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ANALYSIS OF THE FINANCIAL PERFORMANCE OF SELECTED INDIAN PHARMACEUTICAL COMPANIES

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ABSTRACT

Indian companies have established themselves in the leading role in the global pharmaceutical scenario by meeting the domestic requirement. India ranks third in the world in terms of quantity and 14th in the world in terms of value. The current market size of the Indian pharmaceutical industry is approximately $50 billion.

Determining the financial health of a pharmaceutical business requires effective analysis and interpretation of financial statements. analysis and interpretation of financial statements is very necessary to measure the efficiency, profitability, financial soundness and future prospects of pharmaceutical organizations

To examine the financial results of the chosen pharmaceutical organizations, this paper's goal is to compare financial performance. To comprehend the data, ratio analysis and statistical methods are used to analyze the financial performance. These figures are taken from and produced using the financial statements of the chosen businesses for the five years between 2018 and 2022. Results suggest that pharmaceutical companies have high levels of liquidity and financial stability but have inconsistent revenue and efficiency. To fill in the gaps in the current research, the study used recent literature. The regulators, financial analysts, and managers who are worried about the financial performance of the chosen Indian pharmaceutical companies may find this study to be helpful. It serves as a test bed for additional study in this field.

keywords. Pharmaceutical companies, pharmacological liquidity, profitability, and statistical tools

1.INTRODUCTION

Ratio analysis has existed for a very long time, and the early examination of ratio traits and characteristics that it enabled was the primary driver of the development of ratio analysis (Horrigan, 1968). Recently, this has been a popular technique for studying financial statements.

Financial ratios can be used to evaluate an organization's financial performance. Organizations can determine financial strength or weaknesses based on market or industry conditions by using financial ratios. The true picture of the company's financial position can be obtained via financial ratios. These ratios can aid analysts in gaining accurate perceptions of an organization's financial health. Ratios are calculated using data gathered from various financial documents. By examining historical trends, financial ratios can forecast a company's future success for a financial specialist. Ratios can assist the stakeholders in taking actions that will maximize returns while minimizing risk.

A company's financial situation can be learned a great deal from its balance sheet, income statement, and cash flow statement. The examination of financial ratios is then used to further clarify this information by examining the company's financial and operational health. Financial ratios make it possible to distinguish between financial success and its rivals. Several financial ratios can be used for comparison.

2020 (McKinsey & Company) The Indian pharmaceuticals market, or Indian pharma 2020, has characteristics that set it apart. First, branded generics rule, accounting for 70–80 percent of retail advertising. Second, early investments and defined advancement skills have allowed local players to maintain their dominant position. Finally, despite fierce competition, price levels are low. India is third in quantities while ranking tenth globally in terms of value. These traits bring with them unique opportunities and challenges.

In FY22 and FY21, Indian medication and pharmaceutical exports totaled US$24.60 billion and US$24.44 billion, respectively. In September 2022, Indian exports of drugs and pharmaceuticals totaled $2,196.32 million.

We conduct a review of the financial results of the major sector participants while keeping in mind the importance of the industry. Our objective is to examine the financial performance of the two Indian pharmaceutical businesses with the largest revenue using various financial ratios.

2. LITERATURE REVIEW

Financial ratios can be used to gather crucial information about a company, according to the study's author (Beaver, 1966).

Ratio analysis was employed as an analytical tool (Altman, 1968) to forecast corporate financial collapse.

A technique to assess the financial health of a sector or industry is to evaluate its monetary ratios (Cal, Oral, Erdis, & Vural, 2005). According to the study, several important financial ratios may be more important than others.

A different study (Mahajan & Sarkar, 2007) contrasted the financial successes of multinational firms with Indian companies in the motor vehicle industry. Three Indian firms and MNCs were evaluated in the study. To examine the success of the businesses, the averages of these ratios are compared. Their coefficient of variance is determined to determine the relevance of each ratio and to assess the variability of Indian firms and MNCs.

Financial ratios were also employed in another study (Maricia and Georgeta, 2012) to analyze the probability of business failure. The study discovered that there are certain differences in profit and yield, financial positioning, liabilities, and resource shape as well as with the progression of the years.

Financial ratios were also employed by (Dlen, Kuzey, and Uyar, 2013) to assess firm performance using a decision tree method. 31 financial ratios in their entirety were covered.

