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A study on capital structure and solvency position of TVS Srichakra limited using ratio analysis from 2013-2017

Dr. Lakshmi G, P Roshini, B Sowmya and V Shrivarthini

Abstract
This paper analysed the "Capital Structure Pattern and solvency position of TVS Srichakra private limited". A study on long-term solvency, assessment of debt-equity, debt to total fund and examination of the use of debt and equity capital in TVS Srichakra Private Limited through the application of ratio analysis has been undertaken. The time period considered for evaluating the study is five years i.e. from 2013 to 2017. The TVS Srichakra Private Limited had shown an inclination in strengthening long term funds consisting of both shareholders' funds as well as long term borrowed funds in order to finance its assets requirement. TVS Srichakra Private Limited mostly depended on equity financing. So, the financial risk of the company is low, but it could fail to enjoy the advantages of financial gearing. TVS Srichakra Private Limited should raise the debt funds to bring the optimum capital structure for improving the financial performance of the company. A higher interest coverage ratio is desirable, but too high ratio is some of the years of the study indicate that the TVS Srichakra Private Limited is very conservative in using debt, and it is not using debt to the best advantage of the shareholders.

Keywords: Debt-equity ratio, Debt to total fund ratio, Interest coverage ratio and Quantum and structure of total funds TVS Srichakra private limited

Introduction
The capital structure is how a firm finances its overall operations and growth by using different sources of funds. Capital structure analysis is a periodic evaluation of all components of the debt and equity financing used by a business. The intent of the analysis is to evaluate what combination of debt and equity the business should have. This mix varies over time based on the costs of debt and equity and the risks to which a business is subjected. Capital structure analysis is usually confined to short-term debt, leases, long-term debt, preferred stock, and common stock.

Statement of Problem
A company's capital structure is arguably one of its most important choices. From a technical perspective, the capital structure is defined as the careful balance between equity and debt that a business uses to finance its assets, day-to-day operations, and future growth. From a tactical perspective however, it influences everything from the firm's risk profile, how easy it is to get funding, how expensive that funding is, the return its investors and lenders expect, and its degree of insulation from both microeconomic business decisions and macroeconomic downturns. This study depicts the position of the company in choosing the optimum capital structure.

Scope of the Study
The scope of study pertains to "TVS SRICHAKRA LTD". This study is mainly a comparison of five years of its operation and it aims to reveal the company standard in respect of financial PERFORMANCE.
Commercialization and industrialization are key areas of progress and growth of Economy. For rapid industrialization and commercialization it is necessary to have quick transport and logistics facilities. So tyre industry is a key variable for enhancing speed in the logistic and transport industry.

So ultimately tyre industry is a key success factors for rapid industrialization and Commercialization. This analysis can be used for chalking out the purpose of planning, decision making, to identify the optimum capital structure. And it provides a glimpse into the results which are based on historical facts and figures.

Objective

- To express an opinion on viability of company's capital structure using capital structure ratios and analyse solvency position.

Reasearch Methodogy

The Advanced Learner's Dictionary of Current English lays down the meaning of research as "a careful investigation or inquiry especially through search for new facts in any branch of knowledge." Research in common parlance refers to a search for knowledge. Research can be defined as a scientific and systematic search for pertinent information on a specific topic.

Source of Data

Secondary data means data that are already available i.e., they refer to the data which have already been collected and analysed by someone else. When the researcher utilises secondary data, then he has to look into various sources from where he can obtain them. Usually utilised secondary data are collected from:

- Books, magazines and newspapers.
- Reports and publications of various associations connected with business and industry, banks, stock exchanges etc.,
- Public records and statistics, historical documents and other sources of published information.

