



TO ANALYSE THE IMPACT OF LIQUIDITY AND LEVERAGE ON PROFITABILITY

Dr. Rakesh Kumar Ambalal Prajapati

Assistant Professor, Uma Arts And Nathiba Commerce Mahila College. Sector 23 Gandhinagar, Gujarat, India.

ABSTRACT

The combination of liquidity variables and capital structure variables has been always a major concern for the financial managers in different companies. The present study attempts to analyze the relationship between liquidity and profitability and investigate the impact of financial leverage and liquidity on the financial performance of select pharmaceutical companies for the period from 2008-09 to 2017-18. The results of the study show that the liquidity of the companies which is reflected in the ongoing ability to pay financial obligations, affects the firm's capital structure. The increase in liquidity of the firm leads to decrease in the leverage and vice versa. However, no significant impact of leverage on profitability and capital structure is evidenced in the present study.

KEYWORDS: Liquidity, Leverage, Pharmaceutical, Profitability.

INTRODUCTION:

Liquidity plays a key role in the upliftment of a company. Liquidity is the ability of a company to meet the short-term obligations, and convert its assets into cash. Short-term liquidity generally signifies obligations which mature within one accounting year. It also reflects the operating cycle: buying, selling manufacturing, and collecting. A company that cannot pay its creditors on time and continues not to honor its obligations to the suppliers of credit, services, and goods can be declared a sick company or bankrupt company. Inability to meet the short-term liabilities may affect the company's operations and in many cases it may affect its reputation too. Lack of cash or liquid assets on hand may force a company to miss the incentives given by the suppliers of credit, services and goods. Loss of such incentives may result in higher cost of goods which in turn affect the profitability of the business. So, there is no standard norm for liquidity. It depends on the nature of the business, scale of operations, location of the business and many other factors. Every stakeholder has interest in the liquidity position of a company. Supplier of goods will check the liquidity of the company before selling goods on credit. Employees also have interest in the liquidity, as they wish to know whether the company can meet its employees-related obligations, including salary, pension, provident fund, etc. Shareholders are interested in understanding the liquidity due to its huge impact on the profitability. Shareholders may not like high liquidity, as liquidity and profitability are inversely related. However, shareholders are also aware that non-liquidity will prevent the company from getting incentives from the suppliers, creditors, and bankers.

With the expectation that the after tax income from the asset and asset price appreciation will overreach the borrowing cost. As a collateral security for the loan, the finance provider would set a limit on how much risk it is prepared to take and will set a limit on how much leverage it will permit, and would require the acquired asset to be provided. For example, for a residential property the finance provider may lend up to, say, 80% of the property's market value, for a commercial property it may be 70%, while on shares it may lend up to, say, 60% or none at all on some shares.

Gains and losses are to be multiplied on leveraging gains. And on the other side, there is a risk that leveraging will result in a loss i. e., it actually turns out that financing costs overreached the income from the asset, or because the value of the asset has fallen.

Sources:

Leverage can arise in a number of situations, such as:

- By borrowing from their broker, Individuals leverage their exposure to financial investments.
- When buying a home by financing a portion of the purchase price with mortgage debt, Individuals leverage their savings.
- Where the principal is implied borrowed/lent at very short T-bill rates, Securities like options and futures contracts are bets between parties.
- The more it borrows the less equity it needs, so any profits or losses are shared among a smaller base and are proportionately larger as a result. Equity owners of businesses leverage their investment by having the business borrow a portion of its needed financing

- An increase in revenue will result in a larger increase in operating income. Businesses leverage their operations by using fixed cost inputs when revenues are expected to be variable.
- Hedge funds may leverage their assets by financing a portion of their portfolios with the cash proceeds from the short sale of other positions

Risk:

Leverage may also enlarge losses, While leverage magnifies profits when the returns from the asset more than offset the costs of borrowing, a less-leveraged corporation might survive while A corporation that borrows too much money might face bankruptcy or default during a business downturn. An investor who buys a stock on 50% margin will lose 40% if the stock declines 20%.

In value of collateral assets, risk may be ascribed to a loss. When the value of securities holds declines, brokers may require the addition of funds. When the value of real estate declines below the debt's principal, bank may fail to renew mortgages. Loans may be called, Even if cash flows and profits are sufficient to maintain the ongoing borrowing costs.