According to Liu, O'Farrell, Wei, and Yao (2013), stakeholders include investors, analysts, regulators, standard-setters, and stakeholders who are more interested in comparing the financial ratio of a manufacturing company to a nonmanufacturing firm.

(Kanapickien and Grundien, 2015) employed monetary ratios in their research to create a model that can identify fraud in financial statements.

(Huang and Wang, 2017) conducted a study that focuses on the data analytics framework for important financial measures. The study came to the conclusion that ratios like the cost of goods sold to sales, operating activities net cash flow to net income, long-term debt to total assets, and EBIT to (EBIT less expense) are the most useful financial ratios for identifying trustworthy and unreliable businesses.

Financial leverage ratios, for example, are crucial for forecasting stock prices (Praak and Stavrek, 2018). According to their research, there is a correlation between corporate stock techniques and metrics like the debt-to-fairness ratio, economic leverage, return on equity, and return on investment ratio.

According to a study on the Chinese telecom industry by Mbona and Yusheng (2019), a straightforward fusion of 12 proportions or ratios may efficiently analyze a company's operations and provide a relevant comparison rather than analyzing a large number of ratios, which is expensive.

According to Fenyves, Zsido, Bircea, and Tarnoczi (2019), monetary ratios are frequently employed to compare and analyze the economic performance of Romanian and Hungarian retail meals micro businesses.

Several financial ratios were employed as financial indicators in a second study on the Romanian economy (Bunea, Corbos, Popescu, 2019).

(Yameen, Farhan, and Tabash, 2019) discuss the relationship between cash availability and profit growth in the study.

(Rajender, 2020) also analyzed parameters such as operating profit, gross profit, internet profit, the yield on assets, and the yield on equity to determine the capacity of Indian paint companies to generate profits. Three paint manufacturers were chosen and the profitability status of Indian paint companies is good and satisfactory, it was found.

A law that talks about amending the prior patent statute and starting the Patent in Products India was passed in 2005. Yet, the product patent policy has little effect on Indian pharmaceutical businesses' output (Mahajan, 2020).

3.RESEARCH OBJECTIVE

This study's primary objective is to contrast the financial results of two chosen companies. The precise objectives are to contrast:

- The ability of the chosen corporations to pay down short-term debt using current ratios.

- Leverage ratios provide information on the capital structure, financial obligations, and ability of the company to repay the debt.

- The ability of the chosen companies to generate profits using profitability ratios.

4.RESEARCH METHODOLOGY

Data and Sample Selection

The secondary data used in the study was taken from the financial statements and annual reports and through the website moneycontrol.com of the relevant companies. The study's sample consists of the top two Indian pharmaceutical companies, which are:

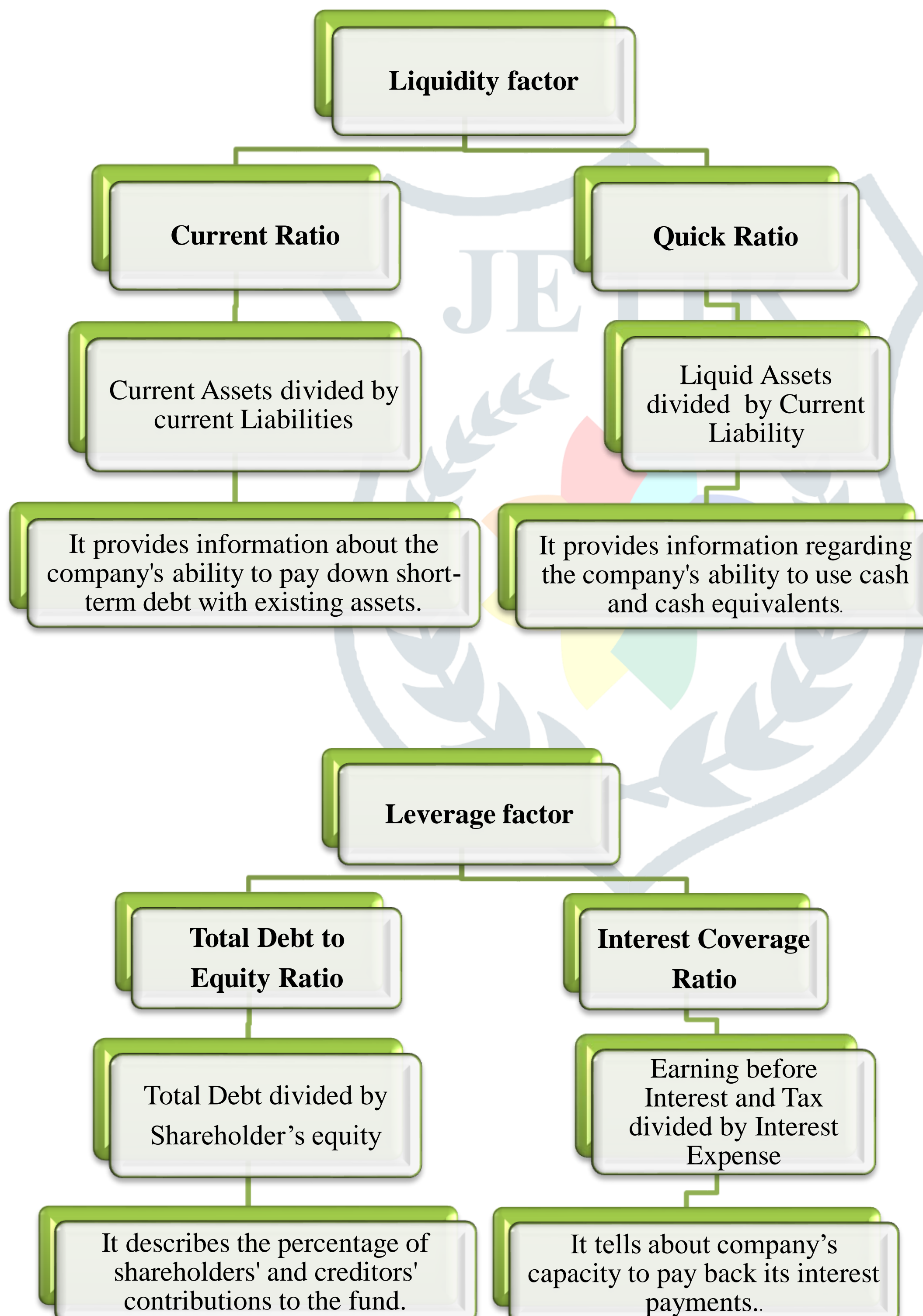
- Sun Pharmaceuticals Industries Ltd.
- Cipla Ltd.

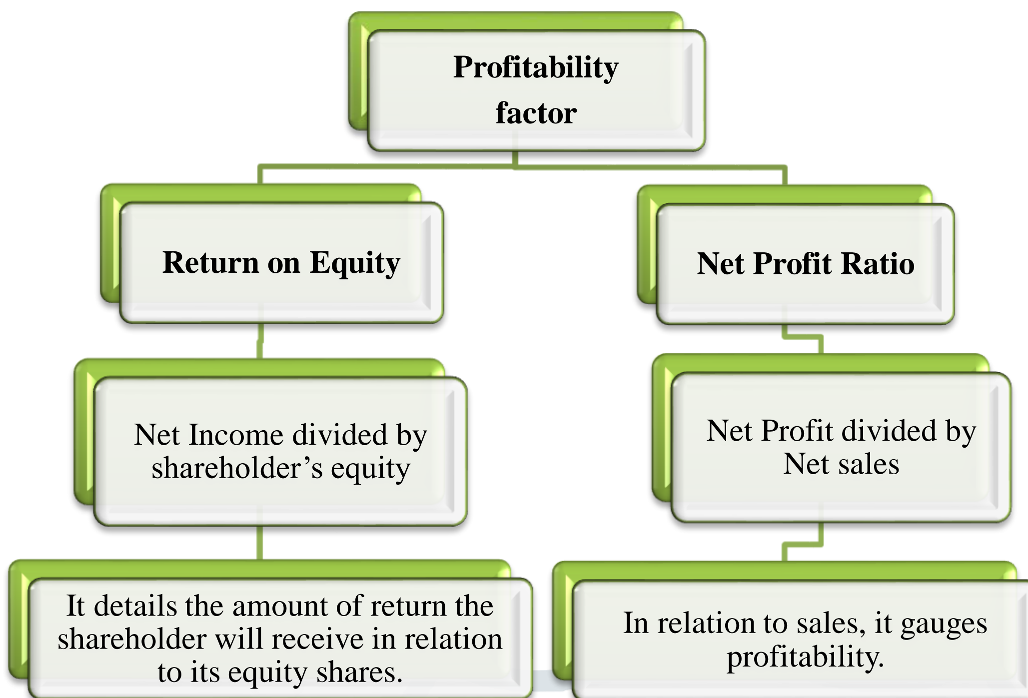
Their net sales are used to make the decision. The study spans five years (2018–2022).

