ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/IJISRT24OCT242

Analysing the Capital Structure of Indian Entertainment and Pharmaceutical Industry: A Comparative Study

Aishwarya Sajjan
PG Student, Department of Management Studies,
Visvewaraya Technology University, Gulbarga, Karnataka, India

Abstract:- This research work has been done through the various analysis regarding the capital structure of different industries. The work has been done to know the different capital structure mix of Entertainment and Pharmaceutical industry of India. Where to know the Capital structure impact on the profitability of different companies along with Covid 19 period. I also had been used the statistical analysis for comparison of both the industries which is R Software programme. The panel data models had been analysed in this research with Fixed effect method of Least squared Dummy Variable [LSDV] model.

Keywords:- *Capital Structure, Panel Data, LSDV, And Covid-19.*

I. INTRODUCTION

The Capital Structure of any firm comprises through different long-term borrowings which are mainly the Equity Capital, Preference Capital, and Debenture Capital. These three are the main pillars of company in the form of rising the funds they are basically borrowed at a certain percentage of portions with the certain percentage of cost of capital. In this three capitals Equity will be the less risky compared to Debt and Preference because when we look into the company's point of view companies must and should pay the certain amount of interest for Debenture holders and some percentage of dividend to Preference Share Holders whereas companies don't have any obligation to pay for the equity shareholders at the time of loss. The companies usually have some amount of equity in their capital and they search for other capital to run their business. In the perspective of company, the mores risky capital is Debt because if the companies make profit or loss they must and should pay interest to debenture holders and the second risky capital is preference where companies need to the dividend every year at certain percentage if it is cumulative they can pay the dividend next if not this year if not. The less risky and more flexible capital for company is equity where they get some freedom at the time loss of company. In the perspective of investors always the equity shareholders have more risk compared to other capitals like preference and debt. There many areas where companies need to make the complex decision in that the financing decision plays very vital role which involves of all the means of company's activities. The financing decision is made upon three main models such as Capital Structure, Capital Budgeting decision, Dividend decision. These three activities which are performed on the basis where the companies should borrow the fund, where companies should invest the borrowed fund and how much proportion should companies need to give as dividend to its shareholders.

Example suppose ABC company need to start a business so it need some finance it usually go to the market for borrowing funds which 'capital structure' at a WACC of 12% and borrowed fund it invest in XYZ company for certain percentage which is usually more than borrowed percentage that is 15% that is 'Capital Budgeting Decision' and after making this to decision where company gets around 3% of profit which it has to decide how should it keep how much to be given to the shareholders as dividend which is basically 'Dividend Decision'.

➢ *The Objective of the Study:*

- To examine the pattern of Entertainment industry and pharma Industry regarding their Capital structure analysis.
- To examine whether there are any major changes in capital structure during COVID19.
- To know the both industries leverage efficiency on the basis capital structure mix.

➢ *The Scope of the Study:*

This research mainly deals with two different industries and 5 different companies in the respected industries which is are registered under NSE or BSE of India. The data is collected around 7 years of all the companies with the scope to analyse the different capita structure.

II. LITERATURE REVIEW

After going through many papers, I came to know that the capital structure they all are describing is about how companies are making the financing decision based on the capital requirement.

The research work made "Rajeshwar Rao and Fariborz" based in the topic of how the institutional capital and capital structure will help to increase the firm's performance and which institutional capital and capital structure leads to the more profit and why companies are more focusing the capital structure mix rather than own capital.

The research work made by "Stewert" is also mainly discuss about the capital mix in the companies. He mainly discussed about the famous and most used capital structure that is Debt and equity. Like how much companies should rely on debt and equity.

The "Joshua and Amir" also made a research based on capital structure and debt structure which mainly deals with the traditional capital structure rather than modern capital structure. This Research also focuses on how the large and medium companies are really making decisions based on the needed capital structure mix.

"Alicia and David" which mainly talks about the capital structure of entrant firms. Like how companies initially make decisions about the company's capital mix and where they really approach as of, they are new to the market.

The Research work made by Mr Sheriden and Roberto made the unique kind of regarding the capital structure which mainly talks about the various debt instruments which are totally related to the companies finance and they also evolved into the all-types debt instruments which are both long term as well as short term instruments.

