Abstract
The scope of present study is comparison of the profitability of Khorasan Razavi Telecommunications Company, Iran after privatization with years before it. The scope of study in terms of time: Financial ratios of three years from October 2006 to September 2009 from the period before transferring (privatization) and financial ratios of three years from October 2009 to September 2012 from the period after transferring (privatization) have been selected for review and analysis. Information and data needed for present research has been gathered through the study of financial statements of Khorasan Razavi Telecommunication Company. Descriptive method was used to conclude the research hypotheses, and parametric T-test (paired comparison) was used to analyze information after ensuring normal distribution of the data using the "Kolmogorov - Smirnov" test in order to determine the difference between the average of both samples. The results have indicated significant difference in the ratio of gross profit to sales and no difference in the ratio of average total assets of Khorasan Razavi Telecommunication Company after privatization.

Keywords: Privatization, Telecommunication, Corporate Performance, Profitability Ratios
INTRODUCTION

Communication is the most important factor in social, economic and cultural development. Undoubtedly, those communities will have better conditions that always try to acquire information about the issues and various events in different regions of the world using several means of communication. Hence, we can say that, in the present era, communication development has led the telecommunications industry undertake a variety of tasks in order to support growth of financial development. However, this industry is faced with increasing growth of business environment in the recent millennium. The dominant impact of global competition has forced telecommunication companies to evaluate their financial performance (Loomis and Taylor, 2001, p.123).

Generally, while the evidence suggests that privatization is followed by faster growth of Fixed telephone lines, higher increase profitability and productivity, the results on the price, the absolute effects of employment and physical investment is less clear. What most studies do agree on is that the effects of privatization cannot be easily separated from effects of compete reforms, changes in market structure and the role of regulatory regime after privatization. These effects altogether can overcome the effects of privatization.

THEORETICAL CONCEPTS

Iranian Telecommunication Company made also some changes in its own organizational structure in early 1996 in line with the policy of decentralization and decreasing monopoly that resulted in elimination of headquarters and establishing regional - provincial - telecommunications companies. It was decided that it continue to operate on the basis of market mechanisms and practice procedures of private sector companies (Chegini and Zare, 2010).

After imparting the law of the policies of Principle 44 of assigning of companies, Iranian Telecommunication Company was among companies included in Principle 44 of the Constitution. Beginning of privatization processes and procedures in Iran on September 27, 2009 became a turning point for enforcing the mentioned law.

This means that, having had public investment for its own establishment and development for about fifty years, Iranian Telecommunication Company was finally sold in Tehran Exchange. The intended base price for the 50 percent plus one share of the company was approximately 8 billion dollars that was considered a high-digit figure for the sale of a public company in the Middle East and Asia. But what caused this event to be called a turning point was the feature of stock buyers. It was a consortium of three companies owned by public and specific institutions were the buyers of the stocks of Telecommunications Company, and private
sector had no part in this transaction (Karafarin, 72, 2009). The stocks assignment was taken place as 51% Tose’e Etemad Mobin Corporation, 5% staff preferred shares, 5% price discovery shares, 20% government ownership, and 19% through assigning Justice Shares.

Under Principle of Constitution and enforcement of the law of Article 7 amendment of the law of establishment of Iranian Telecommunication Company enacted on April 26, 1994, Telecommunication Company of Khorasan was established in January 31, 1996, and was registered in Real Estate headquarter of Khorasan on Registration No. 21675 dated on August 14, 2004. Damages arising out of claims which relates to years prior to the date of admission of the shares of Telecommunication Company in Exchange and has not been declared will be funded by the government.

Therefore, financial ratio analysis is not only a means for people outside the company, but also it can be used as a management tool so that the senior management of company can be aware of the impact of assignment of shares to the private sector and will benefit from it in the planning.

Hence, in present study we sought to answer the question whether is there any difference between the profitability ratio of Telecommunication Company of Khorasan Razavi in the years after privatization and the years before that.

**RESEARCH BACKGROUND**

Moeini (1995) investigated the relationship between the type of ownership (public or private) and profitability of Exchange companies in 1992-1994, and the results suggested the lack of relationship between profitability ratios and activity and ownership kind.

The study by Mohammad Haider Saleteh on the effect of privatization on stock returns of the privatized companies during the three years before and six years later didn’t suggest positive changes of this process on stock returns of the privatized companies.

Goudarzvand Chegini and Mirzad Zare (2010) investigated the effects of assignment (privatization) on performance of Telecommunication Company of Gilan between 1991 to 1995 before the assignment and 1997 to 2001 after the assignment. And they concluded that there is a significant difference between ratios of liquidity and financial leverage after privatization than before it. Also there is no significant difference between ratios of activity and profitability after privatization than before it.

