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Financial Performance of Public and Private telecommunication sector in India

Dr. Pooja Gulati
Assistant Professor,
Department of Commerce,
GVMGC, India.

Abstract: This study is associated with the empirical investigation related to the study and comparison of the financial performance of private and public telecommunication sectors. Financial performance can be studied in many ways, but the current study uses "Ratio analysis". Various ratios are extracted from the related literature review available. The ROL lists important ratios that can provide an understanding of the financial performance of both private and public telecom sectors. Moreover, the researcher also studied two more indicators of financial performance which were selected after doing in-depth interviews, and informal discussions with key personalities working at the topmost positions in the telecommunication sector.

Keywords: Financial performance, ratios, telecommunication sector.

Financial Performance Indicators (Sorted from Review of Literature)

Financial Performance refers to the degree to which financial aims have been accomplished or achieved. It is related to the measurement of a firm's financial performance indicators. Measurement of Financial performance indicators is the key to building a better financial position. One can measure financial performance with the help of financial statement analysis. It is the process of evaluating or measuring the firm's performance and its suitability. The hypothesis for the paper is as follows:

HYPOTHESIS$_1$: There was no significant difference found between the mean of the current ratio of the private and public telecom sectors.

HYPOTHESIS$_2$: There was no significant difference found between the mean of the quick ratio of private and public telecom sectors.

HYPOTHESIS$_3$: There was no significant difference found between the mean of debt-equity ratio of private and public telecom sectors.

HYPOTHESIS$_4$: There was no significant difference found between the mean operating profit margin ratio of private and public telecom sectors.

HYPOTHESIS$_5$: There was no significant difference found between the mean of return on capital employed by private and public telecom sectors.

HYPOTHESIS$_6$: There was no significant difference found between the mean of return on equity of private and public telecom sectors.

HYPOTHESIS7: There was no significant difference found between the mean of return on assets of private and public telecom sector.

HYPOTHESIS8: There was no significant difference found between the mean of gross revenue of private and public telecom sector.

Hypothesis1: There was no significant difference found between the mean of current ratio of private and public telecom sector: First, the descriptive summary of the current ratio of private and public telco sector is studied. The collected data of private and public telecom sector of telecommunication comprises six companies in total. The public sector includes only one company i.e. BSNL (Bhartiya Sanchar Nigam Limited) and the private sector includes five corporations such as Idea Cellular, Bharti Airtel, Vodafone group, Tata Teleservices & Reliance communications. The data is collected for the CURRENT RATIO for the period of nine years.

Table 1: Sector Wise Statistics of Current Ratio

S.NO.	NAME OF THE SECTOR	COUNT	MEAN	STD. DEV.
1	PUBLIC SECTOR	9	1.27	0.47
2	PRIVATE SECTOR	45	0.41	0.21
	N	54	0.55	0.42

(**Source**: Researcher's Calculations through E-Views)

The above table shows that there are unequal samples in both sectors. The public sector count i.e. 9 and private sector count i.e. 45 which reflect that there are unequal variances in the samples. Moreover, the table reflects that public sector has better mean (1.27) then private sector mean (0.47).In comparative terms, the table confirms that private sector position is not as good in terms of paying short term liabilities or obligations on time then public sector. *Hence, the results concluded that public-sector short-term solvency position is better than private sector.*

Hypothesis2: There was no significant difference found between the mean of quick ratio of private and public telecom sector: Before testing hypothesis2, the summary of descriptives of the quick ratio of private and public telecom-sector is studied. The collected data of private and public telecom sector of telecommunication comprises six companies in total. The public sector includes only one company i.e. BSNL (Bhartiya Sanchar Nigam Limited) and the private sector includes five companies namely, Bharti Airtel, Idea Cellular, Vodafone group, Tata teleservices & Reliance communications. The data is collected for the CURRENT RATIO for the period of nine years. The descriptives category wise or sector wise summary of the private and public telecom sector for the financial performance indicator i.e. quick ratio is explained in table given below:

