Kishor Kumar and Dr. Rajiv Chopra (2011). **"Analysis of Capital Structure of Pharmaceutical Companies Glaxo India Ltd. & Novartis India Ltd." – A Comparative Study**
International Journal of Economic Perspectives, 5(1), 9-22
Retrieved from: https://ijeponline.org/index.php/journal/article

"Analysis of Capital Structure of Pharmaceutical Companies Glaxo India Ltd. & Novartis India Ltd." – A Comparative Study

Kishor Kumar
Research Scholar, CMJ University, Meghalaya

Dr. Rajiv Chopra
Associate Professor, Sri Aurobindo College, University of Delhi

ABSTRACT: *The purpose of this study is to find out why pharmaceutical firms have two different types of capital structures, as well as to gain a better knowledge of the industry by identifying what the future prospects for corporate capital structure variety are. For finance managers, understanding how a company's capital structure impacts its profitability is a challenging task. Despite numerous past researches on the effects of capital structure on corporate profits, few are applicable to Indian firms. This research was performed to further examine the impact of capital structure on the profitability of pharmaceutical corporations Novartis and Glaxo. The data is available for the years 2007 to 2011. The results of the study revealed that financial performance, growth and the magnitude of a company are directly correlated. Both the opposite effects of long and short use and liquidity are evident. For two pharmaceutical companies with differing ownership arrangements, the first big shareholder may be connected with financial success. Comparing India's drug industry with other developing countries' pharmaceutical industries, it is one of the most advanced and technologically advanced in the world. The purpose of this study is to look at how two pharmaceutical companies' capital structures changed over the course of five years. The companies under investigation are Novartis India Ltd. and Glaxo India Ltd., respectively (2007-2011).*

KEYWORDS: Capital Structure, Growth Rate, WACC, Operating Leverage, Financial Leverage.

I. INTRODUCTION:

It is a crucial managerial challenge to choose the best appropriate course of action in terms of finance or capital structure in every given situation. This element has an impact on both the profit and the risk that investors take on while investing. As a result, the decision on how to structure an organization's capital structure may have an influence on the stock's market value. The fundamental goal of a company, according to the board of directors, is to maximise the wealth of its owners to the greatest extent feasible. To attain this goal, the cost of capital must be reduced to an acceptable level that is economically practicable as fast as possible. A number of factors, such as the kind and mix of capital employed, the federal government's tax policy, and changes in consumer and producer prices, among other things, are taken into consideration when determining the lowest practical cost of capital. In order to determine the Cost of Capital to the Company, investors must first determine what rate of return they may expect from a corporation. This is the sum of money that the firm is in dire need of at the moment.

II. BACKGROUND OF THE RESEARCH

- **Glaxo India Limited:** It has been several decades since Glaxo India Ltd. has been able to effectively maintain its position as the dominant force in the pharmaceutical industry. Because of the company's growth since its foundation in 1924, it has evolved into a completely owned subsidiary of Glaxo Welcome Pic UK, a well-known name in the pharmaceutical industry. In the United Kingdom, it operates under the name Glaxo Welcome Pic U.K., which is a subsidiary of Glaxo Welcome Pic U.K., which is also situated in the United Kingdom. A number of industries, including markets for

Corresponding author: **Kishor Kumar and Dr. Rajiv Chopra**
Submitted: 27 Oct 2011, Revised: 09 Nov 2011, Accepted: 18 Nov 2011 Published 31 Dec 2011

"bullock-cart" goods and services, are being investigated by the company as potential new business opportunities in India. In addition, the business is exploring into potential "cyber_ space" markets in the nation. According to the firm's website, the company has a wide product range that includes more than two hundred different items. Some of the company's products include Ceftum, stibbs (an anti-diarrhoeal medication), Phexin BD, and Zondon, which are all used to treat nausea and vomiting, respectively. Alpha-D3 is another pharmaceutical made by the company, and it is utilised in the treatment of osteoporosis in the elderly. In addition to having been given the status of 'Recognized Export House,' the firm is currently attempting to get the status of 'Trading House.' A range of agricultural cattle and poultry care products are also manufactured by Qualigens, in addition to the company's fire chemical line. According to Business World Magazine, Glaxo India has been named the most respectable business in India on two separate occasions in the years 2010 and 2011, respectively. According to a poll conducted by Business World – India Research, GlaxoSmithKline was named the world's most successful pharmaceutical company.

- **Novartis India Limited:** Founded in 1947 and still in existence today, it is a subsidiary of Novartis A.G., a Swiss pharmaceutical company with its headquarters in Basel and operations worldwide. As a result of the merger, the activities of Hindustan Ciba Giegy Ltd. and Sandoz India Ltd. have been streamlined, and the overall efficiency of the firm has been improved. The following is a paraphrase of the original text that is accurate to the letter. The company is committed to the well-being of its clients by developing cutting-edge products and services in the Life Sciences industry. CIBA Vision's pharmaceutical and agricultural activities (medicines and crop protection, seeds, and animal health care) are all well-established in their respective industries: pharmaceuticals, seeds, and animal health care. The supply of healthcare and the production of agricultural goods are two examples of public services.