Tools Used For the Analysis

Capital structure ratios

- Equity ratio
- Debt to Equity ratio
- Debt to total assets ratio
- Capital gearing ratio
- Proprietary ratio

Liquidity ratio

- Current ratio
- Liquid ratio
- Absolute liquid ratio

Limitations of the Study

No study is an ultimate effort. It always leaves room for improvement and it is the limitation of one study, which serves as the base for the future research ventures. Even though sincere efforts are taken to ensure that an exact picture can be arrived at, still there may be some limitations related to our study. They are as follows:

- The secondary data was collected through audited financial reports and the figures are most approximate figures.
- The period of the study is limited to five years from 2013-2017 and the results may vary when the same study is conducted after some years.

Profile of the Company

TVS Srichakra is engaged in the business of tyre manufacturing. Incorporated in 1982 as Srichakra Tyres, today it is one of the leading two– and three–wheeler tyre manufacturer in India. TVS Srichakra was founded by Sri T V Sundaram Iyengar. TVS Srichakra Ltd., one of India's leading two & three-wheeler tyre manufacturers. Being a part of TVS Auto Ancillary Group (Turnover of USD 6.0 billion) founded by T.V. Sundaram Iyengar. Over 30 years, they have leveraged their expertise to ensure our every ride is as safe as it is sensible. With state-of-the-art manufacturing units at Madurai (Tamil Nadu) and Rudrapur (Uttrakhand), spread over 2.9 lakh sq. meters, we manufacture a prolific range of tyres: * Two & Three-wheeler tyres * Industrial pneumatic tyres * Farm and implement tyres * Skid steer tyres * Multipurpose tyres * Floatation tyres. Being the leading choice of Original Equipment Manufacturers across India, they also supply their products to major vehicle manufacturers across country:*Atul Auto Limited * Bajaj Auto * Hero Moto Corp Limited * Honda Motors Cycles & Scooters India * India Yamaha Motor Pvt. Ltd * LML * Mahindra 2wheelers* Piaggio * TVS Motor Company Ltd. They cater to domestic after-market with a strong support network of over 2400 dealers and 34 depots. Today, TVS Tyres cruises across the globe as well, extending its presence through export to USA, Europe, South America, Africa and Australia. TVS Srichakra is part of $2.2 billion largest auto ancillary TVS Group. The company provides a complete range of two– and three–wheeler tyres and tubes catering to the domestic market and industrial pneumatic tyres, farm and implements tyres, skid steer tyres, multipurpose tyres, floatation tyres, etc.

Data Analysis and Interpretation

Equity Ratio:

The equity ratio measures the amount of leverage that a business employs. If the outcome of the calculation is high, this implies that management has minimized the use of debt to fund its asset requirements, which represents a conservative way to run the entity. Conversely, a low ratio indicates that a large amount of debt was used to pay for the assets.

$$\text{Equity ratio} = \frac{\text{Shareholders equity}}{\text{Capital employed}}$$

Table 1.1: Table Showing Equity Ratio

Year	Shareholders' equity (Rs.in Crores)	Capital Employed (Rs.in Crores)	Equity ratio
2012-13	170.53	331.28	0.51
2013-14	203.65	350.83	0.58
2014-15	276.29	395.38	0.70
2015-16	418.30	582.15	0.72
2016-17	574.98	731.03	0.79

Source: Annual report of TVS Srichakra Pvt ltd

Inference

The equity ratio should be high which implies the minimum use of debt to fund its asset requirements. The first two years of the study indicates that the company's long term debt is high and it has gradually decreased during the last three years. The Balance sheet of the company shows that the debt has been repaid during the last three studied years and so the ratio is high.