When there is little market liquidity and sales by others are depressing prices, this may happen exactly. It means that as things get bad, leverage goes up, multiplying losses as things continue to go down. Even if the underlying asset value decline is mild or temporary this can lead to rapid ruin. By maintaining unused room for additional borrowing, and by leveraging only liquid assets the risk can be alleviate by negotiating the terms of leverage. Due to its relative stability when compared with other markets, the extreme level of leverage afforded in forex trading presents relatively low risk per unit. In order to make any considerable profit, Compared with other trading markets, forex traders must trade a much higher volume of units. For example, many brokers offer 100:1 leverage for investors, meaning that someone bringing \$1,000 can control \$100,000 while taking responsibility for any losses or gains their investments suffer. Equal part of risk and reward are presented in this intense level of leverage.

There is an implied assumption in that account, however, which is that the underlying levered asset is the same as the unlevered one. The additional variegation might more than offset the additional risk from leverage, if a company borrows money to modernize, or add to its product line, or expand internationally. He or she might have the same volatility and expected return as an investor in an unlevered equity index fund, with a limited downside, if an investor uses a fraction of his or her portfolio to margin stock index futures and puts the rest in a money market fund. The matching and off-setting economic leverage may lower overall risk levels, if both long and short positions are held by a pairs-trading stock strategy.

It is not the case that a levered company or investment is always riskier than an unlevered one while adding leverage to a given asset always adds risk. Rather than unlevered technology companies, many highly levered hedge funds have less return volatility than unlevered bond funds, and public utilities with lots of debt are usually less risky stocks.

LITERATURE REVIEW:

Hiran (2016) aimed to study the relationship between liquidity and profitability, and between leverage and profitability of Indian automobile sector. For the purpose, he collected the data of 25 Indian automobile companies out of 29 compa-

nies which is part of CNX500 Index of NSE, for the period of five years from 2011 to 2015. Alina et al. (2016) collected the data of 15 cement sector firms for the period from 2008 to 2014. The statistical approaches, i.e., correlation, fixed effect, random effect and Hausman tests were applied, to indicate, that both capital structure and liquidity play a vital role in growth and profitability of the firm. Ismail (2016) examined the impact of liquidity management on the performance of the Pakistani firms constituting the KSE 100 Index. The regression analysis was used to find the impact of liquidity on performance. From the above literature review it can be seen that many researchers have conducted studies in the area of liquidity management and financial leverage. There is always an issue with these variables as to how best to combine these elements to improve the firm's financial performance. This is the reason to carry out the present study in finding out the impact of liquidity and leverage on profitability of selected companies of pharmaceutical sector listed on NSE.

OBJECTIVE:

The study aims to:

- Analyze relationship between liquidity and profitability in the select pharmaceutical companies.
- Investigate the impact of financial leverage and liquidity on the financial performance of select pharmaceutical companies.

DATA AND METHODOLOGY:

For research purpose, the sample selected consists of pharmaceutical companies

from Nifty index. The present study is based on secondary data. The data required for this study have been collected from the annual reports of selected companies, previous research papers, journals, various websites, and financial statements of the companies, Bloomberg database, and www.nse.com. The study covers a period of 10 years for all the companies starting from 2010-11 to 2019-20. The study comprises calculation of ratios to find the impact of liquidity and leverage ratios on profitability.

DATA ANALYSIS AND INTERPRETATION:

Descriptive Statistics:

Descriptive analysis gives insight into the behavior of the variable. The researcher obtained descriptive statistics of the variables, namely, mean, maximum, minimum, standard deviation, median, etc. The return rate measured by ROA and ROI, have an average of 14.118 and 16.409 and a median of 13.16 and 17.105, respectively (below Table). The variable D/E ratio has mean of 50.02 and median of 43.79. The value indicates that approximately 50% of the total assets are determined by equity funds, whereas ICR shows 84% of Debt Ratio (DR) is maintained. The above position reveals that the companies are financially leveraged with a large percentage of total DR. It is seen that mean value of the DR, i.e., ICR has a higher volatility as compared to ROA. The standard deviation of ICR is higher which means it is highly volatile, while ROA has a lower standard deviation which means it is less volatile. Skewness is the extent to which a distribution of values deviates from symmetry around the mean. ROI is negatively skewed, while all independent variables have positive skewness. The kurtosis value for all variables is more than one so they are leptokurtic.

