# An Analysis of Leverage And Cost Behavior With Reference To Gleneagles Healthcare India Private Limited

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Abstract- In finance, leverage or leveraging refers to the use of debt to supplement investment. Companies usually leverage to increase returns to stock, as this practice can maximize gain (and losses). The easy but high risk increases in a stock price due to leveraging at US banks has been blamed for the usually high rate of pay for top executives during the recent banking crisis, since gains in stock are often rewarded regardless of method. Delivering in the action of reducing borrowings. In microeconomics, a key ensure of leverage is debt to GDP ratio. There are three types of leverage 1. Operating leverage 2. Financial Leverage 3. Combined Leverage

Separating Mixed Costs into their variable and fixed elements. Mixed costs are common to a wide range of firms. Examples of mixed costs include sales compensation, repairs and maintenance, and factory overhead in general. Mixed costs must be separated into the variable and fixed elements to be included in a variety of business planning analyses such as Cost-Volume-Profit (CVP) Analysis. The way a specific cost reacts to changes in activity levels is called cost behaviour. Costs may stay the same or may change proportionately in response to a change in activity. Knowing how a cost reacts to a change in the level of activity makes it easier to create a budget, prepare a forecast, determine how much profit a new product will generate, and determine which of two alternatives should be selected. Fixed costs Fixed costs are those that stay the same in total regardless of the number of units produced or sold. Although total fixed costs are the same, fixed costs per unit changes as fewer or more units are produced. Straightline Depreciation is an example of a fixed cost. It does not matter whether the machine is used to produce 1,000 units or 10,000,000 units in a month; the depreciation expense is the same because it is based on the number of years the machine will be in service. Variable costs Variable costs are the costs that change in total each time an additional unit is produced or sold. With a variable cost, the per unit cost stays the same, but the more units produced or sold, the higher the total cost.

### I. INTRODUCTION

A company can raise the fund required for investment either by increasing owner's claims or the creditor's claim or both. The claims of the owner's increases when the company raises the fund by issuing equity shares or ploughs back its earnings. The claims of the creditors increase when the funds are raised by borrowings. Means used to raise the funds represent the financial or the capital structure of the company.

The financing or capital structure decision is of tremendous significance for the management, since it influences the debt-equity mix of the company, which ultimately affect shareholder's return and risk. In case the borrowed funds are more as compared to the owner's funds, it results in increase in shareholder's earning together with increase in their risk.

This is because the cost of borrowed funds less than that of shareholder's fund on account of the cost of borrowed fund being allowable as a deduction for income tax purpose. But at the same time, the borrowed fund carries a fixed interest, which has to be paid whether the company is earning profit or not. Thus, the risk of the shareholders increases in case there is high proportion of borrowed funds in the total capital structure of the company.

In a situation where the proportion of the shareholder's fund is more that the proportion of the borrowed fund, the return as well as the risk of shareholders will be much less.

Cost behaviour is the measure of how a cost responds to changes in the level of business activity. Understanding of how costs behave in a particular situation is crucial for decision-making process in an organization. Thus, the production performance results reported on the income statement

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In marginal costing, only variable cost is charged to production. The Institute of cost & management accountants (U.K.) defines it as, "the practice of charging all cost, both variable & fixed to operation, process or product." This explains why this technique is also called full costing. Administrative, selling & Distribution overhead as much from part of total cost as prime cost & factory burden.

### II. NEED FOR THE STUDY

This study is conducted to know the leverage of gleneagles healthcare india private limited. This study helps to gain insight about the leverage in the organization and significantly increase the returns that can be provided on an investment.

### III. OBJECTIVES OF THE STUDY

- To study the Operating, Financial & Combined Leverage
- To understand the Degree of Operating, Financial & Combined Leverage.
- To study the profit volume analysis.
- To study the Break-Even analysis of company.

### IV. SCOPE OF THE STUDY

The study will explore the effects of Leverage in the organization, a case study of GLENEAGLES HEALTHCARE INDIA PRIVATE LIMITED located in Chennai. This study will conclude about increase in the profit that can be provided on an investment.

### V. LITERATURE REVIEW

Prof. I. M. Pandey (2023) has defined leverage from different viewpoints and has explained elaborately the effects of leverage on Shareholders' return. The point to be noted is that he has devoted a special section to the tax-shield effect of leverage. He has dissected the effects of leverage under different scenarios wherein sometimes the EBIT is varying and rate of taxes also varies. As a practical case- study, he has analysed the employment of leverage in Voltas Ltd. which is followed by many examples and illustrations.