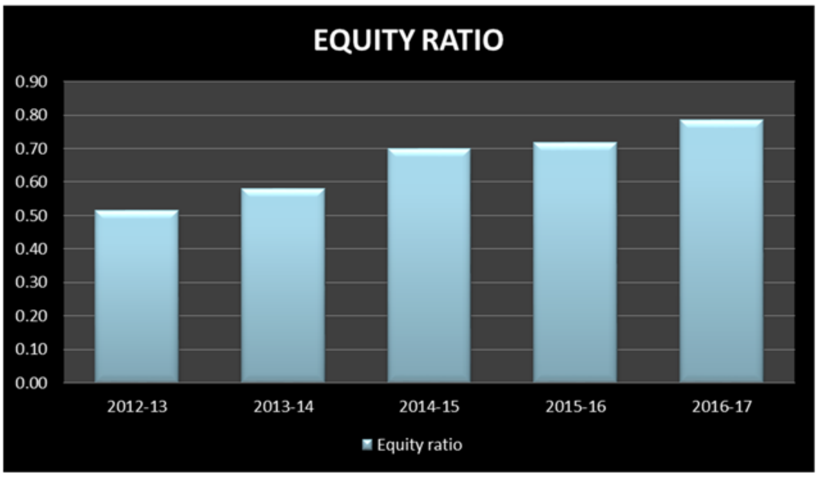

Chart 1.1 Chart Showing Equity Ratio

Debt Equity Ratio

This ratio is calculated to measure the relative proportions of outsider's funds and shareholder funds invested in the company. This ratio is determined to ascertain the soundness of long term financial policy of that company and is also known as external-internal equity ratio. Whether a given debt equity ratio shows a favourable or unfavourable financial position of the concern depends on the industry and the pattern of earnings. A low ratio is generally viewed as favourable from long term creditor's point of view, because a long margin of protection provides safety for the creditor. The same low ratio may be taken as quite unsatisfactory by the shareholders because the find neglected opportunity for using low cost outsiders fund to acquire fixed asset that could earn high return. Keeping in view the interest of a both shareholders and long-term creditors, debt equity ratio of 2:1 in case of (i) and 2:3 in case of (ii) is acceptable.

$$\text{Debt equity ratio} = \frac{\text{long term debt}}{\text{Shareholder funds}}$$

Table 1.2: Table Showing Debt Equity Ratio

Year	Debt (Rs.in Crores)	Shareholders fund (Rs.in Crores)	Debt equity ratio
2012-13	222.34	170.53	1.30
2013-14	264.99	203.65	1.30
2014-15	175.90	276.29	0.64
2015-16	130.54	418.30	0.31
2016-17	299.89	574.98	0.52

Source: Annual report of TVS Srichakra Pvt ltd

Inference

The ratio shows that it is low when compared with ideal ratio. This shows that the creditors are in a favourable condition and they are in a safe position. The shareholders will be unsatisfactory for using low cost outsiders fund to acquire fixed assets.

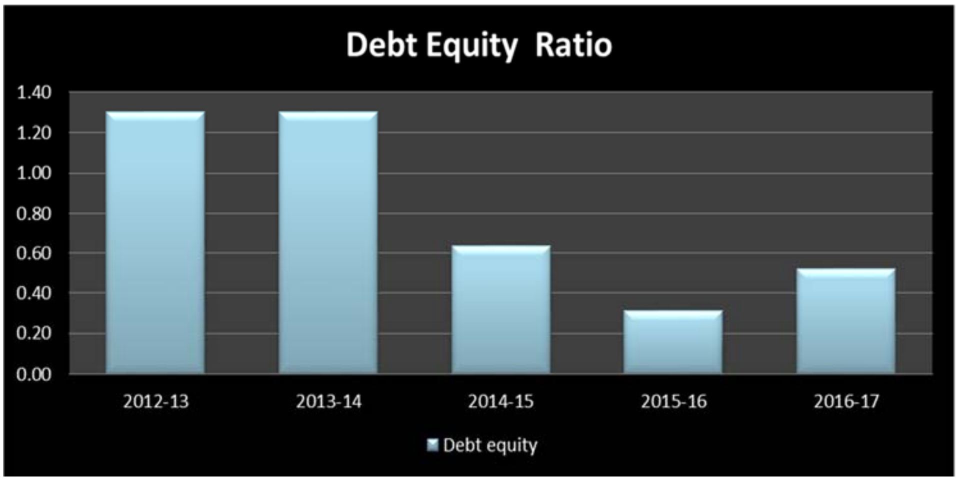

Chart 1.2: Chart Showing Debt Equity Ratio

Debt Ratio

Debt ratio is a measure of a company's total debt to its total assets. A ratio less than a company has more assets than debt, while a ratio of more than one means the opposite. A debt ratio is a measure of how risky it would be for a bank to extent a loan to a company, with a higher ratio indicating great risk.