The introduction of novel hybrid and high-yield seed varieties, which were adequately supported by other sources, played a significant role in making the green revolution in India a reality. Novartis contributes to this effort by supplying farmers with a range of seeds that the company creates and sells around the country, among other things. Other crop types, such as cotton, maize, sunflower, bajra, and jowar have benefited from hybridization, in addition to the ones mentioned above. Vegetable hybrids are available in the following varieties: tomato (bhendi), cauliflower (capsicum), cabbage (capsicum), watermelon (melon), chilli (capsicum), gawar (cowpea), sweet corn, and others. As part of its TB treatment programme, Novartis offers the drugs Rimactazid, pza Ebutol and Rimactane, which are available as tablets and syrups. Female breast cancer treatment is made possible with the use of Femara, a medication manufactured by the business. Excelon, a prescription pharmaceutical business, manufactures medicines to help people suffering from the symptoms of Alzheimer's disease manage their symptoms. In addition, the firm manufactures and distributes items for the care of the eyes.

III. LITRATURE REVIEW:

Reviewing past research may help one figure out what needs to be explored. The following scholarly articles were studied:

- **Modigliani and Miller (MM) (1963)[12] :** When MM initially created the capital structure theory in the early 1963s, it was largely considered to be the world's first capital structure research. 2011 marked the year when MM died away. *"Assuming perfect market circumstances and a tax-free environment, the theory stated that a firm's worth did not influence the choice to issue loans or issue stock in the company."*[12] A new publication was released, correcting several concerns made in the preceding study. It is reported that, when current interest and debt taxes are deductible in the calculation of income tax, legal entities should take into account the tax benefits associated with

Corresponding author: **Kishor Kumar and Dr. Rajiv Chopra**
Submitted: 27 Oct 2011, Revised: 09 Nov 2011, Accepted: 18 Nov 2011 Published 31 Dec 2011

financial leverage in order to minimise their cost when compared to own resources that do not generate financial expenditures and, as a result, do not generate income tax benefits. Although the company's risk associated with debt has increased, shareholders have demanded a higher rate of return on their investments as a result of the increased risk. In a nutshell, the authors (1963) demonstrate that the capital structure plays an active role in the evaluation of the organisation.

- **Jenson and Meckling (1976)[11]:** According to the findings of Jenson and Meckling's research, investors, creditors, and managers, among others, are all involved in two different types of conflict with one another. According to agency cost theory, *"agencies concentrate their efforts on earning the maximum amount of profit for themselves while paying the least amount of attention feasible to the wealth of their owners'. By exercising control and supervision over the project, the company's shareholders have worked exceedingly hard to restrict the agency's effect on its execution, and as a result of their efforts, the total cost of the project (including the agency cost) has grown substantially".* **[11]**

- **Hovakimian (2004)[10] :** As Hovakimian explains the positive link between firm leverage and profitability may come from several causes. Also, with all else being equal, a rise in profitability brings with it the possibility for increased tax savings on the debt, greater likelihood of an overinvestment and reduced bankruptcy probability, which might raise the desired debt ratio. The article analyses whether security offerings and repurchases shift the capital structure in the direction of the objective. *"In accordance with the time-series patterns of debt ratios, only debt reductions are undertaken in order to offset the cumulative deviation from target leverage over time. Earlier debt-equity choice research found that target leverage was important, and this was attributed to a subsample of equity offerings that were accompanied by debt reduction. Equity issues and repurchases, in contrast to debt issuance and reductions, have no major long-term impact on the capital structure of a company. As a result, even businesses with target debt ratios can participate in market timing in the equity market."*[10] Myers (2001) supports this perspective, asserting that greater profitability means the business has a larger amount of taxable income to shelter and that the firm may avoid the danger of financial crisis by servicing more debt. Despite this, it is reasonable to conclude that both the trade-off theory and pecking order predictions are accepted since they are well supported by similar measures of actual results. It is worth noting that the forecasts are complementary, and that they do not contradict each other.

IV. TERMINOLOGY USED:

- **Debt-Equity Ratio:** In order to determine a company's long-term solvency, different debt ratios can be calculated. The percentage of interest-bearing debt in the capital structure is something that the firm may be interested in learning about. The debt-to-asset ratio is calculated by dividing total debt by total assets. The debt-to-equity ratio makes use of the entire equity, as opposed to the debt-to-asset ratio, which makes use of the total assets as the denominator. This ratio demonstrates how much of a company's capital structure is allocated to debt or equity financing. Total debt and net wealth are both components of total capital employed. With a high debt-to-equity ratio, as we properly established, the Company borrows more money than its own, showing that the Company is deficitary, whereas a low debt-to-equity ratio suggests the Company spends more on its own assets and borrows less money.

- **Financial Leverage:** Projects can be funded by loan or equity for Businesses. The firm may also employ preferred capital. The rate of interest on debt is set. A firm can borrow money to fund its

Corresponding author: **Kishor Kumar and Dr. Rajiv Chopra**
Submitted: 27 Oct 2011, Revised: 09 Nov 2011, Accepted: 18 Nov 2011 Published 31 Dec 2011

investments. The firm may also employ preference shares. They set the interest rate and collect the tax *(minus dividend).* The rate of return on equity is determined by the company's dividend policy. Trading on equity is a word used to represent debt and preference capital combined with owner's equity. Equity is a form of debt that is traded on the stock market. In order to protect his investment, a debtor would look for protections in both earnings and share value. Financial leverage is commonly used to produce greater revenue from fixed charge funds than expenditures. The extra (or lack of) profits will have a favourable or negative influence on the owners' equity profitability. With or without leverage, the return on total assets is either higher or lower than the return on owners' equity. An example of calculating financial leverage is shown below:

Degree of Financial Leverage = EBIT ÷ (EBIT- Interest)

- **Operating Leverage:** Fixed expenses are used in operating a business to obtain leverage. For a business to have operating leverage, its fixed expenses must be a specific percentage of its overall costs. A business like this will have a fixed percentage rise in operational profit or pre-interest and tax earnings for every sales rise (EBIT). In the event that the business had fixed expenses, it would have operational leverage, which means that an increase in sales would lead to a disproportionately larger rise in operating profit. As a general rule, a company's operational leverage will be stronger if its total cost percentage of fixed expenses is higher. The value of operating leverage is magnified when fixed expenses are static. For a heavily leveraged business, profits will grow quicker with every rise in sales, regardless of the scale of the jump. While the latter business's costs don't change in proportion to revenue, the first business's do. The duality of operating leverage means it may help or hurt a company's bottom line. In order to calculate the operational leverage ratio, the following formula is used:

Degree of Operating Leverage = Contribution ÷ EBIT

- **Cost of Capital:** Every economy is hampered by a scarcity of available capital. The emergence of the world's most fundamental evil has occurred as a result of the good lord's failure to provide sufficient money. Capital costs are a problem that is extremely essential in the world of business. If a project's return is not at least equal to the cost of capital, a corporation should decline to undertake the project and invest its resources elsewhere. To put it another way, the cost of capital is the rate of return a firm must generate on its investment in order to maintain its market value over time. An increase in the market value of a corporation occurs when the company is unable to produce a return on investment that is at least equal to the rate anticipated by its investors. Consequently, the projected rate of return for the fund providers is the same as the cost of capital for the organisation.

- **Weighted Average Cost of Capital (WACC):** After we have examined the cost of capital of various components of total capital, we may turn our attention to the over - all cost of capital, also known as the Weighted Average Cost of Capital. In order to determine the amounts, divide each individual kind's cost by the proportionate quantity of each specific type of capital that has been used. Using weights to help in the estimation of a company's WACC is standard practise when computing the WACC. Because it is presumed that the firm's current mix of funds (i.e. its current capital structure) is optimal, it is suggested that the usage of these weights be maintained in the future, just as it has been in past years. It is possible to determine the value of a stock or a bond using either Book Value Weights or Market Value Weights, depending on your preferences.

Corresponding author: **Kishor Kumar and Dr. Rajiv Chopra**
Submitted: 27 Oct 2011, Revised: 09 Nov 2011, Accepted: 18 Nov 2011 Published 31 Dec 2011

V. OBJECTIVES OF THE STUDY:

With respect to capital structure (CS), the purpose of this paper is to review recent research on the issue, with a specific emphasis on the relationship between capital structure (CS), which is defined as the ratio of debt to equity, and financial performance (FP) factors, in particular. The findings of the systematic literature review that was carried out have piqued the interest of many people in the field. Even while there is general agreement among academics that CS has an effect on FP, there is significant disagreement regarding the specific ways in which that impact presents itself. The following are the research's primary objectives:

1. The primary goal of the research is to discover methods of reducing the cost of capital to the lowest level practicable, which is dependent on a variety of factors such as capital mix, government tax policy, and changes in the level of the price of products and services offered.

2. The goal of this study is to provide new insights into the capital structure of pharmaceutical businesses Novartis India Limited and Glaxo's India Limited, with special focus on capital structure.

VI. LIMITATION OF THE STUDY:

It is hard to disagree with the project's glacial development because of the stakeholders' incapacity to think critically, as well as a lack of available time and the geographic distance between these two enterprises and the capital city of Delhi. It is unfortunate that the researchers did not receive any financial help, which we believe is a pity because it would have provided them with the resources they needed to effectively finish their investigation, among other things.

VII. RESEARCH METHODOLOGY:

Research, which is defined as the process of collecting new knowledge, is a phrase that is commonly used in the academic world. A classic definition of the term "research" is "a intentional and methodical examination of a certain subject area," according to the Oxford English Dictionary. The study covered the years 2007–2011, including the most recent data available.

- Sampling technique was used to choose the contestants for the competition, and the results were announced after the event.

- Multiple statistical techniques and tests were employed during the course of the research. In this research project, two companies were chosen on the basis of their annual reports for further investigation, and the capital structures of each company were thoroughly examined. It was in Mumbai, India, that information on the activities of these businesses was gathered outside of their yearly reports.

- Using the information collected various types of trend analysis and trend percentage calculations were performed using the information obtained. In order to maintain a high degree of consistency, historical data was translated to current data through the application of inflation accounting techniques. It was decided that numerals would be allocated in order to translate historical figures into their modern-day counterparts.

- To supplement the financial management manual, a reference book on accounting was also purchased for reference purposes to aid in the process.

Corresponding author: **Kishor Kumar and Dr. Rajiv Chopra**
Submitted: 27 Oct 2011, Revised: 09 Nov 2011, Accepted: 18 Nov 2011 Published 31 Dec 2011

- A secondary source of information was obtained from the financial records of pharmaceutical firms in order to perform the current research. The information was gathered between 2007 and 2011 and pertains to the years 1st April, 2007 to 31st March, 2011.

