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A study on sustainable growth rate of selected pharmaceutical companies in India

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Abstract

This paper examines the impact of Sustainable Growth Rate of selected Pharmaceutical companies in India. Objective of the study is to analyze the sustainable growth rate position of selected Pharmaceutical industries in India. For this purpose a sample of top two Pharmaceutical companies in India listed on the National Stock Exchange (NSE) have been selected for the study. The data have been taken for a period of 15 years from 2000 to 2014; from the official database of Center for Monitoring Indian Economy (CMIE) namely Prowess and company websites. Ratios have been used to analyse the sustainable growth rate position of the selected companies.

Keywords: Profit, Tax, Sustainable Growth Rate, Asset

Introduction

The consistency of a company's growth objectives and its policies can be tested by using a concept called 'sustainable growth'. Sustainable growth rate (SGR) is the maximum annual percentage increase in sales, that can be achieved based on target operating, debt and dividend payout ratios. It is also called accounting sustainable growth rate which implies the rate of growth in sales, assets, debt and equity that can be sustained indefinitely without the management altering the debt to equity relationship, the return on equity performance or the dividend payout rate. The management's ability to manage the growth of the company is an important criteria to make the company a value enhanced one, being differentiated from others.

Review of literature

Klein, Daniel P and Brian Belt, (1994) through their study on "Sustainable growth and choice of financing; A test of the pecking order hypothesis", have identified how firms finance growth in sales when that growth is in excess of a sustainable level. A Sample of 363 industrial firms listed on the COMPUSTAT database for the six year period, 1983-88, have been assessed. Contingency table analysis reveals that the firms have shown indirect evidence that faster the firms are growing, the more they use up available internal financing and to compensate that they should raise the funds externally. Logit analysis has shown that firms with lower asymmetric information tend to raise the majority of their funds externally, with debt being the primary choice. It has been concluded indirectly that firms use internal financing as much as possible and when external financing is required the primary choice is debt financing followed by new equity.

Fonseka M.M., Constantino Garcia Ramos, Gao-liang Tian, (2012) in their study, "Sustainable Growth Rate model for managers and researchers" have analysed the difference between the Higgins' model and the Van Horne model of sustainable growth. They have analysed whether these two models estimate divergences related to variations in common financial characteristics. The authors have dealt with all united states manufacturing companies found on the COMPUSTAT industrial research database and full coverage tapes from 2000 to 2008.Since Higgins and Van Horne's sustainable growth models assume that companies do not issue new equity capital and companies can use retained profits and debt capital for their sustainable growth, those companies which issued New Equity capital have been excluded from the sample. Thus, the sample consisted of 15377 companies. The study has confirmed that the Sustainable growth rate of Van Horne's and Higgins model helps the managers and researchers to ensure that the scare resource are allocated wisely. In the company's the sustainable growth rate serves as a valuable tool in the process of coordinating plans and actions.

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Objective

To ascertain the Sustainable Growth Rate of top two Pharmaceutical Companies.

Research methodology

To achieve the above mentioned objective of the study analytical research is used. A Sample of top two pharmaceutical companies (on the base of assets) namely Cadila Health Care and Lupin listed in National stock exchange have been selected. The data have been taken for a continuous period of fifteen years from 2000-2014 from the official database of Capitaline and company websites.

Analysis and Interpretation

The Robert C Higgins' extended model is a powerful tool for

checking the consistency between sales growth goals, operating performance and financial objectives. According to him, the sustainable growth represents the maximum sales or asset growth that a firm can support using both internally generated funds and external funds. Hence:

$$SGR = P \times R \times A \times T$$

Where,

P=Profit margin after tax
R=Reinvestment rate (Retention rate)
A=Asset to Equity (Leverage)
T=Turnover of Assets (Asset Turnover ratio)

Sustainable growth represents the maximum values or asset growth that a firm can support using both internally generated funds and debt. SGR is calculated by multiplying the company's ROE by the proportion of its retained earnings. According to Higgins, SGR depends upon the change in equity in a financial year divided by opening equity without any additional equity introduced during the year. Such a change is possible only through the retained earnings. Thus, the funds generated through retained earnings increase the net worth of the firm and with the increase in the net worth, the firm can borrow more funds which would enable the firm to increase its asset base. The increase in assets results in an increase in operation which ultimately results in an increase in profits and thereby an increase in retained earnings.