$$\text{Debt ratio} = \frac{\text{Total outside liabilities}}{\text{Total debt+ Net worth}}$$

Table 1.3: Table Showing Debt Ratio

Year	Total outside liabilities (Rs.in Crores)	Total debt +Net worth (Rs.in Crores)	Debt ratio
2012-13	568.77	392.87	1.45
2013-14	447.70	425.99	1.05
2014-15	371.80	498.63	0.75
2015-16	424.47	640.64	0.66
2016-17	512.98	797.32	0.64

Source: Annual report of TVS Srichakra Pvt ltd

Inference: The debt ratio is higher during the first two years and it has been reduced much lesser during the latter three years. It shows that the debt has reduced during the last three years.

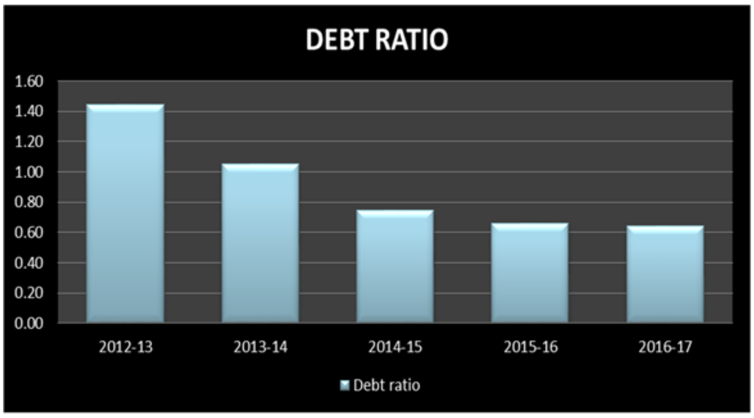

Chart 1.3: Chart Showing Debt Ratio

Proprietary ratio

A variant of debt to equity ratio is the proprietary ratio which shows the relationship between shareholders' funds and total tangible assets. This ratio should be 1:3. One-third of the assets minus current liabilities should be acquired by shareholders fund and the other two-thirds of the assets should be financed by outsider's fund. It indicates the shares of proprietary funds against each rupee of investments and focuses the attention on the general financial strength of the business enterprise.

$$\text{Proprietary ratio} = \frac{\text{proprietary fund}}{\text{Total assets}}$$

Table 1.4: Table Showing Proprietary Ratio

Year	Proprietary Fund (Rs.in Crores)	Total Assets (Rs.in Crores)	Proprietary Ratio
2012-13	170.53	818.74	0.21
2013-14	203.65	838.59	0.24
2014-15	276.29	800.42	0.35
2015-16	418.30	975.23	0.43
2016-17	574.98	1,404.60	0.41

Source: Annual report of TVS Srichakra Pvt ltd

Inference: In proprietary ratio, the proprietary fund of the entity from the year 2013 to 2017 shows an increasing trend from year to year. The ideal ratios 1:3. The company's ratio shows that during the first three years the company has ideal ratio. During the last two years the ratio has slightly increased showing that the shareholders fund constitute a higher portion in acquiring ass