VIII. Research Instrument and Validation:

Following the research procedure, participants in this study were asked questions in one survey and then provided information in another survey. Both surveys were presented at the same time as part of the research methodology, and the findings were compared between the two surveys. As a result of the investigation's findings, it became necessary to contact and interview representatives from pharmaceutical firms as part of the investigation's ongoing process. Any and all information provided by respondents must be kept entirely and completely confidential at all times, regardless of the circumstances in which it was provided.

A. Capital Structure - Concept

There are two ways in which a company's assets might be funded either by increasing the claims of its owners or by growing the claims of its creditors. In the case of a firm that gets funds through the issuing of ordinary shares or the retention of earnings, the owners' claims increase; in the case of a company that borrows, the creditors' claims expand. An organization's financial structure is reflected by the many sources of finance that are accessible to it.

The financial institution's capital structure is the proportionate link between debt and equity. Equity is the total of the capital paid up, share premium, reserves and surplus of a firm. This is an important management option since it includes financial concerns of capital structures. It impacts both investors' profit and risk. As a result, a company's capital structure might impact its share market value. It will take time for the firm to design its financial structure from the start of marketing activities. So, if cash is needed to support investments, the capital structure must be chosen ahead of time.

B. Factors affecting Capital Structure:

When designing a capital structure plan, it is important to consider the following major factors and variables:

a) Income: Prior to being able to fully comprehend the implications of different financing methods on the income of equity owners, it is necessary to first address two concerns. The first thing to consider is that alternate funding strategies are not always financially advantageous. According to this statement, which of the following claims about alternative financing techniques and their impact on earnings per share is correct? What is true about alternative financing techniques, and their influence on earnings per share, is the first question.
The second question is regarding income. Was there a difference in terms of return on equity between using financial leverage and not using financial leverage?
This is more correctly expressed as the company's activities are or should be managed in such a way that equity owners' total risk, which encompasses both business and financial risk, is not extraordinarily high. It is essential for a company that is exposed to a considerable amount of business risk to make every effort to limit its financial risk to the absolute bare minimum. In the case of a firm with a low business risk profile, where the company is able to tolerate a considerable level of financial risk, the situation is the inverse of the above.

Corresponding author: **Kishor Kumar and Dr. Rajiv Chopra**
Submitted: 27 Oct 2011, Revised: 09 Nov 2011, Accepted: 18 Nov 2011 Published 31 Dec 2011

b) Control: When a corporation is involved, the chosen representatives of the shareholders are referred to as the board of directors. These people have the greatest voting power out of preference shareholders and debenture holders in an issue. Shareholders with preference shares have much less voting power than debenture holders, who have none. If the management is doing all in its power to hold on to its voting rights, the capital structure includes debentures and loans, but no equity shares.

c) Adaptability: It is called "adaptability" the ability of a firm to raise cash from any source that it chooses. The ability to generate additional equity capital because the debt-to-equity ratio can be reduced to zero and the firm can raise new equity capital gives financial managers greater flexibility in general because, if the rate of return on equity is adequate, the business can generate additional equity capital and the financial manager can be more creative. The fact that the debt-to-equity ratio is frequently not allowed to exceed a particular level precludes this from being an option. As a result, adaptability for pragmatic reasons may imply that the organisation does not fully utilise its lending capacity to the fullest extent possible, which is not desirable in the long run.

d) Regulatory Standards: In India, capital issuance by public limited firms were governed by the Capital Issues Control) Act, which was repealed in 2011. According to this regulation, a company is typically permitted to have a debt-to-equity ratio of 1:2. This means that for every rupee of equity, two rupees of debt may be used to finance it. In contrast, more liberal standards are implemented in capital-intensive businesses such as fertiliser and cement units, and a norm of 6 : 1 is adopted in shipping units, among other things.

e) Taxes: However, interest on borrowed money is deductible as an operating expense under the tax code. Dividend payments are not tax deductible as a corporate expense. As a result, the higher the tax rate, the greater the likelihood that an economic incentive to employ loan capital would be discovered in the marketplace.

f) Growth Rate: Debt usage must increase with the company. Why? Most firms must pay huge quantities of money that they cannot recoup. De facto, they are dependent on external funding. Due to lower pricing and higher issuance fees, firms that employ external stock instead of debt tend to rely on debt more. Reliance Industries Limited is a recent example, having borrowed heavily to fund their massive investment ambitions.

g) Financial profitability: While it is common to find businesses that employ less debt in their capital structure, we usually find those with high profitability. An example of this is the Gwalior Rayon Manufacturing (Weaving) Company Limited, which for a long period had a relatively minimal loan component in its capital structure. The theory doesn't support a low debt-equity ratio for such businesses, but given the strong profitability, internally produced funds seem to eliminate the need for external funding.

h) Attitude of lenders: The attitude of lenders is crucial to the decision on which capital structure to use, because the availability of loan capital is reliant on their willingness to provide the capital. In order to secure a loan, you must first determine how lenders would react to the debt incurred by your company's operations. It is necessary to seek the counsel and opinion of institutional investors when making large private placements with financial institutions.

Corresponding author: **Kishor Kumar and Dr. Rajiv Chopra**
Submitted: 27 Oct 2011, Revised: 09 Nov 2011, Accepted: 18 Nov 2011 Published 31 Dec 2011

i) Choice of Investors: It is the normal practise of the firm to keep investors with varying levels of financial exposure to securities separate. In addition, a capital structure should offer a wide range of investment options for every type of investor. The brave, venturesome investors tend to go for stock shares and loans, whereas bonds are usually purchased with conservative investors in mind.

