms economic performance according to ROS and MVA.

H<sub>3-11</sub>: There is a difference between the privatization effects on firms economic performance according to ROE and MVA.

H<sub>3-12</sub>: There is a difference between the privatization effects on firms economic performance according to OI and MVA.

## Methodology and Data Collection

Since the study tries to determine the privatization impact on firm's economic performance, the study can be classified as descriptive correlation study.

The population of the study consists of privatized firms listed in TSE during the period of 1999 to 2011 whose stock is sold in TSE. Following conditions are considered to reach a homogenous sample:

1. Firms' fiscal year must end at the end of year and must not have changed during studied period.
2. Sample firms must not have transaction intervals during studied period and its information must be available.

3. Sample firms must not be investment, insurance firms and banks.

The study time span is divided into two groups of three years before and three years after Privatization. However, considering the above conditions, 71 firms are selected to be studied.

### Independent Variable

To measure privatization, stock free float is used. Free float is a stock belonged to small stockholder that is supposed to be traded at impending future.

### Depended Variables

#### Traditional Performance Evaluation Measurement

In this study, traditional performance evaluation measurements are Return on Assets (ROA), Return on Equity (ROE), Return on Sale (ROS) and operating income (OI) calculated as below:

ROA ratio measures firm's profitability in utilizing its assets.

$$ROA = \frac{\text{income before interest and tax}}{\text{total assets}}$$

ROE ratio measures firm's profitability in utilizing its equity.

$$ROE = \frac{\text{income before interest and tax}}{\text{total equity}}$$

ROS ratio measures firm's profitability out of its sales.

$$ROS = \frac{\text{income before interest and tax}}{\text{total sale}}$$

OI measures firms income from its operation.

#### Modern Performance Evaluation Measurement

In this study, modern performance evaluation measurements are Economic Value Added (EVA), Tobin's Q and Market Value Added (MVA) calculated as below:

EVA emphasize on optimal allocation of resources and adding value for stockholders. In EVA, firm's value sticks

to return and cost of capital applied.

$$EVA = NOPAT - (WACC \cdot CAPITAL)$$

where,

NOPAT is net operating profit after tax

WACC is weighted average cost of capital.

CAPITAL is applied capital

#### Tobin's Q

$$\text{Tobin's Q} = MV/BV - \text{Debt}$$

MV is market value (outstanding stock \* stock price)

BV is book value

Debt is firm's debt

#### MVA

MVA is difference between market value and book value indicating the gap between sale of stock by stockholders and their investments.

$$MVA = (\text{Outstanding stock} * \text{stock price}) - (\text{Equity book value} + \text{capital equivalents})$$

### Control Variable

#### Firm's Size

For measuring this variable, firms total assets are summed and divided into firm's number to evaluate assets mean. Firms with assets higher than average are considered as big firms and other firms are considered as small firms.

### Empirical Results

#### Descriptive Statistic

Frequency of TSE listed firms during three years before and after privatization in terms of its size is presented in Table 1. In addition, descriptive statistic of research variables is presented in Table 2.

The results of Table 2 show that there is a very little change (see means) in some performance measures such as ROA, ROS and ROE. However, there is a rather big

**Table 1: Frequency of TSE Listed Firms During Three Years Before and After Privatization in Terms of its Size**

Firms size	Before privatization		After privatization	
	Frequency	Percent	Frequency	Percent
Small	135	63.4	119	55.9
Big	78	36.6	94	44.1
Total	213	100.0	213	100.0

**Table 2: Descriptive Statistic**

Variables		Observation	Mean	Std. deviation	Deviation range	Min	Max	
ROA	traditional measures	Before privatization	213	0.16	0.09	0.51	-0.05	0.46
		After privatization	213	0.16	0.1	0.62	-0.19	0.43
		Difference	213	0.003	0.12	0.76	-0.38	0.38
ROS	traditional measures	Before privatization	213	0.21	0.12	0.72	-0.13	0.59
		After privatization	213	0.21	0.16	1.17	-0.47	0.7
		Difference	213	0.004	0.13	0.97	-0.51	0.46
ROE	traditional measures	Before privatization	213	0.6	1.2	14.58	-0.78	13.8
		After privatization	213	0.42	0.31	2.67	-1.41	1.26
		Difference	213	-0.18	1.21	14.89	-13.32	1.57
OI	traditional measures	Before privatization	213	338649	1171566	10229035	-50479	10178556
		After privatization	213	681860	2290522	16839868	-70967	16768901
		Difference	213	343211	1289327	11449795	-1015920	10433875
EVA	modern measures	Before privatization	213	262638	996302	8517840	-324740	8193100
		After privatization	213	638979	2171660	12411195	-885265	11525930
		Difference	213	376340	1383794	8544911	-1023734	7521177
Tobin's Q	modern measures	Before privatization	213	2.97	2.37	12.92	-1.03	11.89
		After privatization	213	2.06	1.66	13.3	0.3	13.6
		Difference	213	-0.91	2.55	19.43	-10.88	8.55
MVA	modern measures	Before privatization	213	1339468	4256352	24738559	-44175	24694384
		After privatization	213	4186883	14581773	87501020	-3702110	83798910
		Difference	213	2847415	10457724	67953769	-8849243	59104526
FREE	modern measures	Before privatization	213	0.21	0.2	0.8	0	0.8
		After privatization	213	0.28	0.17	0.85	0.05	0.9
		Difference	213	0.07-	0.03	0.05-	0.05-	0.1-
SIZE	modern measures	Before privatization	213	12.85	1.61	7.66	9.74	17.41
		After privatization	213	13.54	1.63	7.34	10.73	18.06
		Difference	213	-0.69	-0.02	0.32	-0.99	-0.65

