Does Privatization Affect Performance?

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Abstract

The ownership structure (Private or Public) has strong impact on firm's financial performance. Pakistan Telecommunication Limited (PTCL) was privatized in 2005. This research study investigates the impact of privatization on the company's financial performance and the performance of its stock. The variables "Net Profit Margin (NPM)", "Operating Profit Margin (OPM)", "Return on Assets (ROA)" and "Earnings per Share (EPS)" are used as proxies for financial performance. On the other hand, the variables "Average Share price (ASP)", "Volume of shares traded (Vol)", and "Number of Trades (NoT)" are used as proxies for performance of stock. The paired-samples t test for mean difference has been used for comparing the pre and post privatization performance. Results indicate negative but insignificant effect of privatization on return. On the other hand, the Average Share price, Volume of shares traded, and Number of Trades are positively and significantly affected. Analysis of the financial data shows decline in the net profit margin, operating profit margins, return on assets and earnings per share after the privatization; but the impact is insignificant for all the variables except the operating profit margin.

Keywords: Privatization, Financial performance, Stock performance.

Introduction

Telecommunication plays a vital role in the economic development of any country. The ownership structure (Private or Public) has strong impact on the firm financial performance. Pakistan Telecommunication Limited (PTCL) was privatized in 2005. Due to the privatization of

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PTCL overall financial performance and the share prices of the PTCL became volatile. This research study focuses on the dynamic aspects of privatization.

Background of the Study

As privatization is a global phenomenon, Eastern Europe and Russia have started moving their economies from state ownership to market based system in early 1990's. Such fundamental restructuring had not been attempted earlier. The current view of researchers regarding privatization is very authentic; they argue that privatization must take place before firms are restructured (Blanchard, Dornbusch, Krugman & Summers, 1991).

Two arguments support the fast restructuring. First, consultants consider that the rapid privatization enhances a political, social and economic problem which comes due to deficiency in management of corporate governance. Second, common motive of government is to generate revenue, and privatizing firms are the realistic system to raise funds (Lipton and Sachs, 1990). To bring private owners instead of state owners means effective and efficient economy and quickly dealing with the property rights (Roland, 1994). Newbery (1991) concluded that the major problem of privatization comes due to monopolies in the market; therefore, governments have to shatter the monopolies before privatization. According to Roland (1994) privatization is the slow and gradual process in to enhance political problems and possible backlash. Where as, Summers (1994) believes that due to ineffective rules and regulations of state-owned firms industries and institutional problems in the countries exist.

Privatization is the key factor that enables markets to work properly and appropriately. According to Megginson & Netter (2001) from last two decades most countries of the world shifted their firms from state ownership to privatization. In 1999 the revenue of privatization firms was $ 1 trillion around the globe.

Privatization leads to economic growth, increase in productivity, efficiency in utilization of resources and expansion in output and employment. The rational consumer take benefits from competition among private firms in the form of better quality services and low prices especially in banking, air travel and telecommunication sectors. Due to rigidity in our culture, Public Sector companies do not become flexible and more dynamic as compared to Private companies.

In mid 1980 the dramatic change was recorded in telecommunication sector. In early 1980 North American telecommunication companies were completely state owned and enjoying the monopoly. There was no isolate regulatory authority outside the ministry who observed that sector. According to the report of International Telecommunications Union (1999) in year 1999 total 90 companies around the globe privatized their telecommunication firms and 95 countries of the world reforms isolated regulatory authorities.

An over view of PTCL

In 1947, after independence, Pakistan had an insufficient telecom base. Only 14,000 land lines were there in whole country and only one department of Telephone and Post Telegraph. In 1962 these two departments were alienated as Postal department and Telephone and Telegraph Department (T&T). Pakistan started gradually enhancement in telecommunication sector in 1990.

The brief history of PTCL is as follows:

- Telegraph and Postal Department was established in 1947.
- Telephone and Telegraph Department was established in 1962.
- Pakistan Telecom Corporation was established in 1990-1991.
- PTCL was listed in the Karachi Stock Exchange in 1996.
- Internet and mobile subsidiaries was established in 1998.
- Policies of Telecom sectors were finalized in 2000.
- Deregulation policy of Telecom sector was announced in 2003.

Pakistan countenanced insignificant growth in telecommunication sector over the years because of state ownership and monopoly in the market.

Justification of the Study

As privatization study is one of the areas of interest for researchers, investors and government. Number of studies has been done on this topic. But this study has its own importance because it covers both the financial and the share market aspect. This study will be helpful for upcoming researchers in the field of privatization. The investors of stock market may also be the beneficiary of the study. The management of PTCL can also take the managerial decision according to the findings of this study.

Objectives of the Study

This research study aims to examine the effect of firm's privatization on the performance of the Pakistan Telecommunication Limited (PTCL). The objectives of the study are as follows.

a. To evaluate impact of privatization on the stock Prices and stock trading of PTCL.
b. To evaluate impact of privatization on the financial performance of PTCL.

Review of Literature

This section describes the different dimensions of privatization in the light of previous research studies on privatization and its impact on financial performances of telecom companies.