Components of Capital Structure: Capital is an essential element of production, and it has a cost, just like every other factor of production. Because it's a capital structure, the firm must always consider the element of cost while raising funds. Shareholders want a higher percentage of the company's profits in return for their investment. But creditors tend to provide better deals since they have better prospects for repayment. Various sources of capital may be obtained, the most prominent of which are as follows:

- **Debt Capital (K_d):** A rate of return that matches net debenture proceeds to future debt capital outflows. It saves cash but raises danger. Inflation decreases borrowing desire. It therefore reduces the lender's required return. Debt service costs are lower than the lender's necessary rate of return. No taxes on losses. Debt costs are so pre-tax. Glaxo India Ltd. and Novartis India Ltd. were picked as cost of capital examples. Both firms are in the pharmaceutical industry. The data was collected from their 2010 Annual Reports. Comparing Novartis India Ltd. and Glaxo India Ltd., the costs of borrowed capital were 9.23% and 8.613%, respectively, based on a 38.53% effective tax rate.

- **Cost of Preferred Stock (K_p):** As a long-term finance option in India, preference share capital is not usually considered as a viable alternative. The cost of preferential share capital is substantially greater, contrary to debt capital, as the dividend paid on preferential shares is the taxable income, while the interest paid on debentures may be deducted as expenditure. From the interest point of view it is also a fixed in charge, but not a contractual duty, but the interest payment is contractually binding in accordance with the terms of the issue agreement made with the Company in advance, regardless of the profits achieved. The following are the procedures for determining the cost of redeemable share capital preferences:

$$\text{Cost of Preference share capital } (K_p) = \frac{\text{Dividend} + \frac{\text{Redeemable Value} - \text{Sales Value}}{\text{Number of Years}}}{\frac{\text{Redeemable Value} + \text{Sales Value}}{2}}$$

- **Cost of Common Equity (K_e):** Shares price is more difficult to calculate than debt or preferred stock cost. The issue is that the cost of common stock is based on the present value of all future dividends. When discounting expected dividends to get their present value, the current market price equals the cost of common shares. Generally speaking, the cost of capital is defined as the minimum rate of return required on investment efforts in order to keep the market value per share at its present level. The cost of capital, to put it another way, is a simple calculation based on the rate of return that the funds employed must create in order to justify their use inside a corporation in the context of achieving the goal of wealth maximisation.. According to the commonly referenced Gordon Model, the cost of equity capital:

$$K_e = \frac{\text{Expected Dividend}}{\text{Current market price}} + g$$

- **Cost of Retained Earnings (K*r*):** The cost of retained earnings must be kept low since the cost of common stock is so vital. If the company doesn't hang on to their earnings, they would have to be given to the common investors as dividends. It is possible to think of retained profits in the same way that a fresh issuance of ordinary stock is thought of as entirely subscribed, and it is possible to think of retained earnings in the same way that retained earnings are thought of as completely subscribed. The

Corresponding author: **Kishor Kumar and Dr. Rajiv Chopra**
Submitted: 27 Oct 2011, Revised: 09 Nov 2011, Accepted: 18 Nov 2011 Published 31 Dec 2011

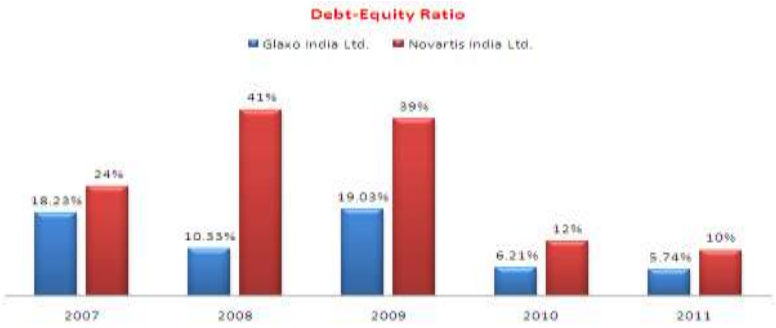
cost of common stock capital exceeds the retained profit cost and the retained earnings cost exceeds the common stock capital costs. Common stock capital costs are higher than retained profit costs. Common stock capital is more costly than retained income. When a shareholder receives a dividend and wishes to reinvest earnings, he/she first must pay distribution taxes before buying further stock shares in the firm. This change has been incorporated in the retained profits cost formula, which has been updated to reflect the change.

$$K_r = K_e \text{ (1 - Tax rate) (1 - brokerage rate) } or = K_e \text{ (1 - brokerage rate)}$$

Analysis and Interpretation:

Table A – The Debt-Equity Ratio of both pharmaceutical firms is reflected in this table, which spans 2007-2011.

Year	Glaxo India Ltd.	Novartis India Ltd.
2007	18.23%	24.0%
2008	10.33%	41.0%
2009	19.03%	39.0%
2010	6.21%	12.0%
2011	5.74%	10.0%



Interpretation: According to the data in the preceding table, the debt to equity ratio is decreasing in both of the units under investigation. GlaxoSmithKline has a lower rate than Novartis. If the EBIT of both companies is assumed to be similar, it may be argued that Novartis stands to gain as a result of the larger degree of financial leverage employed by the company.

Table B - The data displayed in this table illustrates the Degree of Financial Leverage for both pharmaceutical firms from 2007 to 2011.

