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A Study on analysis of risk management in selected automotive industry with Special Reference to TVS Motors Company Ltd

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ABSTRACT

The main focus of this study is to analyse the overall performance of TVS motors using financial statement data showing all revenues, expenses as well as assets and liabilities over the 5-year period 2018-2023. Ratio analysis (liquidity, credit and operational risks) was used to analyse the performance of risk management. This method helped to analyse the overall performance of the company. This study analysed risk management as a structural approach to manage risk related uncertainty and also risk asset management can aid a solution to maximise wealth management. Although the information obtained from the study is not sufficient to analyse complete risk management strategies. This study identified significant changes in risk management strategies from year to year based on the selected study data. This study helps in both short-term and long-term forecasting and growth can be identified through overall performance analysis. This study is based on "Risk Management Analysis of TVS Motors Company Ltd."

Key words: TVS motors ltd, financial performance, risk management, ratios.

JEL Classification Code: G32

I. INTRODUCTION OF THE STUDY

Risk management is a crucial aspect of organizationalplanning and decision-making, involving the identification, assessment, and mitigation of potential risks. Defined as the uncertainty that may affect the achievement of objectives, risks can manifest in various forms, such as financial, operational, or strategic challenges. Managing these risks is integral to safeguarding the overall well-being and success of an organization.By integrating risk management principles into organizational culture, continuously refining strategies, and learning from both successes and failures, organizations can navigate uncertainties more effectively and safeguard their long-term success.

In this project report the whole analysis is performed on TVS motors company Ltd TVs Motors Ltd is a prominent Indian company that specializes in manufacturing motorcycles and three-wheelers. Established in 1980, the company has grown to become one of the largest two-wheeler manufacturers in India. TVs Motors is known for its innovative designs, fuel-efficient engines, and a wide range of products catering to different customer segments. They have a strong presence in both domestic and international markets, offering a diverse portfolio of motorcycles, scooters, and electric vehicles. TVs Motors Ltd. has gained a reputation for its commitment to quality, performance, and customer satisfaction. Apart from motorcycles and three-wheelers, TVs Motors Ltd. has also expanded its product portfolio to include electric vehicles. They have introduced electric scooters and even an electric motorcycle called the "TVs I Qube Electric." This move towards sustainable mobility showcases their commitment to environmental consciousness and embracing new technologies

II. STATEMENT OF THE PROBLEM

Well, when it comes to risk management, the statement of the problem can revolve around identifying and mitigating potential risks that could negatively impact a company or organization. The problem statement could focus on the challenges of effectively assessing and managing risks, ensuring that appropriate strategies and controls are in place to minimize potential losses or disruptions. It could also involve addressing the need for a comprehensive risk management framework that aligns with the organization's objectives and helps in making informed decisions. The statement of the problem in risk management essentially highlights the importance of proactively identifying and addressing risks to ensure the overall stability and success of the organization.

OBJECTIVES OF THE STUDY

- To determine the company's liquidity risk to assess its ability to meet its short term financialobligations.
- To evaluate the credit risk of the company to determine its ability to repay its debts.
- To assess Operational risk in order to identify and manage potential risks to improve business operations and protect financial stability.

LIMITATIONS OF THE STUDY

- The information obtained from the company is limited.
- The financial details are collected only for the period of five years.
- In this analysis, only the selected ratios are used.
- The study has been made with secondary data.