Profit Margin (P)

Profit margin is the proportion of profits earned after taxes (PAT) to the total sales and it indicates the overall measure of profitability. An increase in profit margin will increase the firm's ability to generate funds internally and thereby increase its sustainable growth. A drop in the firm's profitability will decrease its sustainable growth, unless there is a decrease in the dividend payout ratio or an increase in financial leverage, or unless the firm increases its turnover and is able to generate more sales per rupee of assets employed.

$$P = \frac{\text{Profit after taxes during the current year}}{\text{Sales during the current year}}$$

Retention Ratio (R)

The retention ratio being the amount of profits ploughed back into the business is a barometer to assess the proportion of profits after taxes and dividends available to retain in the business as reserves. The retention ratio increases with a decrease in the dividend payout ratio. This increases the internally generated equity and thus increases sustainable growth. The amount of growth a firm can sustain and its profitability are related to its dividend decisions, so long as the firm (because of managerially imposed or external market constraints) cannot issue additional common stock (Robert Higgins).

$$R = \frac{\text{Profit after taxes during the current year} - \text{Dividends paid during the current year}}{\text{Profit after taxes of the current year}}$$

Asset to Equity Ratio (A)

This ratio indicates the proportionate claims of owners and the outsiders against the firm's total assets and an increase in this ratio increases the firm's financial leverage and results in wealth maximization. As a general rule, there should be an appropriate mix of debt and equity in financing the firm's assets to enjoy sustainable growth.

$$A = \frac{\text{Total Assets in the beginning of the year}}{\text{Shareholder's funds in the beginning of the year}}$$

Sales to Asset Ratio (T)

The growth of a company is assessed based on its turnover and the dynamic use of its assets. The asset utilization efficiency should generate higher turnover resulting in a higher asset turnover ratio. An increase in the firm's total asset turnover increases the sustainable growth rate and vice versa.

$$T = \frac{\text{Sales during the current year}}{\text{Total assets in the beginning of the year}}$$

Computation of SGR

The following table shows the SGR of LUPIN calculated for 15 years from 1999-2000 to 2013-2014.

SGR-LUPIN

Years	Profit margin (p)	Retention ratio (R)	Asset to equity ratio (A)	Sales to asset ratio (T)	SGR= P*R*A*T
2000	0.039	0	1.845	0.756	0
2001	0.072	0.767	2.191	0.884	0.107
2002	0.084	0.723	2.906	0.891	0.157
2003	0.078	0.727	2.846	0.909	0.147
2004	0.086	0.734	2.704	1.391	0.237
2005	0.073	0.689	1.841	1.228	0.114
2006	0.114	0.858	1.881	1.026	0.189
2007	0.154	0.868	2.417	1.120	0.362
2008	0.176	0.814	1.973	1.106	0.313
2009	0.144	0.752	1.733	1.250	0.234
2010	0.178	0.815	1.687	1.059	0.259
2011	0.180	0.835	1.358	1.065	0.217
2012	0.150	0.822	1.332	1.098	0.180
2013	0.111	0.858	1.314	1.273	0.159
2014	0.260	0.884	1.154	1.240	0.329
Average	0.127	0.793	1.945	1.086	0.200

The profit margin year-wise analysis has shown an increasing trend from 2000 to 2014 (0.039 to 0.260) and the average is 0.127. An increase in the firm's ability to generate funds internally would increase its sustainable growth.

