Advances in Environmental Biology, 8(21) October 2014, Pages: 1062-1067

AENSI Journals

Advances in Environmental Biology

ISSN-1995-0756 EISSN-1998-1066

Journal home page: http://www.aensiweb.com/AEB/

The effect of Privatization on Profitability and the Quality of Companies' Accounting Earnings listed on Tehran Stock Exchange

Somayeh Tarval and Masoud Pirouzeh

MA of Economics, Department of Economics, Payame Noor University, I. R. Iran

ARTICLE INFO

Article history:
Received 25 September 2014
Received in revised form
26 October 2014
Accepted 25 November 2014
Available online 30 December 2014

Keywords:
Privatization functional performance
stock exchange Tehran

ABSTRACT

In this research, the effect of privatization on financial performance of privatized state companies has been investigated in 1370_1385 AD. In his study, the performance of those companies which were privatized with public offering shares way, are under investigation based on criteria like quality of accounting earnings and profitably. To calculate the quality of accounting earnings, Dechow & Dichev models have been used. After the test the normality of the data and regarding the results of these tests, comparison tests averages and Napa metric parametric test was used to test hypotheses. Accounting earnings quality indicators with of operational efficiency as the ratio of sales to a significant reduction in manpower, showed financial and operational performance.

To Cite This Article: Somayeh Tarval and Masoud Pirouzeh The effect of privatization on profitability and the quality of companies' accounting earnings listed on Tehran Stock Exchange. ***Adv. Environ. Biol., 8(21),*** *1062-1067, 2014*

INTRODUCTION

Underdeveloped countries, especially after the mid-eighties, continued the steeply towards the privatization of state industries and companies.

The collapse of socialist ideology and empirical failure of the state of the economy or the economy on one hand and successful experience of some countries in the world, particularly South East Asia, makes this belief strengthened that to achieve sustainable economic growth, the only way is to join the free market economy and reduction of government intervention through the privatization of state enterprises, and the latter one does not exist. However, in order to examine the issue of whether the privatized companies achieve improvement of financial or operational performance or not, some tools are required. As mentioned in earlier studies, financial information of companies is one of these tools. By analyzing this information in the situation before and after privatization, the nature of the company can be understood during the transformation and measure the mentioned criteria. Since the information is historical and audited, the reliability of this analysis will be increased. The results of this study can be used for the purpose of getting feedback of privatization process. Regarding the impact of companies on people's lives and on issues of corporate governance there, addressing this issue is very important cases. Because the material and spiritual resources are at the disposal of companies and social responsibilities of companies whether state-owned or privately owned make every researcher's mind into challenge regarding the true nature of ownership.

So the aim of this study is to evaluate the financial performance of companies after privatization.

Theoretical foundation of research:

Suitable ground for changing the profit and the earnings-related conflicts of profit, and also due to some inherent accounting limitations such as deficiencies in the estimation process and future prediction, ability to use multiple methods of accounting has caused real profit of single case reported economically vary in financial benefits.

Researchers and professionals of accounting regarding the importance of profit as the major point in evaluating the performance and determining the value of company, needs to assess reported profit by economic units. To evaluate this profit, one concept called quality of earning has been used. In different articles in defining the quality of earning, two features have been mentioned for quality of earning. One of them is profitability in decision-making and another one is the relationship between these two concepts and economic benefits which has been expected by Mr. Hicks.) Hicks was an English economist and presented the general

Corresponding Author: Somayeh Tarval, Department of Economics, Payame Noor University, Isfahan, Iran
Tel: 00989179353326734; E-mail: Starval@yahoo.com

theory of economic benefit. It can be described as follows: Profit is defined as the maximum amount that a person can spend during a specific period of time in a way that at the end of period, the wealth is the wealth of the first period. In another word the quality of earnings is defined as sincere expressing the reported profit from the one which Mr. Hicks expected. The honest expression means descriptive have been done and what has been claimed.