Wallsten (2001) in his research study concluded that there is no relationship between only privatization and improvement in telecommunication sector. The privatizations along with structuring new regulatory reforms are significant enough for enhancement in telecommunication sector.

Galal & Nauriyal (1995) evaluated the performance of telecom sector before and after regulatory reforms. They explored the issues of pricing, commitment, information and how countries become able to balance regulatory authority. They found all three issues achieved greatest improvement in Chile. Philippine also was not categorized in worst performance.

Megginson, Nash, & Randenborgh (1994) compared pre and post financial and operating performance of 61 firms from 32 industries of 18 different countries during the period 1961 to 1989. Their Findings suggest that output, profitability and operating efficiency of the sample companies have increased after privatization.

Boubarki and Cosset (1998) compared three years pre and three years post financial and operating performance of 79 firms from 21 developing countries. They concluded that financial and operating efficiency improves in the post privatization period.

D'Souza and Megginson (1999) compared performance of 78 companies during the period 1990 to 94. Their findings show improvement in the performance in the post-privatization period.

Verbrugge, Megginson and Lee (1999) conducted a study on 65 banks to evaluate their performance in pre and post privatization period. They found moderate improvement in the performance after privatization.

Beck, Cull and Jerome (2003) conducted a study to evaluate impact of privatization on performance of banks. He used an unbalanced panel of 69 banks. Annual data for the time period 1990 to 2001 was used. Findings suggest positive impact of privatization on efficiency.

Hill & Abdala (1996) concluded that the risk factor plays an important role at the time of bidding of the firm that is going to be privatized. Investors face fewer uncertainties if regulatory structure is placed at the time of privatization of the firm, so investors are willing to pay more for the firms.

Some research studies found average performance after reforms. Where as, some studies found positive effect of reforms. Privatization gives significant and greater benefits to the industries. Monopoly provider faces less incentive to enhance services. Many countries around the world privatized their telecom firms with agility and build up regulatory capacity more gradually (Kikeri, John & Shirley, 1992; Wellenius, 1992).

Ambrose, Hennemeyer & Chapon (1990) concluded that competition is the major source of improvements in any sectors. The researcher also noted that the moving monopoly from state ownership to privatization will not result in competitive behaviour. Study further demonstrated that privatization affects both performance and price the investor are willing to pay.

Research Methodology

The study basically focuses on the impact of Privatization on the financial performance of PTCL and the performance of its stock in Karachi stock exchange.

Description of the Data

The daily stock data has been used in this study which has been collected from online database of Business Recorder. Collected data is based on two years before and after Privatization (1st January 2003 to 31st December 2006). For measuring the financial performance, financial data for five year pre and 5 year post privatization period (2000 to 2009) has been collected from the annual reports of PTCL.

Variables and Statistical Techniques

For measuring the stock performance four different variables have been used, namely

i). Average Share Price (ASP)
ii). Stock return (SR) i.e., per day stock return
iii). Volume of Stock (Vol) for evaluating the difference of trade volume
iv). No. of Trades (NOT) per day

For calculating the Stock Return the following equation has been used.

$$R_t = Ln(P_t / P_{t-1})$$

Where R_t = is the return of stock or any particular day
P_t is the stock price of current day
P_{t-1} is the stock price of the previous day.

For measuring financial performance the following four variables have been used:

i). Operating Profit Margin (OPM)

ii). Net Profit Margin (NPM)
iii). Return On Equity (ROE)
iv). Earnings per share (EPS)

The data is divided into two samples, where one sample consists of pre privatisation data and the other one consists of post privatization data. The data has been tested by using the paired-samples t test for mean difference. This test explains volatility and significance of the variables, with the assumptions that the distribution of the variable is normal and that the variance of the variable is same in both set of populations. The test statistic is given by

$$t = \frac{\bar{d}}{S_d \sqrt{n}}$$

(Chaudry & Kamal, 2004), Where,

$\bar{d}$ is sample mean difference.
n is number of sample difference
and S_d is the standard deviation of d
Formulas for $\bar{d}$, S_d and $S_{\bar{d}}$ are :

$$\bar{d} = \frac{\sum \bar{d}_1}{n}$$

$$S_d = \sqrt{\frac{\sum (d - \bar{d}_i)^2}{n-1}}$$

Analysis and Findings

Pre & Post Privatization Analysis of PTCL Stock

Table-1 Paired Samples Statistics for variable ASP

	Mean	N	Std. Deviation	Std. Error Mean	t	Sig.
ASP-Pre	35.77	494	7.2	0.32	33.25	0.00*
ASP-Post	55.13	494	10.61	0.48		

* *Value is significant at 0.05*

The results of Paired-samples t test for the variable ASP are summarized in the table1. ASP of PTCL stock before privatization was recorded as

35.77 and after privatization 55.13. It shows that the average share price of PTCL has increased after privatization. Standard deviation is higher in the post privatization period as compared to pre privatization years which indicates that stock price has become more volatile after privatization. The significant value is 0.00 which indicates that significant change has been observed in the ASP of PTCL after privatization. These results complement the findings of Megginson, Nash & Randenborgh (1994).