Bortolotti et al. (2000) investigated on profitability, operational efficiency and investment criteria in the three years before and after privatization, and the findings from this study indicate improvements in the mentioned criteria, and also improvement of profitability mainly results from
reduced cost rather than increased prices, and increased efficiency is due to improvement in the motivation of the personnel.

Ramamurti studied 118 companies from 29 developing and developed countries in terms of financial and operational (efficiency) performance. In this study, the profitability index (operating income on sales, return on sales, return on assets, return on capital), performance index (the ratio of actual sales per employee), and investment index (capital costs to sales and capital costs to total assets) in the three years before and after privatization have been investigated. The results also showed significant improvement in all countries.

Omran (2003) studied on privatization and examined the impact of ownership structure on performance of transferred companies to determine what type of ownership would have a positive effect on performance in the period after transference. He analyzed financial data of two years before and after the transference. The results suggested a significant improvement in profitability, operational efficiency and dividends and a significant decrease in the level of employment debt and risk. Generally, the results showed a significant improvement. It has also observed that the companies transferred to particular staffs and individuals showed better performance compared to the companies transferred through the exchange.

Cosset and Boubakeri (1998) have investigated on whether performing privatization policy in developing countries has been favorable and whether it has led to improved performance, particularly to profitability. They have concluded that profitability of companies would increase by privatizing them.

Wallsten (2001) reviewed the effects of privatizing competition on telecommunications performance in 30 African and Latin American countries from 1984 to 1997. He found that competition is dramatically associated with increased influence of main lines, communication capacity, influence of public telephone, and lower costs for local calls. Although privatization alone relates to negligible benefits, it has a negative correlation with telecommunications capacity.

In the most comprehensive study, the same method has been used to compare the operational and financial performance before and after privatization of a number of privatized companies through public offer of shares in the developing and developed countries during a period of more than three years. All these studies have produced similar results.

Mathur and Banchuenvijit (2007) selected about 103 companies throughout the world and examined their profitability, productivity, and employment. The results indicate a significant increase in profitability, efficiency, increased productivity, increased capital and reduced debt and employment in these companies.
RESEARCH METHODOLOGY
The present study used a descriptive research design. And gathered data include the information on financial ratios of Telecommunication Company of Khorasan Razavi during 2006 to 2012.

After collecting and extracting required data from financial statements Telecommunication Company of Khorasan Razavi (Corporation) and ensuring the normal distribution of data, the comparison of mean values has been studied by Paired Samples T-Test and Kolmogorov - Smirnov (k-S) Test. T-Test is the most common and yet most commonly used statistical tool used in the research analysis, that can be performed using causal-comparative method. The reason is to apply low-volume research samples that are used due to savings in time and cost (Arkin, 1998).

According to the proposed theoretical basics, a research hypothesis is presented as follows: Comparison of profitability ratios of Telecommunication Company of Khorasan Razavi in the years after privatization has been different from the years before privatization.

Population and Sampling
The sample population in this research is Iranian Telecommunication Company, and the Telecommunication Company of Khorasan Razavi was studied and analyzed as a perfect sample of holding company.

Scope of present study was to compare the ratio of liquidity in the area of financial management and subset of Telecommunication Company of Khorasan Razavi before and after privatization.

Time scope of study was selected to examine and analyze as financial ratios of three years from October 2006 to September 2009 from the period before transference (privatization) and financial ratios of three years from October 2009 to September 2012 from the period after transference (privatization).

Spatial scope of study is limited to geographical location of Iran and one of listed companies in Tehran Stock Exchange, namely Iranian Telecommunication Company.

ANALYSIS
Descriptive Statistics of Variables
Using tests appropriate to the adopted method also helps to ensure more accuracy and validity of results. This section is allocated to report the findings, test results and analysis. To select the test method for testing hypotheses, we perform Kolmogorov – Smirnov Test for test variables at first. If variables are accepted to be normal, we will use parametric tests to test hypotheses d to
compare paired proportions. The following table shows the results of the KS test. Accordingly, all the variables are normal.

Table 1: Results of K-S Test

<table>
<thead>
<tr>
<th>Tests</th>
<th>Ratio of profit to mean assets</th>
<th>Ratio of gross margin to sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>0/021</td>
<td>0/222</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0/013</td>
<td>0/132</td>
</tr>
<tr>
<td>K-S</td>
<td>0/837</td>
<td>0/679</td>
</tr>
<tr>
<td>P-value</td>
<td>0/485</td>
<td>0/746</td>
</tr>
</tbody>
</table>

**Testing the Hypothesis**

"The profitability ratio of Telecommunications Company of Khorasan Razavi in the years after the privatization is different from the years before the privatization."