G1axo India Ltd.			
Year	EBIT *(Rs.in Lakhs)*	EBIT – Interest	Financial Leverage EBIT / (EBIT - Interest)
2007	17589.61	17589.61− 1059.67 = 16529.94	1.06
2008	8304.70	8304.70 − 1007.41= 7297.29	1.14
2009	8662.71	8662.71 − 1124.26 = 7538.14	1.15
2010	12003.18	12003.18 − 925.48 = 11077.70	1.08
2011	10494.88	10494.88 − 1090.73 = 9404.15	1.11

Novartis India Ltd.			
Year	Year	EBIT *(Rs.in Lakhs)*	EBIT – Interest
2007	4769.22	4769.22 − 742.61 = 4026.61	1.18
2008	4710.67	4710.67 − 732.01 = 3978.66	1.18
2009	3536.95	3536.95 − 1716.55 = 1820.40	1.94
2010	6567.25	6567.25 − 956.15 = 5611.10	1.17
2011	11164.11	11164.11 − 453.77 = 10710.34	1.04

Source: Annual Reports from 2007 to 2011 of both the companies

Interpretation: This table illustrates the leverage in its finances, both in terms of the units under investigation and in terms of the company as a whole. Every one percent improvement in EBIT results in a one percent increase in EPS. In order to save their resources, these two firms have turned down

Corresponding author: **Kishor Kumar and Dr. Rajiv Chopra**
Submitted: 27 Oct 2011, Revised: 09 Nov 2011, Accepted: 18 Nov 2011 Published 31 Dec 2011

the option to borrow money at a lower interest rate than the market rate. It is feasible for these firms to increase the amount of earnings per share they create by increasing the amount of debt they have in their capital structure.

Table C - The information shown in this table indicates the degree of operating leverage experienced by both pharmaceutical companies between 2007 and 2011.

	G1axo India Ltd.			**Novartis India Ltd.**		
Year	EBIT *(Rs.in Lakhs)*	Contribution	OL	EBIT *(Rs.in Lakhs)*	Contribution	OL
2007	17589.61	16592.10	0.94	4769.22	13341.08	2.79
2008	8304.70	18887.28	2.27	4710.67	13706.44	2.91
2009	8662.71	20403.63	2.35	3536.95	19703.66	5.57
2010	12003.18	22485.76	1.87	6567.25	22422.15	3.41
2011	10494.88	22594.17	2.15	11164.11	28095.75	2.34

Source: Annual Reports from 2007 to 2011 of both the companies

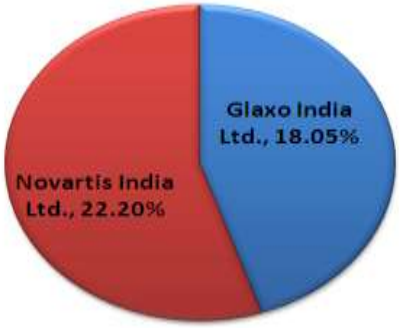
Interpretation: It may be deduced that Novartis' operational leverage is larger than Glaxo's. The extent of operating leverage indicates that profit will be greatly affected by a modest change in sales. No operating leverage exists if a firm's fixed cost to total cost ratio is zero. A given percentage change in sales for such a business would result in a corresponding percentage change in operating profit before interest and taxes. For Glaxo, the operating leverage for the year 2011 was 2.15, meaning that if sales increased by 1 percent, then EBIT would also grow by 2.15 percent. The odds of a Nov having a special ability are 2.34. As a result, Novartis is better positioned in relation to Glaxo.

Table -D: The WACC at book value weights of Novartis India Ltd. (2011) and Glaxo India Ltd (2011) is depicted in the table below:

		Sources				
		Equity Share Capital	Retained Earnings	15% Public Deposits	15% Debt	Total
Novartis India Ltd. (2011)	Book Value *(Rs. In Lacs)*	3186.16	24530.22	292.78	2457.55	30466.71
	Weights	0.104	0.805	0.011	0.080	1.00
	Cost of Capital	23.48%	23.48%	9.23%	9.23%	
	Weighted Cost of Capital	2.44%	18.90%	0.10%	0.76%	**22.20%**
Glaxo India Ltd. (2011)	Book Value *(Rs. In Lacs)*	5978.00	24530.22	--	14% Debt 2070.00	34431.00
	Weights	0.17	0.77	---	0.06	**1.00**
	Cost of Capital	18.65%	18.65%	---	8.61%	
	Weighted Cost of Capital	3.17%	14.36%	---	0.52%	**18.05%**

Corresponding author: **Kishor Kumar and Dr. Rajiv Chopra**

Submitted: 27 Oct 2011, Revised: 09 Nov 2011, Accepted: 18 Nov 2011 Published 31 Dec 2011



Source : Annual Reports from 2007 to 2011

Interpretation: Since the cost of various types of capitals is assessed based on the current market price, it is preferable to use Market Value Weights instead of Market Price Weights when estimating the cost of different kinds of capitals. The National Stock Exchange (NSE) found on the 16th of June, 2011, that the equity shares of Novartis India Ltd. and Glaxo India Ltd. were traded at Rs. 1,200 per share and Rs. 400 per share, respectively, on the NSE. The WACC has been computed using Market Value Weights, and the results are shown in the following Table F. Debentures have been valued at their face value, which is Rs. 100 for each bond issued, rather than at their market value. In order to calculate the market value of equity capital and retained earnings, the following formula is used. Because of the Market Value Weights, the following situation has arisen as a result of their application:

Table – E : The WACC at market value weights of Novartis India Ltd. (2011) is depicted in the table below:

Source	Market Value *(Rs. In Lakh)*	Weights (w)	Cost of Capital (k)	WACC (c) = (w) × (k)
Equity Share Capital Retained Earnings	25489.28	0.90	23.48%	21.13%
15% Public Deposits	292.78	0.01	9.23%	0.09%
15% Debt	2457.55	0.09	9.23%	0.83%
Total	28,229.61	1.000		22.05%

Table -F: The WACC at market value weights of Glaxo India Ltd. (2011) is depicted in the table below:

Source	Market Value *(Rs. In Lakh)*	Weights	Cost of Capital	WACC
Equity Share Capital Retained Earnings	2391.20	0.54	18.65%	10.07%
Debt Capital (14%)	2070.00	0.46	8.61%	3.96%
Total	4461.20	1.000		14.03%

Interpretation: Based on their respective market capitalizations, the weighted average cost of capital (WACC) for Novartis and Glaxo are 22.05 percent and 14.03 percent, respectively. This is a sharp contrast to the last example. It's not difficult to comprehend why this is the case, either. Loan financing accounted for 46 percent of total capital at Glaxo, but debt financing accounts for just 10 percent of total capital at Novartis, according to the company. GlaxoSmithKline is seeing a rise in profits as a result of financial leverage. Using fixed charge instruments, such as preference shares and debt capital, a company can obtain a competitive edge in the marketplace. It is therefore preferable to have a highly leveraged capital structure rather than a less leveraged capital structure. High leveraged capital structures have less tax consequences than lower leveraged capital structures, are more flexible, and

Corresponding author: **Kishor Kumar and Dr. Rajiv Chopra**
Submitted: 27 Oct 2011, Revised: 09 Nov 2011, Accepted: 18 Nov 2011 Published 31 Dec 2011

can be more closely controlled than lower leveraged capital structures (ROE). Debt consumption has risen in parallel with the company's fixed financial responsibilities and the risks shared by its owners as a result of its widespread use, which has raised the company's fixed financial obligations and hazards borne by its owners.

FINDINGS:

In this section, we will show how financial success depends on a range of different factors, including the company model, the state of the industry and the competition level, and how these factors need to be taken into consideration in order to better understand the financial results and the performance of the company:

1. According to the findings of this study, there is a favourable link between firm success and the recommended performance indicators of size and growth.

2. Both of the units under examination are seeing a drop in their debt-to-equity ratios. The interest rate charged by Novartis is higher than the interest rate imposed by GlaxoSmithKline. Even if both businesses use the same amount of financial leverage, it is possible that Novartis will benefit from the higher level of financial leverage used by the latter company. Novartis India Ltd. and Glaxo India Ltd.'s debt capital costs of 9.23 and 8.61 percent, respectively, were determined after accounting for an effective tax rate of 38.5 percent.

3. Table B presents the information about my finances in terms of the number of units being looked at and the overall firm. A one percent rise in EPS occurs from every one percent improvement in EBIT. Although both of these firms have been offered the opportunity to borrow money at a cheaper interest rate, they have declined. Increasing the amount of debt these firms have in their capital structure can help them raise their earnings per share.

4. Novartis has more operational leverage than Glaxo. Due to operating leverage, even little changes in sales will have a big impact on profit. Fixed cost to total cost ratio of 0 means no operational leverage. A change in sales would result in a change in operating profit before interest and taxes. Glaxo's operating leverage for 2011 was 2.15, suggesting that if sales grew 1%, EBIT grew 2.15 percent. Novartis with special abilities have 2.34 chances. As a result, Novartis outperforms Glaxo.

5. When looking at the sampled units for the year 2010, the cost of retained earnings at Novartis India Ltd. was revealed to be a whopping 23.48 percent, whilst the cost of retained profits at Novartis India Ltd. was discovered to be a whopping 18.65 percent.

6. It was determined that, based on the equity statistics of these firms for the year 2011, Novartis India Ltd. had a cost of equity capital of 23.48 percent, Glaxo India Ltd. had a cost of equity capital of 18.65 percent, and Novartis India Ltd. had a cost of equity capital of 23.48 percent.

7. Based on market capitalization, Novartis' WACC is 22.05% while Glaxo's is 14.03%. Contrast. It's easy to see why. In Glaxo, debt financing accounted for 46% of total capital, whereas in Novartis, it is just 10%. Leverage is increasing GlaxoSmithKline's earnings. A firm can gain a competitive advantage by using fixed charge securities like preference shares and loan financing. A highly leveraged capital structure has lower taxes, more flexibility, more control over money, and a higher return on equity (ROE). Debt raises the firm's fixed financial responsibilities and the danger to its owners.