Darshana Lakmal (2022) Management accounting involves using accounting techniques to aid in decision-making and planning for business enterprises. Marginal costing considers only variable manufacturing costs, while absorption costing considers all manufacturing costs as production costs. Both techniques have faced criticism for their overhead recovery rates and allocation of overheads. This paper reviews previous research and literature on marginal and

absorption costing methods, highlighting their supporters and arguments in favor and against each method.

Mark Lee Inman (2022) Marginal costing is a decision-making technique that considers only activity-related costs, assuming time-related costs will be incurred regardless of expenditure decisions. It charges variable costs to cost units and writes off fixed costs against the contribution for the period. Marginal costing is useful in reporting, especially when monitoring operating divisions or activities and dealing with corporate fixed overhead. However, it is unrealistic to take an arbitrary allocated cost over which operations management has no control and appraise it. This approach could produce misleading data when considering decision making and marginal costs.

Avraham Kamara (2021) Operating leverage increases profitability but reduces optimal financial leverage, contradicting trade-off theory. This is demonstrated using China's entry into the World Trade Organization and its impact on U.S. firms' capital-labour ratio.

B. Kriefman (2021) Marginal costing is a method used to analyze costs in a way that excludes fixed or unavoidable costs, focusing on short-term changes in total costs resulting from changes in business activity level, known as marginal costs. Marginal costing

Garin Pratiwi Solihati (2021) This study examines the impact of leverage, return on assets, company size, and sales growth on the value of manufacturing companies listed on the Indonesia Stock Exchange The results show that leverage and return on assets positively affect firm value, while company size and sales growth have no effect.

R. Watts (2019) Firms on growth tend to have less leverage and faster growth compared to their historical records. Most borrowing firms struggle to dispose of debt due to lack of finance. Debt also hinders firms from doling out dividends, as they may be cautious about giving out large amounts due to the fear of future cash reserves being used to service debt. Tobias Adrian and

Bayu Pratama (2018) This study investigates the impact of company size, financial leverage, profitability, and dividend payout ratio on earnings smoothing practices in Indonesian companies listed on the LQ-45 index. Data was collected from 19 companies using purposive sampling. The results show that company size positively influences earnings smoothing practices, while financial leverage has a negative impact. Profitability also positively influences earnings smoothing practices, but dividend payout ratio doesn't

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significantly affect them. The study provides valuable insights for investors on earnings smoothing practices and their internal and external influences.

### VI. RESEARCH MEDHODOLOGY

Research methodology provides a structured approach to addressing research problems effectively. It emphasizes the importance of a methodical approach to achieving clearly defined objectives, as without proper data collection and analysis, targets cannot be met. Hence, gathering the necessary data is crucial in any study, particularly in the realm of social science research. Research involves meticulous, patient, and systematic inquiry or examination within a specific field of knowledge to establish principles or factors. It is a controlled, methodical, and critical investigation into hypothetical propositions concerning the relationships among natural phenomena. Social research specifically delves into the underlying processes in people's lives within various associations. The primary aim of applied research is to discover, interpret, and develop methods and systems to advance human knowledge on a scale.

### **DATA COLLECTION:**

The data collection classified into two types they are:

- 1. Primary Data
- 2. Secondary Data

### PRIMARY DATA

The research has been collected data with the help of primary way. It includes personal discussion with staff member off concern. Also Researcher has been collected the data with the help of investigation and questionnaires'

### SECONDARY DATA

The secondary data are collected from information which is used by other. It is not direct information. This information already collected and analysis by other and that information used by others. This secondary data are collected from following.

- 1) Companies' income statement
- 2) Internet Website

## TOOLS AND TECHNIQUE OF THE ANALYSIS:

For study Analytical technique are used such as table, graphs, charts, diagrams are used in the study.

### **REFERENCE PERIOD: -**

The reference period of the study is 5 years from 2018-2019 to 2022-2023.

### VII. LIMITATION OF THE STUDY

- The study is limited for five years statement of accounts Gleneagles Healthcare India Private Limited.
- The scope & duration of study is limited.

