Nexus between Sporting Performance and Financial Performance in Indian Premier League

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Abstract: *The Indian Premier League, which is India's biggest league, is also one of the world's twenty richest leagues in other sports. Many studies have attempted to find out the economic side of sports clubs in across the world. In this study, the researchers have made an attempt to trace the nexus between sporting performance in terms of team winning status, rank of teams in editions and stadium capacity whereas the nine financial parameters have identified for financial performance of teams. The study has considered three franchises viz., Royal Challengers Bengaluru, Mumbai Indians and Delhi Daredevils out of eight franchises due to availability of data. The data has extracted from the annual reports of the franchises. The period considered for this study is five years i.e, from 2013-18. Descriptive statistics and Pearson's correlation co-efficient have applied for the data. It is found from the analysis that sporting success and turnover increase and stadium capacity and liquidity has statistically significant relationship among the other variables.*
Key words : *Sporting Performance, Financial Performance, Correlation, Leagues*

I.   Introduction

Professional Twenty20 (T20) cricket league in India have initiated by the Board of Control for Cricket in India (BCCI) in the year 2008 and named as Indian Premier League (IPL). The format of the game is round-robin for league stage matches and knockout for semi-finals, eliminator and finals. The league have teams in major Indian cities such as Delhi, Mumbai, Kolkata, Chennai, Hyderabad, Punjab, Bangalore and Rajasthan.

As per the data published by the BCCI, the premier league has been contributing to a chunk of Rupees 11.5 billion to the nation's economy every year. Surprisingly, every year the economic output generated by the premier league through ticket sales and advertisement revenue stood at Rupees 26.5 billion. It was also amazed to note that when the league matches played in UAE during 2014 due to general elections, the edition had given Dhs275 million to the UAE economy. In the year 2009, the IPL matches conducted at South Africa have boosted their economy through ticket sales, food, hospitality and transport. From the above data one could easily understood that IPL has been adding wealth to the nation by employment generation, tourism and media development.

As the league has been delivering monetarily for the franchisees, cricket board, players and for the country, the researchers have made an attempt to find out the nexus between sporting performance and financial performance of the league. The paper organised as follows; Chapter 1 deals with Introduction, Chapter 2 reviews the existing literature about the relationship between financial and sporting performance , Chapter 3 discuss the methodology and variables selected for this study, Chapter 4 briefs the comparison of IPL with other International sports leagues, Chapter 5 presents the results and discussion and Chapter 6 concludes the paper and draws the scope for future research.

II.   Review Of Literature:

Many researchers have attempted to study the relationship between sporting performance and financial performance of league clubs. Majority of the study is based on the football league clubs from France, Italy, Australia, England and America. It could be found from the results of their study is a strong relationship existed between sporting performance and financial performance. Sporting performance is considered as ticket sales, team rankings, stadium capacity and the parameter considered by majority of the researchers to measure the financial performance are profitability, stock market returns, dividends paid, ticket revenues, liquidity, capital structure, Activity ratios, and borrowing levels etc. The statistical tools applied by the majority of the researchers are Pearson's correlation coefficient, ANOVA, and Ordinary Least Square (OLS) regression.(Arnold (1991),Szymanski (1998),Dobson and Goddag (1998)Berument, Ceylan and Gözpınar

(2006), Pinnuck and Potter (2006),Edmans, Garcia and Narlı (2007)Boido and Fasano (2007)Dimitropoulos (2009) Benkraiem et al.(2011) and Atmaca (2012)). Wilson et al(2013) have studied the relationship between ownership structure and English Premier League club performance. In this study they have made an attempt to find out the relationship between financial and sporting performance of league clubs and also investigated the influence of different ownership models on the financial and sporting performance. Many studies have attempted to find out the effect of sporting performance on financial performance of various league clubs except cricket clubs. This has motivated the researchers to find out the nexus between sporting performance and financial performance of teams in Indian Premier League (IPL).