It means high quality of earning shows usefulness of profit information for consumers' decision making and is consistent with Mr. Hicks economic profit. Because people use information in different decisions, there is no possibility to provide a comprehensive definition of profit. Some financial analysts consider the quality of earnings as ordinary, continuous and repeatable and generating cash flow from operation. They believe that quality of earning is a figure between reported net income and flow of cash from operation except unique figures. So far, financial experts have been unable to achieve an independent calculation of the benefit which they have the necessary quality. In this case, financial experts with appropriate adjustments can achieve a domain that is more accurately a reflection of reported quality earning. Thus the quality of earning is not a fixed defined concept which can be easily achieved. That is a relative concept having relation with different views and attitudes. There are different views about evaluation earnings quality that the following number of cases will be examined.

Hunt the financial manager of General Milles believes in evaluation the earnings quality, two points have been analyzed. One of them is having balance between current and previous profits of the company. Another is market perception of profit which is shown in P / E ratio. Hagen the financial manager of the Denivlez company believes that the quality of earnings can be measured by identifying or omitting the effects of changing accounting methods, extraordinary items, market condition or temporary costs. Konoly another Financial analyst believes that earnings quality can be assessed by measuring the value of renewable assets. Valen the financial manager of American broadcasting believes the quality of earnings can be measured by the difference between reported profit and inflation profit.

Sloan proves that companies with higher reported earnings of operating cash flow, the volume of accruals (in the coming years will experience a decline in operating profit.

B.Mikhail believes that the profit which can predict future profit of cash flow of the institute has higher quality.

The concept of earnings quality based on the time series of profit properties:

The concept of quality time series related with earnings quality includes stability, predictability and variability. These three concepts are associated with changing characteristics of profit over time. Stability, the level of maintaining a specific change in future is recognizable and have ability to predict the distribution function of the changes (especially variance of changes) over time. It measures the deviation and variability of changes over time.(that source).

A: sable profit:

This concept is sometimes equated with the concept of variability. For example, profit with high quality is the one which does not show variability. Researchers consider the slope coefficient of the regression of stock while changing and the level of profits as the size and level of stability. Kormendi & Lipe and Easton & Zmijewski. Lipe defined stability based on solidarity in profits. profit means that changes in the current period regarded as a fixed part of the series of profits. Theoretically and practically, it is demonstrated that stability in reported profit has relation with more reported reactions of investors. This reaction has led in evaluating those factors related to stable profit. From investors' perspective, a stable profit is the one which is constant and does not have volatility.

Stability as one of the concepts of quality of earning is the result of perspective of being useful in decision-making. There is conceptual positive and practical relation between stability in profits and efficiency. Stable relationship with a sincere expression of interest income reported by Mr. Hicks is not considered. Because stability is subordinate of both accounting standards and business model as well as entity's operating environment. High instability of profit can be the result of an impartial application of standard accounting in the economic environment. While the management interventions in the reporting process can lead to a change from a non-fixed profit stream to a fixed flow of ones.

Review of literature:

One study has conducted by Wolf in 2008 with title of drivers of performance changes during privatization in England. This study finds those variables which adjust the impacts of privatization on changing performance of companies. In another words, it determines the extent of improvement arising from privatization. For this purpose, the effects of wide range of variables related to the firms on seven different aspects of performances were investigated. These aspect includes profitability, efficiency, investment in capital assets, production, employment, the structure of capitals and dividends paid based on a sample of privatized companies in oil and gas industry. The results show significant differences between criteria performances. On average, the most relevant variables are included in the list of companies, the remaining state-owned and economic development. The results also represent that in findings of previous studies, the driving performances were observed with a smaller scope that may not be damaged by Skewed variables.