### VIII. DATA ANALYSIS AND INTERPRETATION

### CALCULATION OF OPERATING LEVERAGE

The formula for computing the Operating leverage is given below:

Operating leverage = Contribution / Operating profit (or) EBIT

**Table-2.7 Table showing operating leverage** 

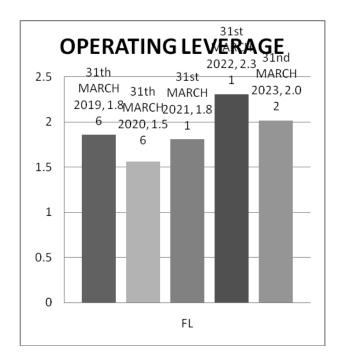
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YEAR	CALCULATION	RESULT
31st	73557000/215748000	1.86
MARCH		
2019		
31st	389147000/139268000	1.56
MARCH		
2020		
31st	432513000/192980000	1.81
MARCH		
2021		
31st	714945000/405293000	2.31
MARCH		
2022		
31st	725338000/366882000	2.02
MARCH		
2023		

### **INTERPRETATION: -**

In the year 31st MARCH 2022, the company is having the Operating Leverage 2.31 & in 31st MARCH 2022 It is lowered down to 2.02 this is due to behaviour of the variable cost with respect to fixed cost.

# **Chart No:2.1 Chart showing operating leverage**

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# CALCULATION OF DEGREE OF OPERATING LEVERAGE

The formula for computing the Degree of Operating leverage is given below:

Degree of operating leverage = Percentage Change in Operating profit/

Percentage Change in

sales

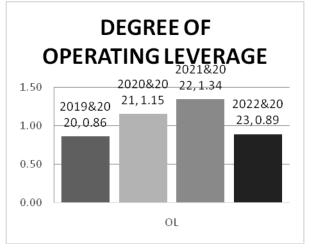
Table-2.8 Table showing degree of operating leverage

YEAR	CALCULATION	RESULT
2019&2020	(975975000-1236365000)/	0.85
	<u>1236365000</u>	
	(267195000-139268000)/	
	139268000	
2020&2021	(975975000-	1.15
	1046136000)/1046136000	
	(192980000-139268000)/	
	139268000	
	(405293000-182980000)/	1.34
	<u>132980000</u>	
	(1382197000-1046136000)/	
2021&2022	1046136000	
2022&2023	(366882000-405293000)/	0.89
	405293000	
	(1576828000-1382197000)/	
	1382197000	

### **INTERPRETATION: -**

The Degree of Operating Leverage is raising due decrease in operating leverage i.e., 1.34

Chart No:2.2 Chart showing degree of operating leverage



# CALCULATION OF FINANCIAL LEVERAGE

The formula for computing the financial leverage is given below:

Financial leverage = Operating Profit (EBIT) / Profit Before tax (EBT)

Table-2.9 Table showing financial leverage

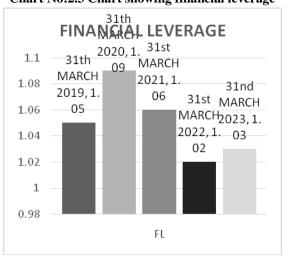
Table-2.9 Table showing infancial level age		
YEAR	CALCULATION	RESULT
31st	267195000/69727000	1.05
MARCH		
2019		
31st	139268000/49521000	1.09
MARCH		
2020		
31st	192980000/52644000	1.06
MARCH		
2021		
31st	405293000/83723000	1.02
MARCH		
2022		
31st	366882000/355611000	1.03
MARCH		
2023		
	•	•

### **INTERPRETATION: -**

In the year 31st MARCH 2021, the company is having the Financial Leverage 1.06& in 31st MARCH 2022 it is lowered down to 1.03 this is due to changes in the fixed cost.

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Chart No:2.3 Chart showing financial leverage



# CALCULATION OF DEGREE OF FINANCIAL LEVERAGE

The formula for computing the Degree of Operating leverage is given below:

Degree of Financial leverage = Percentage Change in Taxable income (or)EPS

/ Percentage Change in operating income(or)EBIT

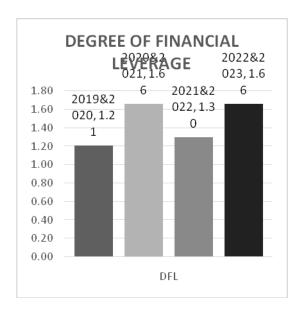
Table-2.10 Table showing age of the degree of financial leverage

	0	
YEAR	CALCULATION	RESULT
2019&2020	(0.72-1.14)/1.14	1.21
	<u>(975975000-</u>	
	1236365000)/	
	1236365000	
2020&2021	(0.78-0.72)/0.72	1.66
	<u>(975975000-</u>	
	1046136000)/1046136000	
	(1.45-0.78)/0.78	1.30
	(405293000-182980000)/	
2021&2022	<u>132980000</u>	
2022&2023	(1.62-1.45)/1.45	1.66
	(366882000-405293000)/	
	405293000	

# **INTERPRETATION: -**

Degree of Financial Leverage is Exists & favorable for the company as it is above one i.e.,1.66