Mr. Raghu ram and Luigi mainly made their research paper on the basis of capital structure along with the companies leverage ratios like to know about how companies are making the decisions based on the leverage that company able to make through their capital structure mix and how a G-7 companies are adopting to the modified capital structure.

The Paper made by the Milton Harris and Artur Raviv made paper on the topics like agency costs, asymmetric information and Market based information about the finance structure of companies and who are they really looking into it for the various financing decisions. They basically made research about the capital structure.

The Research done Mohamed on capital structure of large and well-known big companies in Malaysia around 14 years. This research work mainly made upon how the companies of different industries are really using the capital structure mix. Their research stated that there is some what difference in capital mix of different industries around Malaysia.

The work of Ms. Julian and Mr. Peter it is also basically discuss about how the Australian companies are really managing the capital structure around different industries with some analysis. They started try to make some strategy in identifying the company's efficiency based on some ratios.

The final research paper which looked into is based on the OTT industry of India to know the how OTT Industry is growing in India. How OTT started change the entertainment sector of India with its unique strategy. This paper is done by Dr. Praveen in the year 2024.

III. INDUSTRY ANALYSIS

A. Entertainment Industry:

Entertainment Industry had been becoming one the more profitable industry at the time of covid as well as after covid through its enhancement of service line to the customers. The Entertainment industry of India has been valued around 2.3 trillion as of 2023 financial year and it is expected to grow to 5 trillion of Indian rupees within 2026. The Entertainment Industry includes all types of screenings like television, OTT, theatre, media, radio etc. The Entertainment industry started to grow at the time of covid where people are totally attached to the Televisions due to lockdowns it made the entertainment industry more competitive in nature. The Major companies or Medias which are their in-entertainment industry are Zee Entertainment, Jio cinema, HT media, Sun network, Colours Network etc.

B. Pharmaceutical Industry

The Pharma industry of India has been one the most valued industries around India with the 45 billion of Us dollars and it's expected to increase its valuation at 130 billion by the year 2031. The overall revenue of Pharma industries in the financial year 2023 reported around $25 billion which is huge to any industry. Indian Pharmaceutical industry has been ranked 3 Globally. Indian Pharma industries export to other countries around 48% and it also imports the medicines many big countries like US and UK around 52%. The Major Pharma Companies in Indian market are Cipla ltd, Dr. Reddy Labs, Glenmark Pharma, Sun Pharma etc.

IV. RESEARCH METHODOLOGY

A. Data Collection

The data which I collected for this research work is based on secondary analysis. The analysis which I am trying to make out is for 2 different industries in India around 3 companies each industry for 4 years. I collected data for both Entertainment and Pharma industries from the website

B. Data Source

As I said data is secondary and it is collected from various Indian financial websites like RBI, Stock edge, Money control, Good Returns etc.

C. Statistical tools used

The statistical tools which are used in this research work to analyse the capital structure of 2 different industry is Regression Analysis. This analysis mainly used to check the capital structure difference using some software R programme for Panel data analysis.

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/IJISRT24OCT242

D. Panel Data Analysis

The analysis which I made in this research work is Fixed effect model for both Entertainment and Pharma Industries. The Dummy variables also has been considered in order to make the Least Square Dummy Variable [LSDV].

E. Least Squared Dummy Variable [LSDV]

Least Squared dummy Variable method which is used basically to do fixed Effect model for the given analysis of panel data models. The Least square Dummy Variable method is also called as Covariance Method which mostly used to analyse the data models with dummy variables for the cross-section data which creates dummy as 0 and 1. The dummy is basically created to include the Cross-section data in this research which are companies it is basically taken as n-1 means if the cross-section data have 3 companies, we take two dummy columns which is 3-1=2.

F. Variables Collected

The variables which I collected for both the companies are Debt Equity Ratio and Current ratios and Return on Capital employed which are basically solvency ratios and Profitability ratios.

➢ *Dependent Variable:*

The Dependent Variable which is used for analysis is Profitability Ratio which is Return on Capital Employed. This variable used to know the profitability of industry is dependent on the capital structure mix like Equity, Debt and Preference.