To test the above hypothesis, we performed pair-sample T-Test for variables of gross margin to mean assets ratio and the gross margin to sales ratio. That means that we test the following two hypotheses:

1. There is difference between the ratios of gross margin to mean total assets of Telecommunication Company of Khorasan Razavi during the years after privatization and the years before privatization.
2. There is difference between the ratios of gross margin to sales of Telecommunication Company of Khorasan Razavi during the years after privatization and the years before privatization.

**Hypothesis 1**

The following chart shows the gross margin to mean assets ratio process during the years before and after privatization.

![Figure 1: Ratio of Return on Assets](image)
In other words, the following hypothesis is tested:

\[ H_0: \mu_1 = \mu_2 \]

\[ H_1: \mu_1 \neq \mu_2 \]

Where \( \mu_1 \) is the average ratio of gross margin to mean assets before privatization and \( \mu_2 \) is the average ratio of gross margin to mean assets after privatization.

This hypothesis can be rewritten as follow:

\( H_0: \) there is no difference between the ratios of gross margin to mean total assets of Telecommunication Company of Khorasan Razavi during the years after privatization and the years before privatization.

\( H_1: \) there is difference between the ratios of gross margin to sales of Telecommunication Company of Khorasan Razavi during the years after privatization and the years before privatization.

The following tables show the test results for profitability ratios in Telecommunications Company of Khorasan Razavi before and after privatization.

Table 2: Index of Ratio Difference of Return on Assets (ROA) in the Years before and after Privatization

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Average</th>
<th>Standard Deviation</th>
<th>Average Standard Error</th>
<th>Confidence coefficient of 95% for difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>(ROA)</td>
<td>0/00417</td>
<td>0/01564</td>
<td>0/00452</td>
<td>0/00577</td>
</tr>
</tbody>
</table>

Table 3: Paired-Sample T-Test Results of Return on Assets (ROA) for Two Samples during the Years before and after privatization

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Average</th>
<th>SD</th>
<th>T</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>0/0233</td>
<td>0/013</td>
<td>0/923</td>
<td>0/376</td>
</tr>
<tr>
<td>Public</td>
<td>0/0192</td>
<td>0/0138</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the above test, probability value is higher than 0.05 and the \( H_0 \) are not rejected and it can be said that "There is no difference between the ratios of gross margin to average assets of Telecommunication Company of Khorasan Razavi during the years after privatization and the years before privatization."
**Hypothesis 2:**
The following chart shows the gross margin to sales ratio process during the years before and after privatization.

![Chart 2: Ratio of Gross Margin Process](image)

In other words, the following hypothesis is tested:

\[ H_0: \mu_1 = \mu_2 \]

\[ H_1: \mu_1 \neq \mu_2 \]

where \( \mu_1 \) the average ratio of gross profit to net sales before privatization and \( \mu_2 \) the average ratio of gross gross to net sales after privatization.

This hypothesis can be rewritten as follow:

\( H_0: \) there is no difference between the ratios of gross margin to sales of Telecommunication Company of Khorasan Razavi during the years after privatization and the years before privatization.

\( H_1: \) there is difference between the ratios of gross margin to sales of Telecommunication Company of Khorasan Razavi during the years after privatization and the years before privatization.

The following tables show the test results for the gross margin to net sales ratio in the Telecommunications Company of Khorasan Razavi before and after the privatization.
Table 4: Index of Ratio Difference of Gross Margin in the Years before and after Privatization

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Average</th>
<th>Standard Deviation</th>
<th>Average Standard Error</th>
<th>Confidence coefficient of 95% for difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>gross margin to net sales</td>
<td>-0/13167</td>
<td>0/9953</td>
<td>0/02873</td>
<td>-0/06843</td>
</tr>
<tr>
<td>ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5: Paired-Sample T-Test results for Gross Margin of two samples during the Years before and after Privatization

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Average</th>
<th>SD</th>
<th>T</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>0/1558</td>
<td>0/1167</td>
<td>-4/583</td>
<td>0/001</td>
</tr>
<tr>
<td>Public</td>
<td>0/2875</td>
<td>0/1152</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the above test, probability value is less than 0.05 and the H₀ is rejected and it can be said that "There is difference between the ratios of gross margin to sales of Telecommunication Company of Khorasan Razavi during the years after privatization and the years before privatization."

CONCLUSION

This study examined the profitability ratio of the Telecommunication Company of Khorasan Razavi before and after privatization. The results of this study are as follows:

Results indicate increased ratio of total assets efficiency and decreased ratio of gross margin to sales of the Company. To improve this ratio, the company assets may be used more efficiently and full capacity of the assets (investment) can be used. The sales can be increased by using appropriate marketing mix.

The results of this research are consistent with the results of Goudarzvand and Zare (2010) but are not consistent with the results of Shushinsky and Louise Koloa (1998), and Mc Quria and Ziverita (1996).

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