# Chart No:2.4 Chart showing degree of financial leverage



# **CALCULATION OF PROFIT VOLUME RATIO**

The formula for computing the P/V ratio is given below: P/V Ratio = (Contribution / Sales) \*100

Table-2.12 Table showing PV ratio

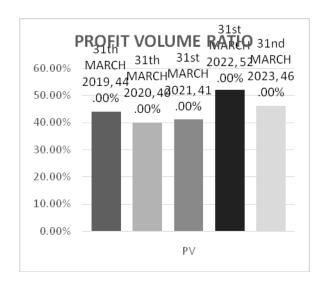
	Table-2.12 Table Showing I v	lulio
YEAR	CALCULATION	RESULT
31st		44%
MARCH		
2019	556498000/1236365000	
31st		40%
MARCH		
2020	249879000/975975000	
31st		41%
MARCH		
2021	239533000/104613600	
31st		52%
MARCH		
2022	309352000/1382197000	
31st		46%
MARCH		
2023	725338000/ 1576828000	

### **INTERPRETATION: -**

As comparing the PV Ratio, it is found that the PVR is increased in the 31st MARCH 2022 the reason behind this high increase in sales volume

### Chart No:2.6 Chart showing PV ratio

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### **CALCULATION OF BREAK-EVEN-POINT (IN SALES)**

The formula for computing the Break-Even Point is given below:

B.E.P. (in sales) = Total Fixed cost / Profit Volume ratio

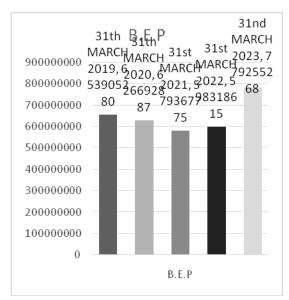
Table-2.13 Table showing B.E.P (in sales)

TIELD	GALGER AFFICAL	DEGIH E
YEAR	CALCULATION	RESULT
31st	289303000/44%	653905280
MARCH		
2019		
31st	249879000/40%	626692887
MARCH		
2020		
31st	239533000/41%	579367775
MARCH		
2021		
31st	309352000/52%	598318615
MARCH		
2022		
31st	358456000/46%	779255268
MARCH		
2023		

### **INTERPRETATION: -**

As comparing the BEP, it is found that the BEP is increased in the 31st MARCH 2023 the reason behind this high increase in sales volume.

# Chart No:2.7 Chart showing B.E.P (in sales)



\*Can not calculate BEP in unit as annual production is not available

### **CALCULATION OF MARGIN OF SAFETY**

The formula for computing Margin of Safety is given below: Margin of safety = actual sales – sales at BEP

Table-2.14 Table showing margin of safety

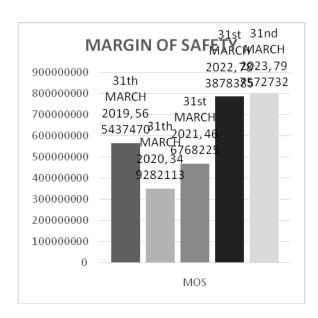
Table-2.14 Table showing margin of safety		
YEAR	CALCULATION	RESULT
31st	236365000-	565437470
MARCH	653905280	
2019		
31st	975975000-	349282113
MARCH	626692887	
2020		
31st	1046136000-	466768225
MARCH	579367775	
2021		
31st	1382197000-	783878385
MARCH	598318615	
2022		
31st	1576828000-	797572732
MARCH	779255268	
2023		

## **INTERPRETATION: -**

As comparing the Margin of safety of the years, it is found that the Margin of safety is decreased in the year 31st MARCH 2020 as the sale is decreasing

# Chart No:2.8 Chart showing margin of safety

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### CALCULATION OF PROFIT PERCENT ON SALES

The formula for computing Profit Percent of Sales is given below:

Profit Percent of Sales = Profit / Sales \*100

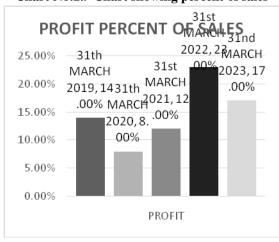
Table-2.15 Table showing profit percent of sales

	9 I	
YEAR	CALCULATION	RESULT
31st	(14198011/650986715)	14%
MARCH	*100	
2019		
31st	(12236433/469487850)	8%
MARCH	*100	
2020		
31st	(10363670/334725393)	12%
MARCH	*100	
2021		
31st	(17270978/472283672)	23%
MARCH	*100	
2022		
31st	(11242025/638792466)	17%
MARCH	*100	
2023		

# **INTERPRETATION: -**

- As comparing the Profit percentage with sale, it is found that the Profit is increased in the year 31st MARCH 2022 this due to increase in the output.
- As comparing the Profit percentage with sale, it is found that the Profit is decreased in the year 31st MARCH 2023 this due to increase in the tax.