The year wise analysis shows that the average retention ratio has increased from 2001 to 2014 with slight fluctuation in between. The company has retained major part of the profits and it results in the less dividend payout. This reveals the ability of the company to plough back its profits.

The proportion of assets is more than equity throughout the study period and during 2001-2004 and 2006-2007, it has been more than twice the amount of equity. This helps in wealth maximisation of the company. There is an appropriate mix of debt and equity in financing the firm's assets to enjoy sustainable growth in the Lupin ltd Company.

The assets utilization efficiency of Lupin ltd Company results in an increase in the sustainable growth rate, In the Lupin ltd Company the increase in sales, assets, debt and equity results in increase in sustainable growth rate during the years. The

management is able to manage the funds with the help of the retained earnings and without issuing additional equity which will increase the net worth of the company. The company can borrow funds to increase the asset base which ultimately increases the profits of the firms. Sustainable growth rate of Lupin ltd Company shows fluctuating trend during the study period.

The following table shows the SGR of Cadila Health Care calculated for 15 years from 1999-2000 to 2013-2014.

SGR-CADILA Health Care

Years	Profit margin (p)	Retention ratio (R)	Asset to equity ratio (A)	Sales to asset ratio (T)	SGR= P*R*A*T
2000	0.084	0.628	1.235	0.614	0.040
2001	0.147	0.730	1.453	0.605	0.094
2002	0.128	0.686	1.096	0.748	0.072
2003	0.082	0.714	1.482	0.637	0.055
2004	0.138	0.734	2.089	1.025	0.217
2005	0.123	0.713	1.752	1.095	0.168
2006	0.132	0.773	1.604	1.078	0.176
2007	0.145	0.756	1.588	1.065	0.185
2008	0.144	0.761	1.507	1.063	0.175
2009	0.156	0.769	1.678	0.916	0.184
2010	0.274	0.796	1.665	0.827	0.300
2011	0.209	0.790	1.366	0.827	0.186
2012	0.209	0.767	1.294	1.079	0.224
2013	0.141	0.908	1.528	0.806	0.017
2014	0.223	0.178	1.635	0.741	0.048
Average	0.156	0.659	1.531	0.875	0.143

The profit margin year-wise analysis has shown a fluctuating trend and the average is 0.156. The maximum profit margin is found in 2009-2010 (0.274).An increase in the firm's ability to generate funds internally would increase its sustainable growth.

The year wise analysis shows that the average retention ratio has increased during the years from the 2000 (0.628) to 2012 (0.767) and it has declined in 2013& 2014 and the average of Retention Ratio is 0.659. The company has to retained more profits and it results in the less dividend payout. This reveals the ability of the companies to plough back their profits.

The Asset to equity ratio reveals an increasing trend accept during some years of the study period. This results in maximisation of the asset base of the company leading to increase in sustainable growth rate.

There is increase in the asset turnover ratio throughout the study period, which implies efficient utilisation of assets. This results in increase in the sustainable growth rate.

In the Cadila Health Care Company Sustainable Growth Rate has shown a fluctuating trend during the study period. The company should increase the sales, assets of the company which will automatically increase the profits and retained earnings.

Conclusion

The goal of financial management of an enterprise is to realize the maximum of enterprise value, improvement of the growth rate, profits of companies. But growth has its limits. Much slow or fast increase can bring the same serious drawback to the development of companies. So, how to utilize the limited financial resource, realize the balance between the growth of sale and fund increase has become the focus of business. The Sustainable Growth Rate (SGR) of a firm can be achieved, given the firm's profitability, asset utilization, and desired dividend payout and debt equity ratios. Comparatively LUPIN has a better Sustainable Growth Rate Cadila Health Care Company. In case of Cadila Health Care Company Sustainable Growth Rate has been fluctuating and found to be very low in 2013 and 2014.Cadila Health Care should take measure to improve the Sustainable Growth Rate.

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