III.   Data and Methodology

Out of eight teams in Indian Premier League, based on the availability data the following three teams are selected viz., Delhi Dare Devils, Royal Challenges Bengaluru and Mumbai Indians. Financial data is extracted from the annual reports of the companies of the teams from 2014-18. Annual reports are extracted from the website of Ministry of Corporate Affairs (MCA). Sporting Success, Rank of the teams and Stadium capacity are considered as proxy for sporting performance of teams. Pearson's correlation co-efficient is applied to test the hypotheses of the study. The main objective of the study is to find out the relationship between sporting performance and financial performance of IPL teams.
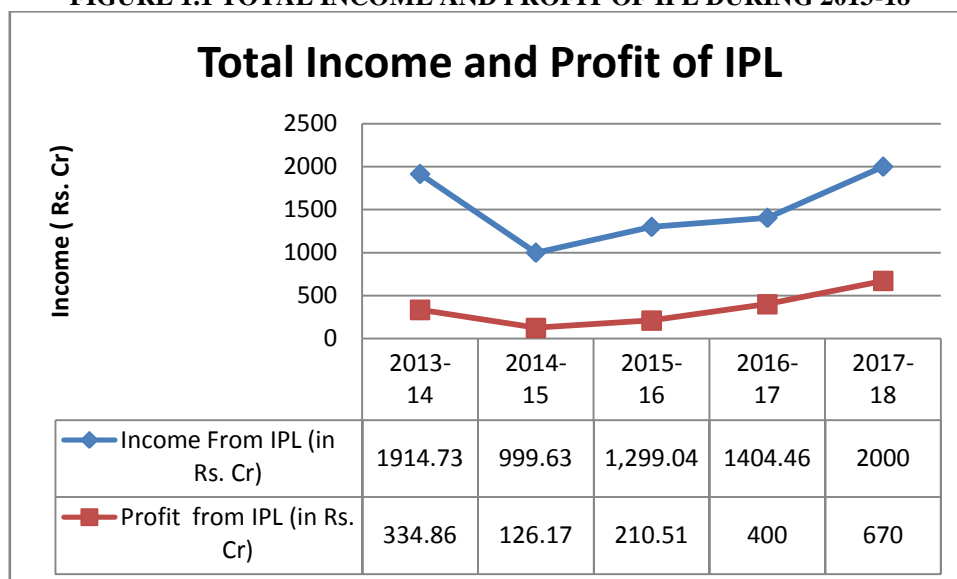
Hypotheses

H_{01} : There exists no significant relationship between sporting success, Rank of teams, stadium capacity and various financial parameters

IV.   Income Generated By Ipl

A report from Duff and Phelps said that one of the contributing factors in rapid growth of value of the Indian Premier League was signing a new television deal with the Star India Private Limited, which engaged more viewers due to the fact that IPL was transmitted to regional channels in 8 different languages, rather than previous deal, which saw the transmission limited to sports networks with English language commentary.

FIGURE 1.1 TOTAL INCOME AND PROFIT OF IPL DURING 2013-18

	2013-14	2014-15	2015-16	2016-17	2017-18
Income From IPL (in Rs. Cr)	1914.73	999.63	1,299.04	1404.46	2000
Profit from IPL (in Rs. Cr)	334.86	126.17	210.51	400	670

Source : Data collected from annual reports of BCCI from 2013-18

The income generated thorugh IPL matches have shown an increasing trend since 2015 and it is mainly due to all the matches played in India. Theincome and profit have declined by 45 per cent during 2014-15 due to 20 IPL matches in 2014 edition were played in UAE. This is primarly of Indian general electionsconducted in the year 2014. On the other side, it is highly appreicable to note that 42 per cent of income have raised in 2018 as the BCCI have received broadcasting rights fees from Star Sports. This has resulted in mammoth increase of profit by 68 per cent during 2017-18.(Refer Figure 1.1)

V. Results and Discussions

This section presents the results which are generated from the analysis of financial data and sports data of the three franchises in IPL.

Table 1.1 Descriptive Statistics Of Various Financial Performance Parameters Of Selected Ipl Franchises

	Turnover Increase	Wages/ Operating Income	Assets Turnover	Liquidity	Profit Margin	Receivable Turnover	ROE	Net Profit/ Total Assets	Debt Equity Ratio
Mean	7.35	0.19	0.73	1.49	-4.07	78.06	-1.45	-0.07	12.21
Median	5.67	0.03	0.71	0.69	0.03	23.76	-0.14	-0.01	2.75
Std. Deviation	16.01	0.26	0.40	1.55	17.78	147.02	4.16	0.17	18.29
Variance	256.19	0.07	0.16	2.39	316.14	21613.92	17.29	0.03	334.68
Skewness	1.03	1.09	0.05	1.23	-1.12	2.59	-3.43	-1.98	1.68
Kurtosis	1.06	-0.43	-1.40	0.43	2.29	6.82	11.80	4.58	1.87
Minimum	-9.57	0.01	0.19	0.24	-43.90	2.74	-14.61	-0.53	0.47
Maximum	44.22	0.72	1.37	4.76	26.18	499.29	0.04	0.10	54.86
Sum	88.15	2.27	8.82	17.91	-48.79	936.73	-17.40	-0.87	146.48

Source : Data collected from annual reports of the selected franchises

Among the financial variables of selected three Indian Premier League franchises, Turnover Increase which is estimated by Trend percentage of Ticket Sales for the selected period, Liquidity (Current ratio) Receivables turnover and Long term solvency (Debt Equity Ratio) have a average of 1 to 78 times during the study period. It could be observed from the table 1.1 that the Profitability in terms of profit margin, Return on Equity (ROE), Net Profit to Total Assets has a negative mean during the period. This indicates profitability of the selected franchises has a great concern.