III. REVIEWS OF LITRERATURE

- **Mr.Srinath N(2023)[1],** The study analyzes the overall performance of TVS engines, which can be seen in relation to the financial statements. Ratio analysis was used to analyze their performance. The company primarily targets the overall performance of TVS engines by looking into various components.
- **Ms. Harshini (2023)[2],** carried out research on ITC Ltd.'s financial performance. The company's financial health is the subject of this investigation. The study's goal is to use profitability, solvency, liquidity, and efficiency measures to assess the company's total profitability and calculate its short-term debt commitments. The company's financial strengths and weaknesses are also revealed through an examination of the trends and patterns in the financial statements. The analysis made use of secondary data. Between 2017 and 2021, a five-year period of data collection was conducted. The study's conclusions provide a comprehensive understanding of ITC Ltd.'s financial performance and highlight the company's positive cash flow and steady growth over the previous ten years.
- **T. Preetha (2022)[3],** examined Tata Marco Polo Motors Ltd.'s financial performance. This article examines the company's liquidity, profitability, and financial standing. Tools like ratio analysis have been used to do this. The activity, liquidity, and solvency ratios were the ratios that were employed. The analysis has made use of secondary data. These details were taken from Tata Marco Polo Motors Ltd.'s annual report, balance sheet, and statement of profit and loss. According to the assessment, the company has not used funds properly or efficiently. This demonstrates the company's worsening financial situation. The business should concentrate on borrowing money, increasing output, and developing tactics to turn a profit.
- **Azharsusanto, Meriyani (2018)[4],** The study analyzed risk management as a structural approach to managing risk-related uncertainty. The purpose of risk management is to reduce various risks related to the chosen sector to a level accepted by the community. And concludes that risk asset management can be one solution to maximize wealth management.
- **J Pavithra (2017)[5],** Finance is rightly called the science of money because it is the lifeblood of business. The research focuses on conducting a study evaluating the financial condition of the company using relationship integration, comparative financial statements and trend analysis
- **Pravesh Kumar Goyal (2016)[6],**This study focused on the financial performance of various stakeholders such as management, lenders, owners and investors. The validity and accuracy of decisions depends on proper analysis of financial statements. Because the use of financial indicators has a significant positive impact on the investments made by investors.

RESEARCH METHODOLOGY

The research involved is extensive and intensive studies of TVS Motors Ltd, in this project the report is based on study of financial performance of the company.

DATA COLLECTION

The data used in this study is secondary data. The data has been collected from the annual report & balance sheet and statement of profit & loss account of TVS Motors Ltd.

PERIOD OF STUDY

The study has been undergone forthe period of 5 years.

TOOLS FOR ANALYSIS

The financial and statistical tool is used in the study on ratio analysis due to the time. The ratios are profitability, activity, liquidity and solvency ratio.

ANALYSISAND INTERPRETATION

A) LIQUIDITY RATIO

1.CURRENT RATIO

It measures the relationship between total current assets to total investment liabilities.it can be calculated as,

Current ratio = Total current assets / total current liabilities

TABLE: 1
CURRENT RATIO

Year	Total current assets	Total current liabilities	Ratio
2018-2019	8331.67	8184.79	1.02
2019-2020	9739.00	10025.24	0.97
2020-2021	10536.84	10908.71	0.97
2021-2022	12848.08	13581.72	0.93
2022-2023	17007.23	19298.70	0.88

Source: Secondary data

Looking at the trend of the current ratio from 2019 to 2023 (0.88, 0.93, 0.97, 0.97, 1.02), we can see a slight increase in the company's ability to meet short-term obligations with its current assets over the five-year period. This indicates a positive trend in the company's liquidity position.

2.QUICK RATIO

Quick ratio measures the company's ability to pay off its short term liabilities using itsmost liquid assets (current assets except inventory)

Quickratio=liquid assets/current liabilities

TABLE:1.1
QUICK RATIO

Year	Total Liquid assets	Total current liabilities	Ratio
2018-2019	7040	8184.79	0.86
2019-2020	8550.53	10025.24	0.85
2020-2021	9169.41	10908.71	0.84
2021-2022	11205.72	13581.72	0.81
2022-2023	15085.72	19218.70	0.78

Source: Secondary data

Based on the values of the quick ratio from 2019 to 2023 (0.86, 0.85, 0.84, 0.81, 0.78), it can be observed that the company's ability to cover its short-term liabilities with its quick assets (excluding inventory) has generally decreased over the five-year period. This indicates a potential decline in the company's liquidity position and may warrant further analysis of its financial health.

3. CURRENT ASSET TO TOTAL ASSET RATIO

This ratio measures the relationship between the current asset to its total asset. It proposes about the proportion of a company's total asset that are in the form of current assets.

Current asset to total asset ratio = current asset / total asset.