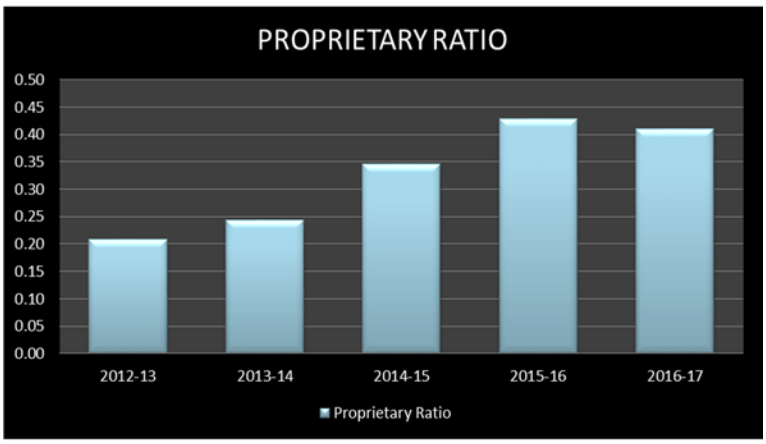

Chart 1.4: Chart Showing Proprietary Ratio

Debt -Asset ratio

Debt to asset ratio is the percentage of total assets that were paid for with borrowed money – creditors, liabilities, and debt. Some see it as an indicator of solvency, some see it as critical to financial health or financial distress. The ratio is expressed as a percentage. A high debt to assets ratio (over 1%) may mean that the company may have trouble borrowing more money, or may borrow money at a higher interest rate than if the ratio were lower. Highly leveraged companies may be putting themselves at risk of insolvency or bankruptcy.

$$\text{Debt- Asset Ratio} = \frac{\text{Total debt}}{\text{Total asset}}$$

Table 1.5: Table Showing Debt- Asset Ratio

Year	Total Debt (Rs.in Crores)	Total Assets (Rs.in Crores)	Debt-Asset Ratio
2013	222.34	818.74	0.27
2014	264.99	838.59	0.32
2015	175.9	800.42	0.22
2016	130.54	975.23	0.13
2017	299.89	1,404.60	0.21

Source: Annual report of TVS Srichakra Pvt ltd

Inference

The above ratio shows that the company's assets are less financed by debt. The ratio is much lesser than 1, which shows that the assets are largely financed through share capital. So the company is in a good financial condition and financial health.

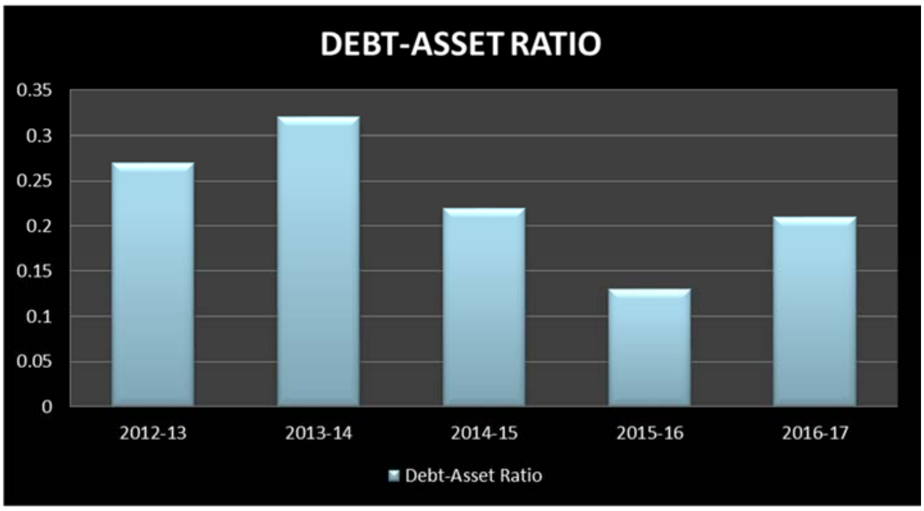

Chart 1.5: Chart Showing Debt- Asset Ratio

Capital Gearing Ratio

Capital Gearing Ratio is a useful tool to analyse the capital structure of a company and is computed by dividing the common stockholder's equity by fixed interest or dividend bearing funds. A company is said to be low geared if the larger portion of the capital is composed of common stockholder's equity and it is said to be highly geared is the major share of the total capital is in the form of fixed interest bearing securities. The ratio shows the relationship between the fixed interest-bearing securities and equity share of the company.