Another study had been conducted in Hungary, Czech and Slovakia and Poland by Aussenegg & Jelic with title of operating performance of newly privatized firms in transition economies in Central Europe. That does not show any significant performance improvement for 6 years after privatization. Unlike in the case of developing and developed countries, privatized firms in this sample do not show significant improvements in profitability, investment in capital assets, performance and product. However, they experience significant reduction in employment and significant increase in financial leverage. Among the mentioned countries, Hungary was better in terms of profitability, while the financial leverage of Czech companies showed an increase compared to the other two countries experienced a decline in lower yields. This result suggests that privatization in transition economies had not significant effect on performance Another study on 116 companies of privatized companies operating in the electricity distribution industry in Latin America had been conducted by Anders and his colleagues. This study had been the first systematic study of effects of privatization of electricity distribution sector and that a series of key indicators were used in this study and a wide range of indicators including production, employment, productivity, efficiency, quality, price, etc. were used in this study more than the other research. These researches also encompass a longer time range. It showed three time periods before privatization, privatization and post-privatization when compared with short term studies. In this research two methods were used. One of them was comparison the mean and median of the indicators used in each test and the significance of changes between periods. Another one was an econometric model having fixed effects of firm, specific time trends and dispersion corrections. . The results suggest that changes would be followed like changes in ownership, significant improvements in labor productivity, efficiency and quality of the product or service. Most of these changes took place in transition period and the improvement more than two years became less after privatization.

Another study had been conducted by Müslümov in Turkey with title of financial and operational performance of privatized firms in Turkish cement industry. The findings of the study showed that when the criteria of performance of privatized and public companies were considered, privatization show diverse performance. In other words, the performance was worse after privatization and the total added value and return on investment had been reduced significantly . This decrease originated primarily from poor productivity of assets. But this decline in productivity is due to the increase in assets in capital assets of investment, because investment in capital assets had not increased significantly after privatization. A significant increase in the level of employment and financial leverage after privatization of these findings are most important points of this study. It also became clear that the privatization through the public offering, the gradual privatization and foreign ownership of local ownership(instead of foreign ownership) is an incentive for the financial and operational performance of the company after privatization.

Research hypothesis:

The first sub-hypothesis: There is difference between quality of corporate accounting earnings before and after privatization.

The second sub-hypothesis: there is difference between profitability of firms before and after privatization.

Methods of research:

This purpose of this research is applied and the method is descriptive. (After the occurrence of events or causal) which uses historical data of previous periods, financial and operational performances of companies before and after privatization have been compared.

Spatial and temporal scope of investigation:

The time domain of this study includes years from 1379 to 1385. The spatial domain of this study was accepted in privatized companies and will be listed in Tehran stock exchange.

Statistical population and samples:

The population of this study is privatized companies accepted in Tehran stock exchange. A sample was selected using available information.

Data collection:

Collecting essential data is one of the basic steps of every research. And if essential accuracy has not been done regarding data collection, the results of the study will not be confirmed.

In the present study the data were gathered through librarian method in a way that essential information for review of literature and theoretical were gathered from books, journals, authentic papers, thesis. And statistical data and information essential for testing hypothesis were collected through Tehran stock exchange .

This information was extracted from audited financial statement of the companies.

Advances in Environmental Biology, 8(21) October 2014, Pages: 1062-1067

Data analysis:

Paired test was used to analyzing the changing performance of financial and operational privatized companies before and after the process of privatization. In a way that normalization of the data has been tested and afterwards, a t-test has been used for paired samples. If the data do not follow normal distribution, nonparametric Wilcoxon statistical techniques used for paired comparisons. The operational and financial performances of privatized companies two years after and before the privatization process were compared with each other. All statistical tests of hypothesis of all population were analyzed by using SPSS and EXCEL.