Table 2: Category or Sector Wise Statistics of Quick Ratio

S.NO.	NAME OF THE SECTOR	COUNT	MEAN	STD. DEVIATION
1	PUBLIC SECTOR	9	1.12	0.47
2	PRIVATE SECTOR	45	0.37	0.21
	N	54	0.50	0.38

(***Source:** Researcher's Calculations through E-Views*)

The above table shows the public sector observations i.e. 9 and private sector observations i.e. 45 which reflect that there is inequality in the samples. The table reflects that public sector has better mean (1.12) then private sector mean (0.37).In comparative terms, the table confirms that private sector position is not good in terms of paying short-term liabilities or obligations within a month or immediately. *Hence, it can be concluded that public-sector short-term solvency position is better than private sector.*

Hypothesis3: There was no significant difference found between the mean of debt equity ratio of the private and public telecom sectors: Before testing hypothesis 3, the summary of descriptives for the debt-equity ratio of the public-private telecom sector is studied. Data consists of the private and public telecom sectors of telecommunication comprising six companies in total. The public sector includes only one company i.e. BSNL (Bhartiya Sanchar Nigam Limited) and the private

sector includes five companies namely, Bharti Airtel, Idea Cellular, Vodafone group, Tata Teleservices & Reliance comm. The data is collected for the DEBT-EQUITY RATIO for nine years.

Table 3: Category or Sector Wise Statistics of Debt Equity Ratio

S.NO.	NAME OF THE SECTOR	COUNT	MEAN	STD. DEVIATION
1	PUBLIC SECTOR	9	0.17	0.07
2	PRIVATE SECTOR	45	1.28	1.34
	N	54	1.10	1.29

The above table shows the public sector observations i.e. 9 and private sector observations i.e. 45 which reflect that there is inequality in the samples. The table reflects that private sector mean (1.28) and public sector means (0.17). Both sectors are showing lower debt equity ratio than ideal ratio of 2:1, the lesser this ratio, the better it is for the long term lenders. Lower ratio means long term debts are lesser than shareholder funds. The lesser ratio provides sufficient protection to long term lenders.In comparative terms, the table confirms that public sector position ability to pay long term lenders is better than private sector. *Hence, the results concluded that public sector long term solvency or capitalstructure is sound better than private sector.*

Hypothesis$_4$: There was no significant difference found between the mean of operating profit margin ratio of private and public telecom sector: Before testing hypothesis 4, the descriptive summary of the operating profit margin ratio of public & private telecom sector is studied. The data consists of public & private sector of telecommunication comprises six companies in total.The public sector includes only one company i.e. BSNL (Bhartiya Sanchar Nigam Limited) and the private sector includes 5 companies namely; Bharti Airtel, Idea Cellular, Vodafone group, Tata Teleservices & Reliance comm.. The data is collected for the OPM (%) for the time period of nine years.The descriptives category wise or sector wise summary of the private and public telecom sector for the financial performance indicator i.e. operating profit margin ratio is explained in table given below:

Table 4: Sector Wise Statistics of Operating Profit Margin Ratio

S.NO.	NAME OF THE SECTOR	COUNT	MEAN	STD. DEVIATION
1	PUBLIC SECTOR	9	3.14	10.53
2	PRIVATE SECTOR	45	19.77	19.92
	N	54	17.00	19.63

(*Source*Researcher'sCalculations through E-views)

The above table shows the public sector observations i.e. 9 and private sector observations i.e. 45 which reflect that there is inequality in the samples. The table reflects average of operating profit margin of private sector (19.77) and public sector (3.14). The figures show that private sector business operations are strong and profitable than public sector operations.In comparative terms, the table confirms that public sector is left with lesser proportion of profit after making payments of non-operating costs than private sector. *Hence, it can be concluded that privatesector is sound than public sector, when profits are concerned.*