CONCLUSION:

Corresponding author: **Kishor Kumar and Dr. Rajiv Chopra**
Submitted: 27 Oct 2011, Revised: 09 Nov 2011, Accepted: 18 Nov 2011 Published 31 Dec 2011

In light of the fact that pharmaceutical companies are capital-intensive organisations and that decisions about capital structure are critical in terms of financial management and risk management, this is a noteworthy development. Comparing the number of research studies conducted in different parts of the globe, the number of research studies undertaken in developing countries such as India is comparable to that found in other parts of the world. During the course of the investigation, the research outcomes are reached:

1. A few of the elements that have an impact on capital structure are profitability, control, flexibility, and compliance with legal and regulatory requirements. Fixed financial costs, such as debt and capital, provide a more flexible source of funding in a company's capital structure than stock since they are not affected by fluctuations in the stock market. Financial leverage may come in a number of shapes and sizes, depending on the situation. A company's financial soundness may be measured by three ratios: the debt-to-equity and debt-to-equity-to-asset ratios, as well as the interest coverage ratio.

2. Glaxo and Novartis were found to have denied themselves the benefit of lower-cost borrowed capital by increasing their debt levels, which was uncovered after a comprehensive examination into the circumstances.

3. Operating leverage is a term used to describe the practise of utilising fixed expenditures to run a business, which is also referred to as capital expenditures in some circles. A table that demonstrates the degree of operational leverage that GSK and Novartis India have achieved in their respective businesses may be seen on their respective websites.

4. Novartis has a higher OL than Glaxo than the other firms, according to the figures in the table below. Every condition, including money, has a monetary value, and money is not an exception. For a long period of time, financial management was thought to have only one function: to provide an organisation with favourable operating circumstances in accordance with the company's objectives.

5. The firm's overall cost of capital is greatly influenced by the source of its capital, and hence its choice of financing is crucial. Capital budgeting choices must also include a cost of capital estimate. Making choices on leasing, bond refunding, working capital policies, and many other topics also necessitates estimates of the cost of capital.

References:

1. *Abor, J. (2005). The effect of capital structure on profitability: An empirical analysis of listed firms in Ghana. The Journal of Risk Finance, 6(5), 438–445.*
2. *Akhtar, S. and Oliver, B. (2009), "Determinants of Capital Structure for Japanese Multinational and Domestic Corporations", International Review of Finance, 9(1-2), pp. 1-26.*
3. *Antoniou, A., Guney, Y. and Paudyal, K. (2008), "The determinants of corporate debt ownership structure: Evidence from market-based and bank-based economies", Managerial Finance, 34(12), p. 821– 847.*
4. *Baker, M., Wurgler, J. (2002). Market timing and capital structure. The Journal of Finance, LVII (2), 1–32.*
5. *Bari, R. R. Cash Planning & Management, Triveni Publications, Delhi I Edition, 2007.*
6. *Benjamin M. Blau and Kathleen P. Fuller (2008) published an article "Flexibility and dividends" in the Journal of Corporate Finance 14 (2008) 133–152.*
7. *Booth, L., Aivazian, V., Demirguc-Kunt, A. and Maksimovic, V. (2001), "Capital Structures in*

Corresponding author: **Kishor Kumar and Dr. Rajiv Chopra**
Submitted: 27 Oct 2011, Revised: 09 Nov 2011, Accepted: 18 Nov 2011 Published 31 Dec 2011

Developing Countries", Journal of Finance, 56(1), pp. 87-130.

8. *Chen, J. S., Chen, M. C., Liao, W. J., Chen, T. H. (2009). Influence of capital structure and operational risk on profitability of life insurance industry in Taiwan. Journal of Modelling in Management, 4(1), 7–18.*

9. *Crnigoj, M. and Mramor, D. (2009), "Determinants of Capital Structure in Emerging European Economies: Evidence from Slovenian Firms", Emerging Markets Finance and Trade, 45(1), pp. 72-89.*

10. *Hovakimian, Armen. (2004). The Role of Target Leverage in Security Issues and Repurchases. The Journal of Business. 77. 1041-1072. 10.2139/ssrn.262584.*

11. *Jensen and Meckling (1976), Journal of Financial Economics, October, 1976, V. 3, No. 4, pp. 305-360.*

12. Modigliani, F., & Miller, M.H. (1963). Corporate income taxes and the cost of capital: A corretion. The American Economic Review, 53(3), 433-443.

13. *Statistical Pocket Book, 2011, Central Statistical Organisation, Department of Statistics, Ministry of Planning Government of India.*

14. *Triandafil, C. and Brezeanu, M. P. (2010), "CEE Corporate Finance Peculiarities: Comparative Approach in Relation with Developed Countries", Management & Marketing Challenges for Knowledge Society, 5(2), pp. 77-92.*

15. *Waterman, Merwin 11., Trading on Equity, ill Litman. W.J. (cd.), Essays on Business Finance. Masterco Press. 1953 p. 411.*

16. *Weston, Fred F., and Brigham Eugene, F., Managerial Finance, The Dryden Press,Hinsdale, Illinois, V Edition, 1972.*

17. *Yasaswy, N. 1. : Finance for Non-Financial Executives, Allied Publishers Pvt. Ltd., New Delhi, 1978.*

Newspapers and Periodical:

1.1 Annual Reports of Glaxo India Ltd. 2007 – 2011

1.2 Annual Reports of Novartis India Ltd. 2007 – 2011

1.3 Business India, (Fortnightly), Bombay.

1.4 Business World (Fortnightly), Bombay.

1.5 Business Today, (Fortnightly), New Delhi.

1.6 www.moneycontrol.com.

Corresponding author: **Kishor Kumar and Dr. Rajiv Chopra**

Submitted: 27 Oct 2011, Revised: 09 Nov 2011, Accepted: 18 Nov 2011 Published 31 Dec 2011