TABLE:1.2
CURRENT ASSET TO TOTAL ASSET RATIO:

Year	Currentassets	Total assets	Ratio
2018-2019	8331.67	16696.49	0.5
2019-2020	9739.00	19358.82	0.5
2020-2021	10536.84	21992.69	0.48

2021-2022	12848.08	27072.08	0.47
2022-2023	17007.23	35232.91	0.48

Source: Secondary data

Based on the values of the current assets to total asset ratio from 2019 to 2023 (0.482, 0.474, 0.48, 0.50, 0.50), it can be observed that the proportion of current assets in relation to total assets has remained relatively stable over the five-year period. This indicates that the company has maintained a consistent allocation of its assets towards short-term liquidity.

B) CREDIT RISK

1.DEBT TO EQUITY RATIO

This ratio determine relationship between total debt and equity .it suggests that whether the company ratios is more on debt financing which leads the way for higher / lower financial risk.

Debt-to-equity ratio = total debt / shareholder's equity

TABLE:1.3
DEBT TO EQUITY RATIO

Year	**Total debt**	**Shareholder's equity**	**ratio**
2018-2019	8162.97	3170.77	2.57
2019-2020	9001.93	3282.10	2.74
2020-2021	9349.51	3826.67	2.44
2021-2022	15297.28	4399.65	3.48
2022-2023	21626.23	5505.05	3.93

Source: Secondary data

Looking at the values of the debt-to-equity ratio from 2019 to 2023 (2.57, 2.74, 2.44, 3.48, 3.93), it can be observed that the company's level of debt in relation to its equity has generally increased over the five-year period. This indicates a potential higher financial risk and reliance on debt financing.

2.CASH FLOW COVERAGE RATIO

This helps to determine the ratio between operating cash flow to the total debt payment. Which helps to conclude the company's ability to generate sufficient cash flow from its operations to cover its debt obligations.

Cash flow coverage ratio = operating cash flow / total debt

TABLE:1.4
CASH FLOW COVERAGE RATIO

Year	**Operating cash flow**	**Total debt**	**Ratio**
2018-2019	-917.94	8162.97	-0.11
2019-2020	373.43	9001.93	0.04
2020-2021	1151.29	9349.51	0.12
2021-2022	-1560.16	15297.28	-0.09
2022-2023	-4404.83	21626.23	-0.20

Source: Secondary data

Based on the values of the cash flow coverage ratio from 2019 to 2023 (-0.11, 0.04, 0.12, -0.09, -0.2), it can be observed that the company's ability to cover its cash flow obligations with its operating cash flow has shown some variability over the five-year period. The negative values indicate that the company may have faced challenges in generating sufficient cash flow to meet its obligations in certain years.

C) OPERATIONAL RISK

1.ASSET TURNOVER RATIO

The company's ability to generate sales form its total assets is a key indicator of its operational efficiency and effectiveness in utilising its asset base

Asset turnover ratio = net sales / average total assets

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TABLE:1.5
ASSET TURNOVER RATIO

Year	Net sales	Average total asset	ratio
2018-2019	20159.99	14955.01	1.34
2019-2020	18849.31	18027.65	1.04
2020-2021	19420.82	20675.75	0.93
2021-2022	24355.31	24532.38	0.99
2022-2023	31973.99	31152.41	1.02

Source: Secondary data

Looking at the values of the asset turnover ratio from 2019 to 2023 (1.34, 1.04, 0.93, 0.99, 1.02), it can be observed that the company's efficiency in utilizing its assets to generate revenue has shown some variability over the five-year period. The ratio measures how effectively a company is generating sales from its total assets. The decreasing values indicate that the company may have experienced challenges in generating revenue relative to its asset base in certain years.

2. OPERATING MARGIN

This helps to determine the relationship between the company to generate profit from its core operations. It determines the relationship between operating profit to net sales
Operating margin = operating profit / net sales.