change in better way according to EVA and MVA as modern performance measures and OI as a traditional performance measure. Tobin's Q change is rather big, but it is worsened. The results in whole indicate that the changes of modern performance measures is much more than traditional ones. Difference of free float is negative as to before privatization and after privatization showing that in privatization, governmental firms stock mostly

is sold to institutional and block holders not to small stockholders.

### Hypotheses Test

Considering that the effect of privatization on firm's performance efficiency is investigated three years before and after privatization Paired Samples t test is used. Firstly,

**Table 3: Paired Samples Statistics**

		Mean	N	Std. Deviation	Std. Error Mean	Correlation	Sig.
H <sub>1-1</sub>	ROA-pre	.1581	213	.09320	.00639	.317	.000
	ROA-post	.1611	213	.10671	.00731		
H <sub>1-2</sub>	ROS-pre	.2109	213	.11836	.00811	.541	.000
	ROS-post	.2156	213	.15717	.01077		
H <sub>1-3</sub>	ROE-pre	.6021	213	1.20503	.08257	.117	.088
	ROE-post	.4233	213	.31547	.02162		
H <sub>1-4</sub>	OI-pre	338649.03	213	1171566.816	80274.436	.924	.000
	OI-post	681860.57	213	2290522.088	156943.987		
H <sub>2-1</sub>	EVA-pre	262638.87	213	996302.157	68265.499	.877	.000
	EVA-post	638979.75	213	2171660.178	148799.704		
H <sub>2-2</sub>	QUTIBIN-pre	2.9742	213	2.37742	.16290	.240	.000
	QUTUBIN-post	2.0587	213	1.66471	.11406		
H <sub>2-3</sub>	MVA-pre	1339468.31	213	4256352.132	291640.443	.978	.000
	MVA-post	4186883.50	213	14581773.019	999126.624		

**Table 4: Paired Samples Test**

	Mean		Paired Differences		
			T	df	Sig.
H <sub>1-1</sub>	ROApre – ROApost	-.00300	-.373	212	.709
H <sub>1-2</sub>	ROspre – ROSpost	-.00472	-.505	212	.614
H <sub>1-3</sub>	ROEpre – ROEpost	.17877	2.157	212	.032
H <sub>1-4</sub>	OIpre – OI post	-343211.535	-3.885	212	.000
H <sub>2-1</sub>	EVApre – EVApost	-376340.878	-3.969	212	.000
H <sub>2-2</sub>	QUTIBINpre – QUTUBINpost	.91545	5.231	212	.000
H <sub>2-3</sub>	MVApre – MVApost	-2847415.192	-3.974	212	.000

**Table 5: Two Independent Samples t Test**

	F	Levene's Test for Equality of Variances		t-test for Equality of Means		
		Sig.	T	df	Sig.	
H <sub>3-1</sub>	EVA&ROA	180.122	.000	.609	424	.543
				.609	238.874	.543
H <sub>3-2</sub>	EVA&ROS	118.821	.000	.797	424	.426
				.797	260.187	.426
H <sub>3-3</sub>	EVA & OE	9.927	.002	2.050	424	.041
				2.050	375.605	.041
H <sub>3-4</sub>	EVE & OI	26.225	.000	2.324	424	.021
				2.324	272.406	.021
H <sub>3-5</sub>	QUTUBIN&ROA	214.232	.000	.405	424	.686
				.405	220.097	.686
H <sub>3-6</sub>	QUTUBIN&ROS	155.105	.000	.537	424	.591
				.537	226.639	.592
H <sub>3-7</sub>	QUTUBIN & ROE	5.297	.022	1.841	424	.066

	<i>F</i>	<i>Levene's Test for Equality of Variances</i>		<i>t-test for Equality of Means</i>		
		<i>Sig.</i>	<i>T</i>	<i>df</i>	<i>Sig.</i>	
				1.841	404.045	.066
H <sub>3-8</sub>	QUTUBIN & OI	35.317	.000	2.423	424	.016
				2.423	378.407	.016
H <sub>3-9</sub>	MVA&ROA	174.225	.000	.695	424	.487
				.695	242.558	.487
H <sub>3-10</sub>	MVA&ROS	112.934	.000	.908	424	.365
				.908	266.646	.365
H <sub>3-11</sub>	MVA & ROE	10.832	.001	2.248	424	.025
				2.248	361.944	.025
H <sub>3-12</sub>	MVA & OI	26.398	.000	2.517	424	.012
				2.517	265.313	.012