The receivables turnover has the highest value of standard deviation among the other financial parameters as 147.02 which indicates that the mean of receivables turnover is less concentrated than the standard deviation. The smallest value of standard deviation could be indentified in Net profit to Total assets as 0.17.

Table 1.2 - Relationship Between Sporting Performance And Financial Performance

		Turnover Increase	Wages/ Operating Income	Assets Turnover	Liquidity	Profit Margin	Receivable Turnover	ROE	Net Profit/ Total Assets	Debt Equity Ratio
Sporting Success	Pearson Correlation	.648[*]	.143	-.030	-.129	-.322	-.115	.140	.065	-.072
	Sig. (2-tailed)	.023	.659	.927	.690	.308	.722	.665	.842	.823
	N	12	12	12	12	12	12	12	12	12
RANK	Pearson Correlation	-.302	-.113	-.008	-.410	.428	.518	.490	.145	-.491
	Sig. (2-tailed)	.340	.726	.980	.186	.165	.085	.106	.654	.105
	N	12	12	12	12	12	12	12	12	12
Stadium Capacity	Pearson Correlation	-.167	-.231	.428	-.587[*]	.097	.369	.327	-.237	-.554
	Sig. (2-tailed)	.603	.470	.166	.045	.764	.238	.299	.459	.061
	N	12	12	12	12	12	12	12	12	12

Note:*correlations are statistically significant at 5% level
Source : Data collected from annual reports of the selected franchises

It could be inferred from the results of correlation that there is a significant relationship existed between sporting success and turnover increase at 5 % level of significant. It indicates that if a team win more

matches in an edition then it could increase the turnover of franchises. It could be identified from the results of correlation that there existed no significant relationship between sporting success and wages to operating income, assets turnover, liquidity, profit margin, receivable turnover, Return on Equity, Net Profit to Total Assets and Debt Equity Ratio. It elucidates that the winning matches does not relate with the profitability and liquidity of the franchises.

It could be further noticed from the results of correlation that there existed no significant relationship between rank of the teams and all financial variables selected. One could infer from the Table 1.2 that there is a significant relationship existed between stadium capacity and liquidity of the franchise.

VI. Conclusion and Scope for further study

Increasing sports clubs in a country contributes new arena of income to the economy. The role of sports leagues in wealth creation of a country have drawn attention of many academic researchers across the world. In India, the T20 Cricket Premier League Viz., the IPL which has completed eleven editions till 2019, have been contributing 11.5 billion every year. This has turned IPL as the epicentre of all T20 Cricket clubs in the world. The data has extracted from the annual reports of the franchises. The period considered for this study is five years i.e, from 2013-18. Descriptive statistics and Pearson's correlation co-efficient have applied for the data. It is found from the analysis that sporting success and turnover increase and stadium capacity and liquidity has statistically significant relationship among the other variables. The study could be extended to the other sports clubs and based on the availability of data; the same topic can be studied with all franchises with a different duration.

References

[1]. Andreff, W. (2011). Some comparative economics of the organization of sports: Competition and regulation in north American vs. European professional team sports leagues. European Journal of Comparative Economics, 8(1), 3-27.
[2]. Andreff, W., & Staudohar, P. (2000). The evolving model of professional sport finance. Journal of Sports Economics, 257-276. https://doi.org/10.1177/152700250000100304
[3]. Anscombe, F., & Glynn, W. (1983). Distribution of the Kurtosis Statistic b2 for Normal Samples. Biometrika, 227-234. https://doi.org/10.1093/biomet/70.1.227
[4]. Barajas, A., & Rodriguez, P. (2010). Spanish Football Clubs' Finances: Crisis and Player Salaries. InternationalJournal of Sport Finance, 52-66.
[5]. Baroncelli, A., & Caruso, R. (2011). The Organization and Economics of Italian Serie A: a Brief Overall View.Rivista di diritto ed economia dello sport, 7(2), 67-85.
[6]. Boeri, T., & Severgnini, B. (2014). The decline of professional football in Italy. Handbook on the Economics of Professional Football, 322. https://doi.org/10.4337/9781781003176.00027
[7]. Bonini, F. (2008). Sport, azienda e politica: il Milan di Silvio Berlusconi". Memoria e ricerca.
[8]. Brunkhorst, J. P., & Fenn, A. J. (2010). Profit Maximization in The National Footbal League. The Journal of Applied Business Research, 45-58.