Hypothesis$_5$: There was no significant difference found between the mean of return on capital employed of private and public telecom sector: Before testing hypothesis 5, the descriptive summary of the ROCE ratio of public and private telecom sector is studied. The data consists of public and private telecom companies.The public sector includes only one company i.e. BSNL (Bhartiya Sanchar Nigam Limited) and the private sector includes 5 companies namely; Bharti Airtel, Idea Cellular, Vodafone group, Tata Teleservices & Reliance comm.. The data is collected for the RETURN ON CAPITAL EMPLOYED for the time period of nine years.The descriptives category wise or sector wise summary of the private and public telecom sector for the financial performance indicator i.e. ROCE (%) ratio is explained in table given below:

Table 5: Sector Wise Statistics of Return on Capital Employed

S.NO.	NAME OF THE SECTOR	COUNT	MEAN	STD. DEVIATION
1	PUBLIC SECTOR	9	-8.73	4.82
2	PRIVATE SECTOR	45	-0.39	11.03
	N	54	-1.78	10.70

(*Source:Researcher'sCalculations through E-views*)

The above table shows the public sector observations i.e. 9 and private sector observations i.e. 45 which reflect that there is inequality in the samples. The table reflects average of return on capital employed of private sector (-0.39) and public sector (-8.73).The mean figures of both private and public telecom sector is in minus or negative which reflects that both sectors indicated bad borrowing policy i.e. its earnings are less than its borrowing rate. *In comparativeterms, the results are concluded that private sector was showing better deployment of funds than public sector.*

Hypothesis[6]: There was no significant difference found between the mean of return on equity of private and public telecom sector: Before testing hypothesis 6, the descriptive summary of the return on equity of public & private telecom sector is studied. The data consists of public & private sector of telecommunication comprises six companies in total. The public sector includes only one company i.e. BSNL (Bhartiya Sanchar Nigam Limited) and the private sector includes 5 companies namely; Bharti Airtel, Idea Cellular, Vodafone group, Tata Teleservices & Reliance comm.

Table 6: Category or Sector Wise Statistics of Return on Equity

S.NO.	NAME OF THE SECTOR	COUNT	MEAN	STD. DEVIATION
1	PUBLIC SECTOR	9	-10.43	6.06
2	PRIVATE SECTOR	45	-19.04	130.08
	N	54	-17.61	119.25

(*Source: Researcher'sCalculations through E-views*)

The above table shows the public sector observations i.e. 9 and private sector observations i.e. 45 which reflect that there is inequality in the samples. The table reflects average return on equity of private sector (19.04) and public sector (-10.43).The mean figures of both private and public telecom sector are in minus or negative which reflects that both sectors indicated lesser return to shareholders meaning by both sector shows incapability in declaring dividend and no reserves creation for future growth.

Hypothesis[7]: There was no significant difference found between the mean of return on assets of private and public telecom sector: Before testing hypothesis 7, the descriptive summary of the return on assets ratio of public & private telecom sector is studied. The data consists of public & private sector of telecommunication comprises six companies in total. The public sector includes only one company i.e. BSNL(Bhartiya Sanchar Nigam Limited) and the private sector includes 5 companies namely; Bharti Airtel, Idea Cellular, Vodafone group, Tata Teleservices & Reliance comm.. The data is collected for the ROA (%) for the time period of nine years.

The descriptives category wise or sector wise summary of the private and public telecom sector for the financial performance indicator i.e. ROA (%) ratio is explained in table given below:

Table 7: Category or Sector Wise Statistics of Return on Assets

S.NO.	NAME OF THE SECTOR	COUNT	MEAN	STD. DEVIATION
1	PUBLIC SECTOR	9	-5.53	2.90
2	PRIVATE SECTOR	45	-0.083	8.34
	N	54	-0.85	7.96

***Source** Researcher'sCalculations through E- views*)

The above table shows the public sector observations i.e. 9 and private sector observations i.e. 45 which reflect that there is inequality in the samples. The table reflects average return on assets of private sector (-5.53) and public sector (-0.083).The mean figures of both private and public telecom sector is in minus or negative which reflects that both sectors indicated the unfavourable signal that the business is not using and managing its assets properly and efficiently in order to increase earnings or net income.