**Table 6: Summary Result of the Hypotheses Test**

<i>Result</i>	<i>Description</i>	<i>Hypotheses</i>
Does not accepted	Privatization have not a significant effect on ROA	H <sub>1-1</sub>
Does not accepted	Privatization have not a significant effect on ROS	H <sub>1-2</sub>
Accepted	Privatization have a significant effect on ROE	H <sub>1-3</sub>
Accepted	Privatization have a significant effect on OI	H <sub>1-4</sub>
Accepted	Privatization have a significant effect on EVA	H <sub>2-1</sub>
Accepted	Privatization have a significant effect on Tobin's Q	H <sub>2-2</sub>
Accepted	Privatization have a significant effect on MVA	H <sub>2-3</sub>
Does not accepted	There is not a difference between the privatization effects on firm's economic performance according to EVA and ROA.	H <sub>3-1</sub>
Does not accepted	There is not a difference between the privatization effects on firm's economic performance according to EVA and ROS.	H <sub>3-2</sub>
Accepted	There is a difference between the privatization effects on firm's economic performance according to EVA and ROS and mean of EVA is more than ROE.	H <sub>3-3</sub>
Accepted	There is a difference between the privatization effects on firm's economic performance according to EVA and OI and mean of EVA is more than OI.	H <sub>3-4</sub>
Does not accepted	There is not a difference between the privatization effects on firm's economic performance according to Tobin's Q and ROA.	H <sub>3-5</sub>
Does not accepted	There is not a difference between the privatization effects on firm's economic performance according to Tobin's Q and ROS.	H <sub>3-6</sub>
Does not accepted	There is not a difference between the privatization effects on firm's economic performance according to Tobin's Q and ROE.	H <sub>3-7</sub>
Accepted	There is a difference between the privatization effects on firm's economic performance according to Tobin's Q and OI and mean of Tobin's Q is more than OI.	H <sub>3-8</sub>
Does not accepted	There is not a difference between the privatization effects on firm's economic performance according to MVA and ROA.	H <sub>3-9</sub>
Does not accepted	There is not a difference between the privatization effects on firm's economic performance according to MVA and ROS.	H <sub>3-10</sub>
Accepted	There is a difference between the privatization effects on firm's economic performance according to MVA and ROE and mean of MVA is more than ROE.	H <sub>3-11</sub>
Accepted	There is a difference between the privatization effects on firm's economic performance according to MVA and OI and mean of MVA is more than OI.	H <sub>3-12</sub>

statistics for three years before and after privatization is tested and then correlation test is applied between two situations. First and second main hypotheses along with its sub-hypotheses are tested through this approach. The results of this test are presented in Table 3.

In all seven hypotheses other than  $H_{1-3}$ , considering the significance of test, presence of a correlation between two groups is accepted. However, the significance of the correlation is tested which is shown in Table 4.

Considering the results of Table 3, taking the significance of test into account, all hypotheses are accepted other than  $H_{1-1}$  and  $H_{1-2}$ .

To test hypothesis three and its sub-hypotheses, two independent Samples t Test is used since difference between the effects of firm's economic performance according to modern and traditional performance evaluation measurements is investigated.

The results of these hypotheses test are shown in Table 5.

Considering the results of Table 5 and the significance of test,  $H_{3-3}$ ,  $H_{3-4}$ ,  $H_{3-8}$ ,  $H_{3-11}$  and  $H_{3-12}$  are accepted. Summary result of the hypotheses test is presented in Table 6.

## Discussion and Conclusion

In recent years, there is a movement which led to booming of country economy because of implement of principle policy 44. There is census implement of this policy guaranteed the process of privatization. There is an expectation that privatization leads to an increase in firms performance. However, the aim of this study was comparative investigation of the effect of privatization on firm's performance during the period of 1999 to 2011 regarding modern and traditional performance evaluation measurement. To do so, privatized firms are considered as research population and putting some conditions, 71 firms selected to be studied. Privatization is captured by free float as independent variable. In this study, traditional performance evaluation measurements are Return of Assets (ROA), Return of Equity (ROE), Return of Sale (ROS) and Operating Income (OI) and modern performance evaluation measurements are Economic Value Added (EVA), Tobin's Q and Market Value Added (MVA). The results of the study show that privatization affects firm's performance based on EVA, MVA, Tobin's

Q, ROE, OI but not based on ROA and ROS. In addition, the results show that there is deference between the effects of privatization on firm's performance with respect to modern and traditional performance evaluation measurement. The results of this study are consistent with Okten and Arin (2006), Huang and Wang (2011), Tsamenyi *et al.* (2010), Bortolotti *et al.* (2002) and against with Almasi (2002) and Talebnia and Mohammadzadeh (2005).

These results suggest the positive effect of privatization on firm's performance. However, it seems that considering the mean of free float after privatization, this privatization has been mostly in the way of changing the ownership from giant governmental owners to giant private sectors not small owners. Therefore, it is strongly suggested that authorities step the speed of privatization up and try to make it in the way that small investors such as employees of the firms has a share in this process.

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