Financial ratios are used as variables to compare the financial positions of the firms, examine the data, and develop conclusions. These factors are eliminated from the financial statements of these businesses during the aforementioned time. Also, a thorough study is conducted using statistical methods like mean, standard deviation, and coefficient of variation.

Six factors that are divided into three main categories—liquidity factor, leverage factor, and profitability factor—are the starting point of this study.

Variables Description





5.ANALYSIS AND DISCUSSION

➢ **Liquidity Factor**

Table 1 Current Ratio

Current Ratio		
Years	**Sun Pharmaceuticals**	**Cipla Industries**
2018	0.76	2.91
2019	0.84	4.00
2020	1.07	3.45
2021	1.45	3.79
2022	0.96	4.41
Mean	1.02	3.71
SD	0.24	0.51
CV	23.74%	13.67%

A 2:1 current ratio is optimal. It means that the optimal situation for the business is to have twice as many current assets as it does current liabilities. According to Table 1, the average current ratio for Sun Pharmaceuticals and Cipla is (1.02) and (3.71), respectively, with a coefficient of variation of 23.74% and 13.67%.

It demonstrates that Cipla can pay off its existing creditors with their current assets but Sun Pharmaceuticals is not very liquid. However, Sun Pharma's coefficient of variation is significantly higher (23.74%) than Cipla's (13.67%), indicating that Sun Pharmaceuticals' current ratio values are more variable than Cipla's.

Also, during the study period, Cipla's current mean current ratio was above (2.5:1), which is not ideal given the company's large amount of underutilized current assets that may be wisely invested.

Table 2 Quick Ratio

Quick Ratio		
Years	**Sun Pharmaceuticals**	**Cipla Industries**
2018	0.59	1.79
2019	0.63	2.79
2020	0.83	2.29
2021	1.07	2.64

2022	0.62	3.23
Mean	0.75	2.55
SD	0.18	0.48
CV	24.34%	19.01%

A 1:1 Quick ratio is excellent. To pay off your current liabilities, your organization should have a comparable quantity of quick assets, such as marketable securities, trade receivables, cash on hand, and bank accounts. According to Table 2, the quick ratio for Sun Pharmaceuticals and Cipla, respectively, has a mean value of (0.75) and (2.55) and a coefficient of variation of 24.34% and 19.01%.

It demonstrates that Cipla has more liquid assets than are needed to cover its short-term obligations. That indicates that, in comparison to Sun Pharma, Cipla is quite liquid. When compared to Cipla (19.01%), Sun Pharmaceuticals has a higher coefficient of variation (24.34%), indicating that Cipla's quick ratio readings are more inconsistent than those of Sun Pharma. In the five-year study period, Cipla's quick ratio was greater than 1:1, indicating that the company has a large number of quick assets that it may utilize rather than leave in place.

➢ **Leverage Factor**

Table 3 Total Debt to Equity Ratio

Total Debt to Equity Ratio		
Years	**Sun Pharmaceuticals**	**Cipla Industries**
2018	0.30	0.01
2019	0.26	0.00
2020	0.24	0.00
2021	0.26	0.00
2022	0.20	0.00
Mean	0.25	0.00
SD	0.03	0.00
CV	12.90%	0.00%

The total debt-to-equity ratio provides information about the firm's financial structure. It provides information about the money's sources. The total debt is the result of borrowing money, whereas the equity is the result of shareholders owning money. The debt-to-equity ratio allows us to determine how much money is owned by the shareholders vs how much money is borrowed from creditors and banks. There isn't a perfect ratio for this, either. Both ways of funding sourcing may have advantages and disadvantages. The advantage of having more shareholder money is that it is owned, meaning the company may decide whether or not to return the money and can only pay out dividends when they make a sizable profit. Disadvantages include the high cost of equity and the possibility of agency conflicts as a result of having more funding from shareholders. Similarly to this, one benefit of having more funding from creditors is that debt costs are lower than equity costs. Cons: There is a solvency issue.

According to Table 3, Sun Pharmaceuticals and Cipla had mean total debt-to-equity ratios of 0.25 and 0.00, respectively, with coefficients of variation of 12.90% and 0.00%.