$$\text{Capital Gearing Ratio} = \frac{\text{Interest Bearing Funds}}{\text{Equity Share Capital + Reserves and Surplus}}$$

Table 1.6: Table Showing Capital Gearing Ratio

Year	Int bearing funds (Rs.in Crores)	E.share capital+Reserves and surplus (Rs.in Crores)	Capital gearing ratio
2012-13	222.34	170.53	1.30
2013-14	264.99	203.65	1.30
2014-15	175.9	276.29	0.64
2015-16	130.54	418.3	0.31
2016-17	299.89	574.98	0.52

Source: Ann
ual report of TVS Srichakra Pvt ltd

Inference

The capital gearing ratio shows that it is high during the first two studying years showing that during these years the fixed interest bearing securities were high. The company has repaid the debt and so the ratio shows that during the last three years the ratio has reduced. The table shows that the company was highly geared during the first two years and during the next two years it was low geared

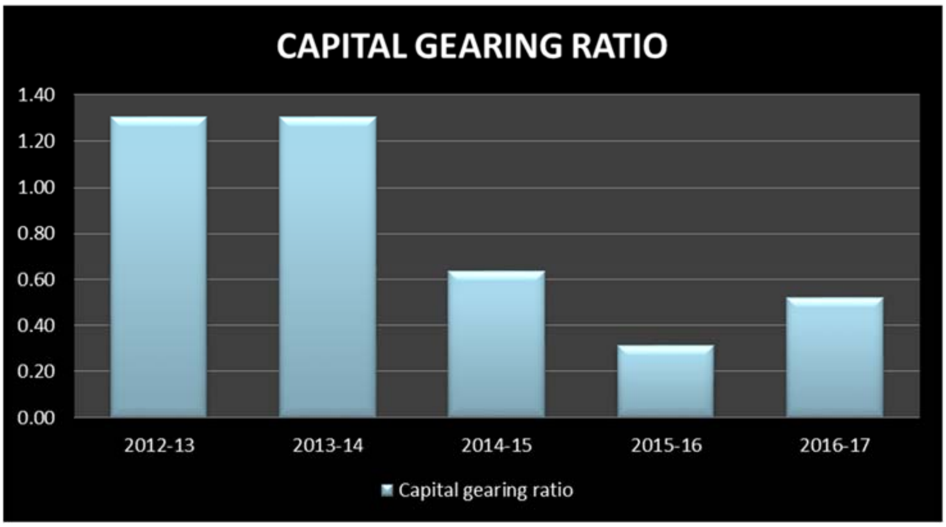

Chart 1.6: Chart Showing Capital Gearing Ratio

Current ratio

The current ratio is mainly used to give an idea of a company's ability to pay back its liabilities (debt and accounts payable) with its assets (cash, marketable securities, inventory, and accounts receivable). As such, current ratio can be used to make a rough estimate of a company's financial health.

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

Table 1.7: Table Showing Current Ratio

Year	Current assets (Rs.in Crores)	Current liabilities (Rs.in Crores)	Current ratio
2012-13	524.94	487.46	1.08
2013-14	504.56	487.76	1.03
2014-15	410.64	405.04	1.01
2015-16	433.07	393.08	1.10
2016-17	691.87	673.57	1.03

Source: Annual report of TVS Srichakra Pvt ltd

Inference

The ideal current ratio is 2:1, the current ratio of the company during the years were 1:1 (approximately). This shows that the company's ability to pay short term liabilities is less.