Table-2 Paired Samples Statistics for variable SR

	Mean	N	Std. Deviation	Std. Error Mean	T	Sig.
SR-Pre	0.0004	494	0.014	0.0006	-0.56	0.57*
SR-Post	-0.0002	494	0.019	0.0008		

* *Value is significant at 0.05*

Table 2 shows summary of result of Paired-samples t test for the variable stock return (SR). Mean value for the return is negative after privatization of PTCL (-0.0002) whereas, before privatization it was 0.0004. The value for the standard deviation is a bit higher for the post privatization period. The mean and standard deviation indicate that the average return has decreased after privatization; moreover, it has become more volatile as compared to the pre-privatization period. The significance level for this variable is 0.57 which is greater than the 0.05 which shows that statistically there is no significant difference in the stock return in pre and post privatization period. These results are almost same as finding of Galal & Nauriyal (1995).

Table-3 Paired Samples Statistics for variable Vol.

	Mean	N	Std. Deviation	Std. Error Mean	t	Sig.
Vol-Pre	12326.20	494	11906.26	535.68	5.14	0.00*
Vol-Post	21213.80	494	35907.23	1615.54		

* *Value is significant at 0.05*

In table 3 result of Paired-samples t test are summarized for the variable Vol. Mean volume of PTCL stock has increased after privatization. The standard deviation is higher in the post privatization period as compared to pre privatization period indicating increase in the volatility of volume after privatization. Whereas, the significant value is 0.00 which is less than 0.05 which indicates that significant change has been observed in the Volume of PTCL stock after privatization. Same results have been seen in Malaysia by Ibrahim (2003).

Table-4 Paired Samples Statistics for variable NoT

	Mean	N	Std. Deviation	Std. Error Mean	t	Sig.
NoT-Pre	2111.30	494	1503.94	67.67	9.27	0.00*
Not-Post	4363.02	494	5205.71	234.22		

* *Value is significant at 0.05*

Table 4 summarizes result of paired t test for the variable Number of trades. The mean value of the Number of trades is almost double in the post privatization. Whereas, the standard deviation for the number of trades is high in the post privatization period. P or significant value for the variable Number of Trades (NoT) is highly significant as it is less than .005 indicating that the number of trades per day is significantly affected due to privatization.

Pre & Post Privatization Analysis of PTCL Financial Performance

Table-5 Paired Samples Statistics for variable OPM

	Mean	N	Std. Deviation	Std. Error Mean	t	Sig.
OPM-Pre	48.67	5	3.87	1.73	3.43	0.027*
OPM-Post	29.26	5	9.29	4.15		

* *Value is significant at 0.05*

Table 5 shows summary of result of Paired-samples t test for the variable operating profit margin (OPM). Mean value of the OPM is lower in the post privatization period. On the other hand, standard deviation is higher in the post privatization period as compared to pre privatization period. It indicates that privatization has negative impact on the net profit margin; moreover, it has also become more volatile after privatization. Whereas, the significant value is less than 0.05 which indicates that significant change has been observed in the OPM after privatization.

Table-6 Paired Samples Statistics for variable NPM

	Mean	N	Std. Deviation	Std. Error Mean	T	Sig.
NPM-Pre	30.39	5	5.13	2.29	1.56	0.19*
NPM-Post	17.96	5	13.60	6.08		

Value is significant at 0.05

Table-7 Paired Samples Statistics for variable ROE

	Mean	N	Std. Deviation	Std. Error Mean	T	Sig.
ROE-Pre	26.82	5	3.61	1.61	2.28	0.09*
ROE-Post	13.38	5	10.83	4.84		

* *Value is significant at 0.05*

Table-8 Paired Samples Statistics for variable EPS

	Mean	N	Std. Deviation	Std. Error Mean	T	Sig.
EPS-Pre	3.29	5	1.72	0.77	0.35	0.74*
EPS-Post	2.72	5	2.22	0.99		

Value is significant at 0.05

Table 6, 7 and 8 shows summary of result of Paired-samples t test for the variable Net Profit Margin (OPM), Return on Equity (ROE), and Earning per Share (EPS) respectively. Results show that all of these three variables have declined after privatization, and have become more volatile. The significance value is greater than 0.05 which indicates that changes in these variables are not statistically significant.

Conclusions

Pakistan Telecommunication Ltd (PTCL) the largest telecom company in Pakistan was privatized in 2005. The privatization has affected the financial and operational performance of the company. This research focuses on the impact of privatization on PTCL. To achieve this objective, the financial performance of PTCL and performance of PTCL common stock has been analyzed before and after privatization, using Paired-samples t test for mean differences. Findings suggest that there is a significant effect of privatization on the average share prices, volume and number of trades. This effect is being found positive as well. But the stock returns are not significantly affected from the privatization. Analysis of the financial data shows decline in the financial performance of the company after privatization measured by operating profit margin, net profit margin, return on equity and earnings per share ratio. These entire four variables show decline in the post privatization period but the change is significant only in the variable operating profit margin (OPM). Hence we can conclude that privatization of PTCL has not been found analytically favourable from the investors' point of view.

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