Descriptive Statistics of the Variables

	ROA	ROI	QR	CR	D/E	ICR	D/A
Mean	14.11820	16.40910	1.216100	2.257800	50.02850	84.20200	21.37920
Median	13.16000	17.10500	0.930000	1.780000	43.79500	16.91000	23.25000
SD	15.30636	9.319433	0.908423	1.672196	47.47820	155.1658	16.75068
Skewness	6.461806	-0.111820	1.945102	2.515911	0.999094	2.516952	0.163547
Kurtosis	57.11337	3.165766	8.120927	12.12471	4.159651	8.651858	1.830233
Jarque-Bera	12,896.99	0.322887	172.3233	452.4145	22.23977	238.6821	6.147276
Probability	0.000000	0.850914	0.000000	0.000000	0.000015	0.000000	0.046253
Observations	100	100	100	100	100	100	100

Correlation Analysis:

In order to fulfill the first objective of the study, the correlation matrix was calculated on Eviews. Correlation investigation was employed to determine the strength and course of the linear association among the variables in concern. The correlation coefficients are displayed in below Table. It is observed that liquidity ratios (QR and CR) have positive relation with profits of the firm, whereas leverage ratios D/E ratio and D/A ratio have negative relation with the profits of the

firm. This implies that firms' profitability will decrease as the leverage increases, and this may be due to increased financing costs. QR is negatively related to leverage impact. Similarly, DR (ICR) is positively correlated with liquidity ratios, i.e., as the leverage increases, liquidity of the firm decreases. This is due to increased cost of capital and lack of efficiency of the firm in meeting short-term obligations.

Correlation Coefficients

	ROA	ROI	QR	CR	D/E	ICR	D/A
ROA	1.000000	0.242874	0.416862	0.393991	-0.191365	0.161491	-0.304635
ROI	0.242874	1.000000	0.240114	0.212052	-0.408151	0.313062	-0.396904
QR	0.416862	0.240114	1.000000	0.754079	-0.459390	0.514108	-0.520424
CR	0.393991	0.212052	0.754079	1.000000	-0.377750	0.418234	-0.428574
D/E	-0.191365	-0.408151	-0.459390	-0.377750	1.000000	-0.400176	0.952941
ICR	0.161491	0.313062	0.514108	0.418234	-0.400176	1.000000	-0.439517
D/A	-0.304635	-0.396904	-0.520424	-0.428574	0.952941	-0.439517	1.000000

CONCLUSION:

The study used data of 10 companies of pharmaceutical sector listed on National Stock Exchange for the period 2006-07 to 2015-16. Results reveal that D/A ratio and D/E ratio are negatively correlated with the profits of the firm and also the liquidity ratios. However, ICR has positive correlation with profits of the firm and also with the liquidity of the firm. It was found while analyzing that the liquidity ratios have positive correlation with the profits of the firm. This negative relationship and insignificance of debt ratio and debt to asset ratio with profits of the sampled companies shows that an increase in debts might lead to a reduction in the assets utilization potential of the company. This means that pharmaceutical companies do not assign much value to the debt financing for the growth of their companies. The ICR of the financial leverage of the quoted pharmaceutical companies shows positive relationship with ROI. It is insignificant and cannot be considered as an important variable affecting the financial performance of pharmaceutical companies. ICR is not used in financing the company's growth. So, there is no significant effect of ICR on profitability of quoted pharmaceutical companies. The empirical findings of this model can thus be used for

future policy and managerial strategy formulation to enhance the profitability of the pharmaceutical companies listed on NSE. The study concludes that liquidity has a statistically significant impact on the profitability and capital structure of the select companies. However, no such significant impact of leverage on profitability and capital structure is evidenced in the study. In line with the findings of this study, the following recommendations are made: the capital structure proxies show negative impact on firm performance, so it is suggested that the firm's financial managers should wisely use the combination of debt and equity. They should ensure such a combination which will help the firm in achieving its goals. Both QR and CR have positive impact on the financial proxies of the pharmaceutical sector firms. It is therefore opined that, more the firms have cash and are near to cash resources, the better the firms will perform financially. The results of this research showed that the liquidity of the company, which is reflected in the ongoing ability to meet financial obligations, affects the firm's capital structure. The increase of liquidity of the firm leads to decrease of the leverage and vice versa. More often than not, it is rare for any firm to depend solely on equity finance, thus, management seeks other sources of funding. Therefore, managers

should employ financial leverage in a way that enhances value for their company and maintains financial stability. The amount of debt finance in the financial mix of the firm should be at the optimal level so as to ensure adequate utilization of the firm's assets. And also the leverage has to be efficiently maintained in terms of returns to owners and total assets.

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