Operational definition of variables:

The index of accounting of profit quality:

For the variable of quality of accounting earnings, first the multiple regression equation using SPSS software and then using Dechow & Dichev as the following:

TCAj,t=b0+b1CFOj,t−1+b2CFOj,t+b3CFOj,t+1+vj,t

TCAj,t=(ΔCAj,t−ΔCLj,t−ΔCashj,t+ΔSTDEBTj,t)

CFOj,t=NIBEj,t−TAj,t

TAj,t=(ΔCAj,t−ΔCLj,t−ΔCashj,t+ΔSTDEBTj,t−DEPNj,t)

EQ=|vj,t|

TCAj,t: total current accruals in year *t*

b3ob: the obtained value and coefficient of regression

CFOj,t: firm j's change in current liabilities between year *t*

vj,t: Error of the regression model is used to measure earnings quality

ΔCAj,t: firm j's change in current liabilities between year *t-1* and year *t*

ΔCLj,t: Changes in the current liabilities of firm j

ΔCashj,t: changes in cash in firm j and during one financial year

ΔSTDEBTj,t: firm j's change in debt in current liabilities between year *t-1* and year *t*

NIBEj,t: firm j's net income before extraordinary items in year

TAj,t: firm j's total accruals in year *t*

DEPNj,t: firm j's depreciation and amortization expense in year *t*

EQ: earning quality of firm j in year t

|vj,t|: For larger values of absolute error regression model indicates poor earnings quality and Smaller values for the absolute error regression model indicates that earnings quality is stronger.

Index of profitability:

Profitability shows capabilities of organization in generating income by using capital resources of that organization.

The variable of profitability is average of two years before and after an index of return on assets.(ROA), return on equity (ROE) and return on Sales (ROS) has been estimated.

ROA: Net income to total assets

ROE: Net Income to Total Equity

ROS: net profit on sale

Results:

The first test sub-hypothesis:

Research and statistical hypothesis for the first hypothesis is as follows:

Sub-Hypothesis 1: there are differences between quality of corporate accounting earnings before and after privatization.

Ho: $\mu d = 0$

H1: $\mu d \neq 0$

In statistical hypothesis above, dμ represent average of coupled data of accounting earning quality. As can be seen in table below, the results of this test for this index show significant indicator. Thus, Ho is rejected and H1is accepted. In another word the first sub hypothesis of this research cannot be rejected at 0.05 level error. And the quality of accounting earnings is different in the period after the privatization of state enterprises in comparison with the period before it.

Table G the result of t-test of paired samples for index of accounting earning quality.

Significance level	Degree of freedom	T	GD couples					
			Distance ensure%95		Standard deviation error	Standard deviation	mean	
			Maximum	minimum				
0,028	19	-2,377	-1,43853E5	-2,26216E6	5,06041E5	2,26308E6	-1,20301E6	d

The second sub-hypothesis:

The second sub-hypothesis can be presented as follows:

Advances in Environmental Biology, 8(21) October 2014, Pages: 1062-1067

Sub-hypothesis 2: there are differences between after and before privatization of firms regarding their profitability.

Ho: µd = 0

H1: µd ≠ 0

In statistical hypothesis above, dµ represents mean of paired data of profitability index.

As was explained in previous parts, the index of profitability in this research has been investigated by 3 groups. Therefore, in this study for the three indicators of ROA, ROE and ROS separate statistical hypothesis were written. And each of them was investigated separately. As it has been observed in this table, none of the conducted tests is significant for 3 indicators. So HO is rejected. In another word, the profitability of firms after and before privatization do not have significant differences.

Table P. The results of the t test for paired samples yield of total assets.

Degree of freedom	T	GD pairs					
		Distance ensure%95		Standard deviation error	Standard deviation	mean	
		Maximum	minimum				
19	-0.428	0.06917	-0.10472	0.4154	0.18578	-0.01777	d

Table N The results of Wilcoxon test for index equity returns.

The mean of return on equity after privatization- the mean of return on equity before privatization	variable
0.296	Significance level

Table and the results of t-test of paired sample index of return on sale.