It demonstrates that Sun Pharmaceuticals rather than borrowing money from the outside, a company gets the majority of its funding from shareholders, and on the other hand, Cipla is sourcing all there funding from its shareholders. Yet Sun Pharmaceuticals (12.90%) has a far higher coefficient of variation than Cipla (0.00%), indicating that the Total Debt to Equity ratio of Cipla can vary significantly from that of Sun Pharmaceuticals.

Table 4 Interest Coverage Ratio

Interest Coverage Ratio		
Years	**Sun Pharmaceuticals**	**Cipla Industries**
2018	9.60	24.70
2019	10.00	18.80
2020	18.40	16.40
2021	51.20	26.80
2022	72.00	43.00
Mean	32.24	25.94
SD	25.06	9.33
CV	77.72%	35.97%

The interest coverage ratio reveals how frequently a business can pay its operating expenses out of hobby revenue. The organization is put under more stress due to debt expense the lower the ratios. Although there is no ideal ratio, a company's ability to pay interest rates may be in doubt if its interest coverage ratio is 1.5 or lower.

According to Table 4, the average interest coverage for Sun Pharmaceuticals and Cipla is (32.24) and (25.94), respectively, with coefficients of variation of 77.72% and 35.97%.

It demonstrates that both businesses have the financial resources to use the operating income to pay off the interest. However, it has been observed that over time, Cipla's interest coverage ratio has decreased in the years 2019 and 2020, which indicates that either their operating income is declining or their interest payments are rising, neither of which is good news for those years. In contrast, the ratio has increased in the years 2021 and 2022, which is good news for the company. A positive sign for Sun Pharma is that its interest coverage ratio has been rising over time. With coefficients of variation of (77.72%) and (35.97%), respectively, both Sun Pharma and Cipla show a high degree of variability in their interest coverage ratio numbers.

- **Profitability Factor**

Table 5 Return on Equity

Return on Equity		
Years	**Sun Pharmaceuticals**	**Cipla Industries**
2018	1.36	10.50
2019	3.57	10.40
2020	13.16	10.10
2021	8.54	14.10
2022	-0.40	12.90
Mean	5.25	11.60
SD	4.97	1.60
CV	94.65%	13.81%

According to Table 5, the average return on equity for the Sun Pharmaceuticals and Cipla businesses is (5.25%) and (11.60%), respectively, with a coefficient of variation of 94.65% and 13.81%.
Sun Pharma's and Cipla's return on equity fluctuated significantly during the study. Sun Pharma's Return on Equity is negative in the year 2022. (-0.40). However, Sun Pharma's coefficient of variation is significantly higher (94.65%) than Cipla's (13.81%), indicating that Sun Pharma's return on equity values is more variable than Cipla Industries'.

Table 6 Net Profit Ratio

Net Profit Ratio		
Years	**Sun Pharmaceuticals**	**Cipla Industries**
2018	3.39	12.89
2019	7.92	15.26
2020	25.62	18.31
2021	16.71	17.75
2022	-0.64	22.59
Mean	10.60	17.36
SD	9.47	3.25
CV	89.34%	18.72%

According to Table 6, the average net profit ratios for the Sun Pharmaceuticals and Cipla businesses are respectively 10.60% and 17.36%, with a coefficient of variation of 89.34% and 18.72%..
Sun Pharmaceuticals and Cipla's net profit ratios have increased during the study period. In the year 2022, Sun Pharma's net profit ratio is negative (-0.64). The greatest net profit ratios were obtained by Cipla (22.59) and Sun Pharma (25.62) respectively in the years 2022 and 20220. However, Sun Pharma's coefficient of variation is significantly higher (89.34%) than Cipla's (18.72%), indicating that Sun Pharma's return on equity values vary far from those of Cipla Industries.

6. CONCLUSION & SUGGESTIONS

In this study, the financial position of the chosen Indian pharmaceutical companies is analyzed in terms of their Liquidity, Leverage, and Profitability ratios. Cipla enjoys a stronger position than Sun Pharma in terms of liquidity. Even though Cipla and Sun Pharmaceuticals have better current ratios and quick ratios than each other, both businesses can pay off their short-term debt. In terms of leverage, both businesses are doing well. Both businesses have nearly identical capital structures, with shareholders providing the majority of funding.

Also, the businesses generate enough operational money to pay the owed interest. In terms of profitability, it can be noted that Cipla had its greatest net profit ratio of 22.59% in 2022, whereas Sun Pharma had a negative net profit ratio.