TABLE:1.6
OPERATING MARGIN

Year	Operating profit/income	Net sales	percentage
2018-2019	2160.82	20159.99	0.11
2019-2020	2273.05	18849.31	0.12
2020-2021	2237.83	19420.82	0.12
2021-2022	2754.63	24355.31	0.11
2022-2023	4067.38	31973.99	0.13

Source: Secondary data

Based on the values of the operating margin from 2019 to 2023 (13%, 11%, 12%, 12%, 11%), it can be observed that the company's profitability, as measured by the operating margin, has remained relatively stable over the five-year period. The operating margin represents the percentage of revenue that remains after deducting operating expenses. While there may be slight fluctuations, the company has maintained a consistent level of profitability.

FINDINGS OF THE STUDY

- Current ratio is less than 1-0.88 in the year 2022-2023. This shows that the company is unable to pay off their liabilities.
- Quick ratio is less than 1-0.78. This indicates that the company is unable to pay off liabilities through readilyconvertible current asset.
- A good current asset ratio is 1.2 to 2. For the year 2022-23 the ratio is less than 1.2-0.48. This means that Based on the current asset to total asset ratio of 0.48, it suggests that the company has a lower proportion of current assets compared to its total assets. This means that a significant portion of the company's assets may be tied up in long-term or non-liquid investments.
- An ideal debt-to-equity ratio varies from the range of 1 or lower. Here the value is 3.93 for the year 2022-23. Hence the When the debt-to-equity ratio is 3.93, it suggests that the company has a higher level of debt compared to its equity. This indicates that the company relies more on debt financing to fund its operations and investments. A higher debt-to-equity ratio can indicate higher financial risk and potential difficulties in meeting debt obligations.
- When the cash flow coverage ratio is less than 1, such as in the case of a value of -0.20 year 2022-23, it suggests that the company's cash flow is not sufficient to cover its debt obligations. This can indicate financial difficulties and a potential inability to meet debt payments.
- The ideal value for asset turnover ratio varies from industry however it is quite to have the value above 1. Here for the year 2022-2023 the

value is 1.02 Oh, with an asset turnover ratio of 1.02, it means that the value is slightly above 1, it suggests that the company is utilizing its assets fairly efficiently to generate revenue.

- As a rule of thumb for operating margin, 5% is a low margin, 10% is a healthy margin, and 20% is a high margin. The value is 13% for the year 2022-2023 With an operating margin of 13%, that falls within the range of a healthy margin. It indicates that the company is generating a good amount of profit from its operations. While it's not considered a high margin, it's still above the 10% threshold for a healthy margin.

IV. SUGGESTIONS OF THE STUDY

- On the analysis of liquidity ratios of the company, it appears that the company is facing some liquidity challenges. The current ratio and quick ratio are all below the ideal values, indicating that the company may have difficulty paying off its liabilities and may have a lower level of liquid assets compared to its current liabilities.
- The current asset to total asset ratio suggests that a significant portion of the company's assets may be tied up in long-term or non-liquid investments.
- The company has a higher debt-to-equity ratio of 3.93, indicating a reliance on debt financing. This can pose financial risks and difficulties in meeting debt obligations. The cash flow coverage ratio being less than 1, with a value of -0.20, suggests that the company's cash flow is insufficient to cover its debt obligations, potentially leading to financial difficulties.
- Improving cash flow through strategies like optimizing revenue generation and reducing expenses can help cover debt obligations. Developing a comprehensive debt repayment plan and continuing efficient credit management practices will also contribute to financial stability.
- With respect to asset turnover ratio and operating margin, a company shall keep focusing on optimizing asset utilization to further improve revenue generation. Maintaining a healthy operating margin can be achieved by implementing cost-effective strategies, streamlining operations, and exploring opportunities for revenue growth.

V. CONCULSION

On analysis of risk management of financial performance of TVS MOTORS LTD is done by ratio analysiswith respect to risk management. Ratio analysis is selected based on the financial statements of the company. On the study of financial performance of the TVS MOTORS LTD reveals that company have trouble in meeting short-term obligations and may struggle with cash flow. The company should focus on increase in cash reserves, reduce debt levels optimise resource allocation and explore opportunities to increase revenue. The company should focus on increase in production and generate profit by making strategies. Only by analysing the performance of the company investors, stakeholders etc. will invest the fund in the company’s share. So, the company shall be financially sound.

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