Significance level	Degree of freedom	t	GD pairs					
			Distance ensure %95		Standard deviation error	Standard deviation	mean	
			maximum	minimum				
0.136	19	-1.556	0.02862	-0.19463	0.05333	0.23850	-0.08301	d

Discussion and conclusion:

The first hypothesis of the study was about the impact of privatization on accounting earning quality of firms. In this study, the absolute value of the company between accruals and operating cash flow of the company, the company was determined as a measure for the quality of accounting earnings. As the results of first hypothesis which has been presented in 4th chapter, show the significant differences between the mean of average earning quality of firms. Since the average quality of accounting earnings in the period after privatization is less than the pre-privatization, it can be concluded that privatization of state companies in Iran will cause the reduction in quality of accounting earning of firms. This result is consistent with the results Jouykin Fingtin in 2009 that was conducted in China. Using this criterion to evaluate the performance of privatized firms in this study has been performed for the first time in Iran. By researching, it seems that it has been unique in foreign countries.

Regarding the fact that almost all of conducted studies about privatization of state firms have used indexes like profitability, liquidity, employment, using these indexes will make to have different approaches to the issue. It can be important for those researchers who in field of privatization. However, other indexes have been used in this study for better comparison.

Regarding the second hypothesis that is about the impacts of privatization on the profitability of firms, the criterion for profitability is considered as the most used indicator for evaluating the performance of privatized firms. The results of testing hypothesis for Indicators ROA, return on equity and return on sales show the non-significant of these tests. In another words, privatization does not have significant effect on profitability of firms. These results are consistent with both the study conducted by Heshmati and Tatahi with title of operational and financial performance of privatized companies in Sweden and study conducted in Hungary, Czech, Poland, Slovika by Aussenegg & Jelic in 2006 with title of operational performance of newly privatized firms in economies in transition in central Europe. But many other results of research in this area indicate the differences in profitability before and after privatization. However the results of other researches in this field represent differences in profitability of firms before and after the process of privatization like the research in the field of privatization conducted by Wolf in 2008 with the title of changing incentives of performance during the process of privatization in England and another conducted by Manooma and Tanko in 2008 with the title of factors improved performance for privatized companies in Nigeria.

REFERENCES

[1] David, T., Beito, Peter Gordon and Alexander Tabarrok (editors); foreword by Paul Johnson, 2002. *The voluntary city: choice, community, and civil society*. Ann Arbor: University of Michigan Press/The Independent Institute.

Advances in Environmental Biology, 8(21) October 2014, Pages: 1062-1067

[2] Bel, Germà, 2006. "The coining of `privatisation´and Germany's National Socialist Party", *Journal of Economic Perspectives*, 20(3): 187-194
[3] Clarke, Thomas (ed.), 1994. "International Privatisation: Strategies and Practices" Berlin and New York: Walter de Gruyter.
[4] Clarke, Thomas and Pitelis, Christos (eds.), 1995. "The Political Economy of Privatisation" London and New York: Routledge.
[5] Juliet D'Souza, William L. Megginson, 1999. "The Financial and Operating Performance of Privatised Firms during the 1990s", *Journal of Finance*.
[6] Von Hayek, Friedrich, 1960. *The Constitution of Liberty*.
[7] Roger, L., Kemp, PhD, 2007. "Privatization: The Provision of Public Services by the Private Sector," McFarland & Co., Jefferson, NC, USA; and London, UK.
[8] Kosar, R., Kevin, 2006. "Privatisation and the Federal Government: An Introduction", *Report from the Congressional Research Service*.
[9] Mayer, Florian, 2006. *Vom Niedergang des unternehmerisch tätigen Staates: Privatisierungspolitik in Großbritannien, Frankreich, Italien und Deutschland*, VS Verlag, Wiesbaden
[10] Megginson and Netter, 2001. From state to market: A survey of empirical studies on privatization, Journal of Economic Literature, 39(2): 321-89.