➢ *Independent Variables:*

The Independent Variables which are used for analysis is solvency ratios which are Debt to Equity ratio, Current Ratio and Covid. These variables are mainly used because which are involved in capital structure of companies. The major explanatory variable used for this analysis is Covid period.

G. Collected Data

Table 1: Entertainment Industry

Companies	**ID**	**Years**	**ROCE**	**LT. DER**	**CR**	**Covid**	**Sun TV**	**Zee Ent.**
Sun TV	**1**	2020	31.37	0.05	3.4	0	1	0
	1	2021	28.05	0.07	3.74	0	1	0
	1	2022	27.45	0.04	4.45	1	1	0
	1	2023	24.49	0.07	3.19	1	1	0
Zee Ent.	**2**	2020	20.23	0.04	3.34	0	0	1
	2	2021	20.01	0.05	3.67	0	0	1
	2	2022	19.56	0.03	4.62	1	0	1
	2	2023	10.82	0.04	3.77	1	0	1
HT Media	**3**	2020	7.93	0.1	0.89	0	0	0
	3	2021	-7.49	0.08	1.04	0	0	0
	3	2022	3.71	0.15	1.51	1	0	0
	3	2023	-4.62	0.13	1.42	1	0	0

Table 2: Pharma Industry

Companies	**ID**	**Years**	**ROCE**	**LT. DER**	**CR**	**Covid**	**Dr. Reddy**	**Sun Pharma**
Dr. Reddy Labs	**1**	2020	18.46	0.07	2.84	0	1	0
	1	2021	18.17	0.07	2.95	0	1	0
	1	2022	12.25	12	3.06	1	1	0
	1	2023	18.45	0.03	2	1	1	0
Sun Pharma	**2**	2020	13.45	0.05	1.84	0	0	1
	2	2021	8.15	0.19	2.14	0	0	1
	2	2022	8.2	0.2	1.3	1	0	1
	2	2023	15.79	0.32	1.95	1	0	1
Glenmark Pharma	**3**	2020	10.7	0.24	5.78	0	0	0
	3	2021	11.79	0.21	5.39	0	0	0
	3	2022	11	0.15	4.99	1	0	0
	3	2023	10.86	0.15	3.47	1	0	0

The above data which I collected through Money control and good returns website is went through panel analysis using **R software** with the method “Fixed effect Model” in that of Least Square Dummy Variable [LSDV] or Covariance. In the above collected information the Covid Period treated as 0 and non-covid period as 1.

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/IJISRT24OCT242

V. SUMMARY OUTPUT

A. The Summary output for Entertainment Industry [LSDV]

```
Call:
lm(formula = ROCE ~ DER + CR + Covid + Sun + Zee)

Residuals:
   Min     1Q Median     3Q    Max
-6.280 -3.425  1.014  2.261  7.772

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept)  -13.669     12.787  -1.069    0.326
DER          100.348     94.907   1.057    0.331
CR             4.261      4.688   0.909    0.398
Covid         -6.331      4.124  -1.535    0.176
Sun           23.161     12.010   1.928    0.102
Zee           14.072     13.006   1.082    0.321

Residual standard error: 5.297 on 6 degrees of freedom
Multiple R-squared:  0.9086,    Adjusted R-squared:  0.8325
F-statistic: 11.93 on 5 and 6 DF,  p-value: 0.004502
```

The above summary output clearly specifies that the Model is significant with the P-value of 0.004502 which is less than 0.05. The R squared is 0.908or 91% and adjusted R squared is 0.83 or 83% which specifies the 83% change in the independent variables which are Capital mix and Covid will change in the Profitability which is ROCE of companies. If we see the P-value of variables which are not significant. We can clearly observe that the Long-Term Debt Equity Ratio is making high impact compared to other variables with 100.348 which clearly specifies the entertainment industries profit has been dependent on the capital structure mix which are Debt and Equity. In the above summary we can observe the Covid made some what impact on the profitability of these companies with -6.331 and which as negative impact on the profit of these companies due to covid around -6 has been declined in the ROCE of companies.