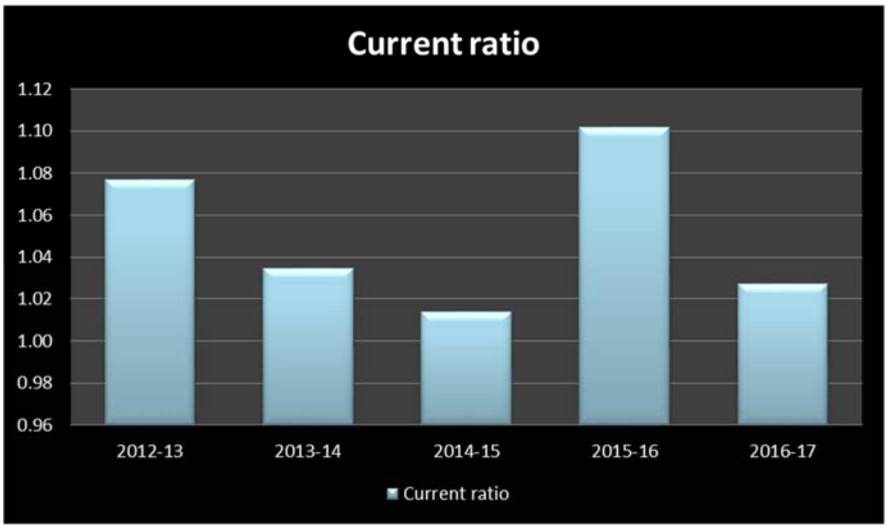

Chart 1.7: Chart Showing Current Ratio

Quick Ratio

The quick ratio, also known as the acid-test ratio, is a liquidity ratio that is more refined and more stringent than the current ratio. Instead of using current assets in the numerator, the quick ratio uses a figure that focuses on the most liquid assets. The main asset left out is inventory, which can be hard to liquidate at market value in a timely fashion. The quick ratio is more conservative than the current ratio and focuses on cash, short-term investments and accounts receivable. The ideal ratio is 1:1

$$\text{Quick Ratio} = \frac{\text{Liquid assets}}{\text{Liquid liabilities}}$$

Table 1.8: Table Showing Quick Ratio

Year	Liquid assets (Rs.in Crores)	Current liabilities (Rs.in Crores)	Quick ratio
2012-13	271.77	487.46	0.56
2013-14	297.91	487.76	0.61
2014-15	200.80	405.04	0.50
2015-16	225.14	393.08	0.57
2016-17	280.09	673.57	0.42

***Source*:** Annual report of TVS Srichakra Pvt ltd

Inference

The company's liquid ratio shows that it is much lesser than tha ideal ratio (1:1). It shows that the company's short terms solvency position is not good.

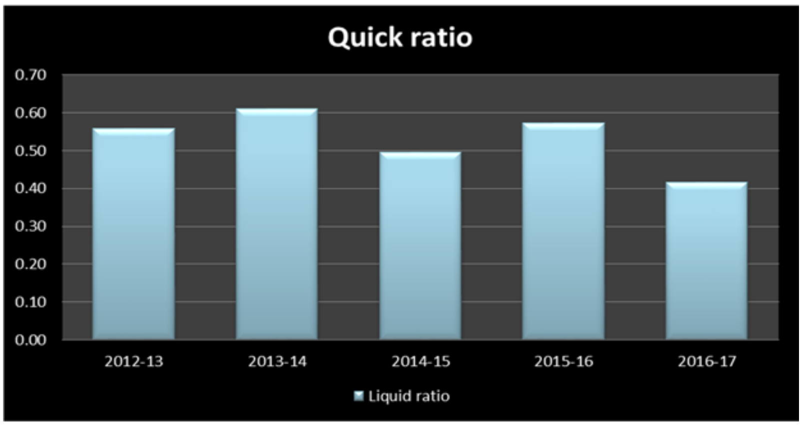

Chart 1.8: Chart Showing Quick Ratio

Absolute liquid ratio

The relationship between the absolute liquid assets and current liabilities is established by this ratio. Absolute Liquid Assets take into account cash in hand, cash at bank, and marketable securities or temporary investments. The most favourable and optimum value for this ratio should be 1: 2.

$$\text{Absolute liquid ratio} = \frac{\text{Absolute liquid assets}}{\text{Current liabilities}}$$