As per the findings of the paper, Cipla Industries has to work on its large amount of underutilised current assets that may be invested wisely and can make the company's hold in the market strong. Along with its current assets, it has to work on its quick assets rather than leave them as they are. Both the companies have to take advantage of debt because if one had debt, it would've paid less tax. The interest deductions actually encourage companies to avail themselves of debt. No debt means they will end up paying more taxes. On the other hand, for its investors, Sun Pharma has been losing money. Even though Sun Pharmacy is currently losing money, it is not yet in a very unstable position and can recover if they concentrate on raising the operational profit margin by increasing sales relative to their operating expenses. This is because of the low equity multiplier and interest expenses.

REFERENCES

[1] Beaver, W. H. (1966). Financial ratios as predictors of failure. Journal of Accounting research, 71-111.

[2] Altman, E. I. (1968). Financial ratios, discriminant analysis, and the prediction of corporate bankruptcy. The journal of finance, 23(4), 589-609.

[3] Bunea, O. I., Corbos, R. A., & Popescu, R. I. (2019). Influence of some financial indicators on return on equity ratio in the Romanian energy sector-A competitive approach using a DuPontbased analysis. Energy, 189, 116251.

[4] Delen, D., Kuzey, C., & Uyar, A. (2013). Measuring firm performance using financial ratios: A decision tree approach. Expert systems with applications, 40(10), 3970-3983.

[5] Fenyves, V., Zsido, K. E., Bircea, I., & Tarnoczi, T. (2020). Financial performance of Hungarian and Romanian retail food small businesses. British Food Journal.

[6] Horrigan, J. O. (1968). A short history of financial ratio analysis. The Accounting Review, 43(2), 284-294.

[7] Huang, J., & Wang, H. (2017). A data analytics framework for key financial factors. Journal of Modelling in Management.

[8] Kanapickiene, R., & Grundiene, Z. (2015). The model of fraud detection in financial statements utilizing financial ratios. Procedia-Social and Behavioral Sciences, 213, 321-327.

[9] Liu, C. M., O'Farrell, G., Wei, K. K., & Yao, L. J. (2013). Ratio analysis comparability between Chinese and Japanese firms. Journal of Asia Business Studies.

[10] Mahajan, V. (2020). Is the productivity of the Indian pharmaceutical industry affected by the introduction of the product patent act? Indian Growth and Development Review.

[11] Mahajan, S., & Sarkar, M. (2007). How Does the Financial Performance of MNCs in the Automobile Sector Compare with Indian Companies? An Analysis Using Financial Ratios. Paradigm, 11(2), 38-45.

[12] Malichová, E., & Ďurišová, M. (2015). Evaluation of the financial performance of enterprises in the IT sector. Procedia Economics and Finance, 34, 238-243.

[13] Maricica, M., & Georgeta, V. (2012). Business failure risk analysis using financial ratios. Procedia-Social and Behavioral Sciences, 62, 728-732.

[14] Mbona, R. M., & Yusheng, K. (2019). Financial statement analysis. Asian Journal of Accounting Research.

[15] Öcal, M. E., Oral, E. L., Erdis, E., & Vural, G. (2007). Industry financial ratios—application of factor analysis in the Turkish construction industry. Building and Environment, 42(1), 385-392. http://iaeme.com/Home/journal/IJM 543 editor@iaeme.com

[16] Pražák, T., & Stavárek, D. (2018). Importance of financial ratios for predicting stock price trends: evidence from the Visegrad Group. International Journal of Trade and Global Markets, 11(4), 293-305.

[17] Pech, C. O. T., Noguera, M., & White, S. (2015). Financial ratios used by equity analysts in Mexico and stock returns. Contaduríay Administración, 60(3), 578-592.

[18] Rajender, D. P. (2020). Performance Evaluation of Select Paint Companies in India. International Journal of Management (IJM), 11(1), 56-60.

[19] Salih, A., Ghecham, M. A., & AlBarghouthi, S. (2019). The impact of the global financial crisis on conventional and Islamic banks in the GCC countries. International Journal of Finance & Economics, 24(3), 1225-1237.

[20] Tan, P. M., Koh, H. C., & Low, L. C. (1997). Stability of financial ratios: A study of listed companies in Singapore. Asian Review of Accounting.

[21] Yameen, M., Farhan, N. H., & Tabash, M. I. (2019). The Impact of Liquidity on Firms'

[22] Online website moneycontrol.com.