B. Summary Output of Pharma Industries [LSDV]

```
Call:
lm(formula = ROCE1 ~ LDER1 + CR1 + Covid1 + Dr.Reddy + SunPharma)

Residuals:
    Min      1Q  Median      3Q     Max
-3.2882 -0.7560 -0.0691  0.7962  3.5895

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept)   4.5384    10.2101   0.445   0.6723
LDER1        -0.6377     0.3199  -1.993   0.0933 .
CR1           1.2136     1.8944   0.641   0.5454
Covid1        1.4260     2.3178   0.615   0.5610
Dr.Reddy     10.2295     5.0636   2.020   0.0899 .
SunPharma     4.0737     6.1643   0.661   0.5332
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 2.648 on 6 degrees of freedom
Multiple R-squared:  0.7313,    Adjusted R-squared:  0.5073
F-statistic: 3.265 on 5 and 6 DF,  p-value: 0.09102
```

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/IJISRT24OCT242

The above summary output clearly tells that the model of least squared dummy variable is not significant because the p value of the model is 0.09102 which more the significance level of 0.05 so the model not stable and it clearly tells that the Pharma companies are more dependent on the debt which not leading them much profit. The R squared is 0.7313 or 73% and Adjusted R squared is 0.5073 or 50% which specifies the change in the independent variables that is in capital mix only changes around 50% of the profit. In this panel model it says that the longterm debt to equity is -0.6377 which tells the debt structure of these companies are not actually leading to profit but it is leading to the negative of 0.6377. The covid not much impacted on this companies because they have positive numbers around 1.4260. Even the variables also not significant which are above 0.05.

C. Comparison of Output between Two Industries

After running the panel analysis on both the industries using the R programme, we came to Know that the Entertainment industry is utilizing its capital structure mix to make profit around 100 time but when it comes to the pharmaceutical industry, they are to much dependent on the capital structure mix which is also not leading them profit but it is actually them into the loss of -0.6377 which not good for the Pharma companies.

The Covid 19 had made negative impact on the profitability as well as the capital structure of Entertainment industries around -6.31 decrease in the profit during covid and when it comes to the Pharma industries, they also not made any huge profit but they did not go into loss during covid actually they made around 1.41 times of profit on ROCE of the Pharma companies.

D. Findings of the Study

The research work which I had been done basically to know the capital structure of two different industries in India with the objective of Capital structure mix impact on company's profit. The analysis clearly tells that the Entertainment industry is making profit using its capital mix where Pharma Industries are much dependent on the debt and equity and they are not making much profit as per their utilization of the capital mix. The Covid had impacted Entertainment industry some what but the pharma industry is not much affected due to the covid.

VI. CONCLUSION

The Conclusion of this research paper is that the different industries have different capital structure mix because when we compare Pharma with Entertainment Industry, we came to know that the debt to equity take by the pharma industry is more and they high debt to equity ratio which risker to the companies as well as the investors of the company. Whereas the Entertainment industry not taking much debt so they have less risk compared to the Pharma Industries Basically the Parama industries requires much long-term borrowing due to their operational and research and development activities where the entertainment does not require that much debt because they only incur high operational activities but not much on the R and D activities. So, here I conclude by saying the different industries need different capital structure due to their nature of business.

REFERENCES

[1]. *Dr. reddy labs*. (2024). Retrieved from https://www.drreddys.com
[2]. *Glenmark*. (2024). Retrieved from https://glenmarkpharma.com/
[3]. *Goodreturns*. (2024). Retrieved from https://www.goodreturns.in/company/glenmarkpharmaceuticals/ratios.html
[4]. *HT MEDIA*. (2024). Retrieved from https://www.htmedia.in/
[5]. *Money Control*. (2024). Retrieved from https://www.moneycontrol.com/financials/suntvnetwork/ratiosVI/STN01
[6]. *Statista* . (2024). Retrieved from https://www.statista.com/statistics/235784/india-value-of-the-mediaand-entertainment-industry/
[7]. *Stock Edge*. (2024). Retrieved from https://web.stockedge.com/share/sun-pharmaceuticalindustries/5071?section=overview
[8]. *Sun Pharma*. (2024). Retrieved from https://sunpharma.com/
[9]. *Wikipedia*. (2018). Retrieved from https://en.wikipedia.org/wiki/Pharmaceutical_industry_in_India *wikipedia*. (2024). Retrieved from https://en.wikipedia.org/wiki/Sun_TV_(India)
[10]. *Zee Entertainment*. (2024). Retrieved from https://www.zee.com