Table 1.9: Table Showing Absolute Liquid Ratio

Year	Absolute Liquid assets (Rs.in Crores)	Current liabilities (Rs.in Crores)	Absolute liquid ratio
2012-13	44.89	487.46	0.09
2013-14	7.94	487.76	0.02
2014-15	9.42	405.04	0.02
2015-16	12.30	393.08	0.03
2016-17	9.37	673.57	0.01

***Source*:** Annual report of TVS Srichakra Pvt ltd

Inference

The absolute liquid ratio shows that it is much lesser than the ideal ratio (1:2). The company has to improve the liquidity position to improve the solvency condition.

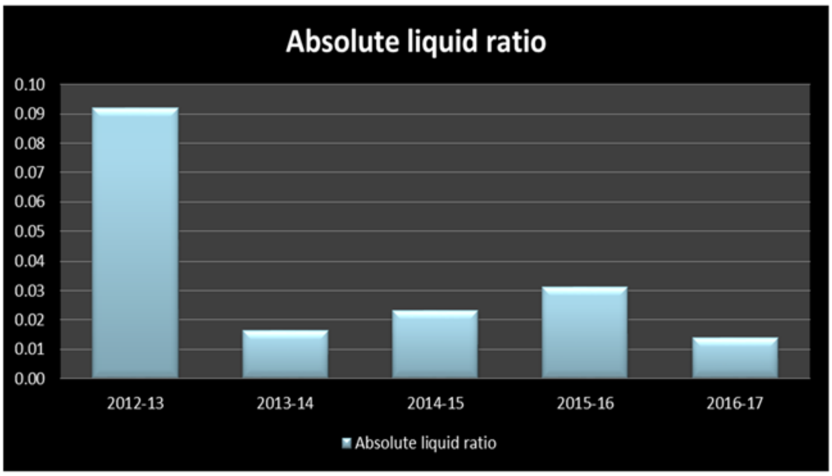

Chart 1.9: Chart showing absolute liquid ratio

Findings

- Equity share capital remained constant during the period of study. No new issue has been made but the existing share capital is sufficient to cover the debts of the company.
- In TVs Srichakra Private Limited, Preference share capital and Debenture does not exist.
- The equity ratio should be high which implies the minimum use of debt to fund its asset requirements. The first two years of the study indicates that the company's long term debt is high and it has gradually decreased during the last three years.
- The ratio shows that it is low when compared with ideal ratio. This shows that the creditors are in a favourable condition and they are in a safe position.
- The debt ratio is higher during the first two years and it has been reduced much lesser during the latter three years. It shows that the debt has reduced during the last three years.
- In proprietary ratio, the proprietary fund of the entity from the year 2013 to 2017 shows an increasing trend from year to year. The ideal ratios 1:3.
- The above ratio shows that the company's assets are less financed by debt. The ratio is much lesser than 1, which shows that the assets are largely financed through share capital.
- The capital gearing ratio shows that it is high during the first two studying years showing that during these years the fixed interest bearing securities were high.
- The ideal current ratio is 2:1, the current ratio of the company during the years were 1:1 (approximately).
- The absolute liquid ratio shows that it is much lesser than the ideal ratio (1:2).

Conclusion

The study was undertaken to analysis the capital structure and short term solvency position of TVS SRICHAKARA LIMITED. The study shows that the debt content in capital structure is less and debt has been gradually repaid during the last years of the study. The company has advantage of trade in equity. The short term solvency position shows that it is weak and the company has to improve the short term solvency position to meet the current liabilities

References

1. Management accounting by R.F.N. Pillai and Bagavathy, imprint: S. Chand and sons, Revised edition, 2010.
2. Financial Management. Jain and Narang. Published by Tata McGraw-Hill Education Pvt. Ltd, Second edition , In the year. 2005.
3. Annual report of TVS Srichakra Limited from the year, 2013-2017.
4. Profit.ndtv.com.
5. m.moneycontrol.com.