Hypothesis$_8$: There was no significant difference found between the mean of gross revenue of private and public telecom sector: Before testing hypothesis 8, the descriptive summary of the gross revenue earned by public & private telecom sector is studied. The data consists of public & private sector of telecommunication comprises six companies in total. The public sector includes only one company i.e. BSNL(Bhartiya Sanchar Nigam Limited) and the private sector includes 5 companies namely; Bharti Airtel, Idea Cellular, Vodafone group, Tata Teleservices & Reliance comm.. The data is collected for the gross revenue for the time period of nine years. The descriptives category wise or sector wise summary of the private and public telecom sector for the financial performance indicator i.e. gross revenue is explained in table given below.

Table 8: Category or Sector Wise Statistics of Gross Revenue

S.NO.	NAME OF THE SECTOR	COUNT	MEAN	STD. DEVIATION
1	PUBLIC SECTOR	9	2385.75	408.71
2	PRIVATE SECTOR	45	6673.95	4268.53
	N	54	5959.25	4213.51

(Source: Researcher'sCalculations through E-views)

The above table shows that there are unequal samples in both sectors. The public sector count i.e. 9 and private sector count i.e. 45 which reflect that there are unequal variances in the samples. Moreover, the table reflects that private sector has mean (6673.95) and public sector mean (2385.75).

In comparative terms, the table confirms that private sector is earning more revenue good than public sector. *Hence, the results are concluded that private sector revenue making capacity is better than privatesector.*

Various performance indicators considered are as follows: Current ratio (C.R.), Quick ratio (Q.R.), Debt to Equity ratio (D/E), Operating Profit Margin ratio (O.P.M.), Return on capital employed (R.O.C.E.), Return on equity (R.O.E.), Return on Assets (R.O.A.), Gross revenue (G.R.) and Adjusted Gross revenue (A.G.R.).The information regarding these financial performance indicators was scanned and collected from the PROWESSIQ cmie database; official website of related companies; TRAI and money control website to get an overview of overall telecom industry. The Secondary sources were considered as a sampling frame for the study. The relevant information was extracted for public and private sector of telecommunication industry for the time period of nine years i.e. from 2009-10 to 2017-18.

The following important findings were summarized as follows:

s.no.	Financial Performance Indicators	Result 1 (Who is a good performer?)	
1.	Liquidity Ratios		
	Current Ratio (in times)	Public sector	
	Quick Ratio (in times)	Public sector	
2.	Solvency Ratio		
	Debt to Equity Ratio (in times)	Public sector	
3.	Profitabiltity Ratio		
	Return to Capital Employed (%)	Private Sector	
	Operating Profit margin (%)	Private Sector	
4.	Revenue Performance		
	Gross Revenue(in Crore)	Private sector	

* means result 1 on the basis of descriptive statistics

To conclude, following hypothesis are found to be accepted or rejected in context of financial performance indicators of public and private telecommunication sector in India.

- Hypothesis$_1$: **H$_o$Rejected:** There existed significant differences between the mean of current ratio of private and public telecom sector.

- Hypothesis $_2$: **H$_o$Rejected:** There existed significant differences between the mean of quick ratio of private and public telecom sector.

- Hypothesis$_3$**: H$_o$Rejected:** There existed significant differences between the mean of debt equity ratio of private and public telecom sector.

- Hypothesis$_4$: **H$_o$Rejected:** There existed significant differences between the mean of operating profit margin ratio of private and public telecom sector.

- Hypothesis$_5$: **H$_o$Rejected:** There existed significant differences between the mean of return on capital employed of private and public telecom sector.

- Hypothesis$_6$: **H$_o$Accepted**: There were no significant differences found between the mean of return on equity of private and public telecom sector.

- Hypothesis$_7$: **H$_o$Accepted:** There were no significant differences found between the mean of return on assets of private and public telecom sector.

- Hypothesis$_8$: **H$_o$Rejected:** There existed significant differences between the mean of gross revenue of private and public telecom sector.

- Hypothesis$_9$**: H$_o$Rejected:** There existed significant differences between the mean of adjusted gross revenue of private and public telecom sector.

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