Chart No:2.9 Chart showing percent of sales



### IX. FINDINGS

- In the year 31st MARCH 2022, the company is having the Operating Leverage 2.31 & in 31st MARCH 2022 It is lowered down to 2.02 this is due to behaviour of the variable cost with respect to fixed cost.
- The Degree of Operating Leverage is raising due decrease in operating leverage i.e.,1.34
- In the year 31st MARCH 2021, the company is having the Financial Leverage 1.06& in
- 31st MARCH 2022 it is lowered down to 1.03 this is due to changes in the fixed cost.
- Degree of Financial Leverage is Exists & favorable for the company as it is above one i.e.,1.66
- In the 31st MARCH 2020, the company is having the Combined Leverage 3.04&in 31st MARCH 2021it is lowered down to 2.39 this gives how the risk bearing for the company is lowered down
- As comparing the PV Ratio, it is found that the PVR is increased in the 31st MARCH 2022 the reason behind this high increase in sales volume
- As comparing the BEP, it is found that the BEP is increased in the 31st MARCH 2023 the reason behind this high increase in sales volume.
- As comparing the Profit percentage with sale, it is found that the Profit is increased in the year 31st MARCH 2022 this due to increase in the output.
- As comparing the Profit percentage with sale, it is found that the Profit is decreased in the year 31st MARCH 2023 this due to increase in the tax.
- As comparing the tax percentage with sale, it is found that the Profit is increased in the year 31st MARCH 2022 this due to increase in the output.
- As comparing the percentage all fixed cost, it is found that the interest on loan is taking over 44.95 percentage in overall interest.

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 As comparing the percentage all fixed cost, it is found that the salary is taking over 85-90 percentage in overall fixed cost.

# X. SUGGESTION

- Having high operating leverage company may reduce administration salary because it holds more that 80% of fixed financial expenses
- On variable expenses the consultation expenses having high percentage reducing it will have increase profit of the organisation
- Financial leverage is above one so the Management may reduce the interest on loan because it holds 30-40% fixed operating expenses
- The company margin of safety is high even sales is decreasing so the company may reduce its debt capital on capital structure

#### XI. CONCLUSION

The project work entitled as "AN ANALIYSIS OF LEVERAGE AND COST BEHAVIOUR WITH REFERENCE TO GLENEAGLES HEALTHCARE INDIA PRIVATE LIMITED" is conducted in Chennai, theresearcher found that the company is increasing in profitability and solvency but the operating leverage still in high level it is too risk. The company is suggested to low fixed operating expenses.

### REFERENCES

- [1] Sivakumar, s., &dr.Pitchaimani, m. (2019), "financial analysis of jsw steel company a study", journal of emerging technologies and innovative research (jetir), vol. 6, no. 6, issn: 2349-5162.
- [2] Suganthi, a., &yuvasri, v. (2022), "a study on analysis of financial statement and its financial performance with special reference to nlcindia limited", journal of emerging technologies and innovative research (jetir), vol. 11, no. 4, issn: 2349-5162.
- [3] Sushma, m. (2020), "a study on financial performance of indian pharmaceutical companies using dupont analysis", journal of emerging technologies and innovative research (jetir), vol. 7, no. 11, issn: 2349-5162.
- [4] Vadivukkaras, k. (2019), "a comparative study on financial performance of marutisuzuki and skoda cars", journal of emerging technologies and innovative research (jetir), vol. 6, no. 2, issn: 2349-5162.
- [5] Vijay, k., &sudarsan, k. (2022), "financial performance of national insurance company limited", journal of emerging

- technologies and innovative research (jetir), vol. 9, no. 5, issn: 2349-5162.
- [6] https://rspsciencehub.com/article\_15571\_aa96cdc1d6511 9976990d9186c92f0c7.pdf
- [7] https://www.jetir.org/call-for-paper
- [8] https://www.scribd.com/doc/86485296/A-Project-Reporton-Financial-Statement-Analysis
- [9] https://ncert.nic.in/textbook/pdf/leac204.pdf
- [10] Essentials of Management Accounting by Dr. P.N. Reddy
- [11] Corporate Accounting by K.S. Raman
- [12] Management Accounting by R.S.N. Pillai & Bhagawati V.

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