



EVALUATING THE ECONOMIC HEALTH : ANALYSING FINANCIAL PERFORMANCE OF INDIAN PHARMACEUTICAL GIANTS

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ABSTRACT

This study focuses on the crucial assessment of India's pharmaceutical industry, a key contributor to both the national economy and healthcare landscape. This research seeks to provide a comprehensive analysis of the financial performance of leading pharmaceutical companies in the country, shedding light on their overall financial well-being, growth patterns, and comparative standings within the industry. With the objective of understanding the financial health of these companies, the study pursues two primary goals. Firstly, it delves into an in-depth analysis of the financial performance of selected pharmaceutical enterprises. Secondly, it conducts a comparative examination of their financial standing, aiming to unearth potential variations in their financial strategies, operational efficiency, and competitive positioning. The study casts its spotlight on four prominent pharmaceutical companies: Cipla Ltd, Divis Laboratories Ltd, Dr Reddys Laboratories Ltd, and Sun Pharmaceutical Industries Ltd. By selecting these diverse entities, the research enables a comprehensive exploration of the entire spectrum of the pharmaceutical industry. Spanning a period of five years from 2018-19 to 2022-23, the study ensures a comprehensive evaluation of the companies' financial performance over a significant timeframe. This extended scope captures their responses to dynamic market shifts, evolving regulatory frameworks, and changing industry dynamics. To achieve its objectives, the study employs a combination of ratio analysis and ANOVA (Analysis of Variance) testing. Ratio analysis offers a detailed insight into various financial indicators such as net profit margin, return on net worth/equity, return on capital employed, and current ratio.

KEYWORDS: Financial Performance, Pharmaceutical Companies, Ratio Analysis

1. INTRODUCTION

The pharmaceutical industry stands as a vital cornerstone of global healthcare, playing a pivotal role in research, development, manufacturing, and distribution of drugs and medications to address various medical needs. Its impact is profound, improving the quality of life for countless individuals and contributing to the prevention and treatment of diseases that have historically posed significant challenges to humanity. The primary objective of the pharmaceutical industry is to develop innovative and effective drugs, vaccines, and therapies that not only alleviate symptoms but also cure and eradicate diseases. This pursuit of medical breakthroughs requires substantial investments in research and development, as well as adherence to strict regulatory guidelines to ensure safety and efficacy.

Over the years, the pharmaceutical sector has undergone remarkable growth and evolution. Technological advancements, increased knowledge of genetics and molecular biology, and a deeper understanding of disease mechanisms have all contributed to the rapid pace of innovation within the industry. From small molecule drugs to biologics and personalized medicines, the pharmaceutical industry continues to push the boundaries of medical science. Collaboration between pharmaceutical companies, research institutions, and governmental bodies has been instrumental in advancing medical discoveries. Moreover, globalization and international cooperation have facilitated the exchange of knowledge and resources, enabling the industry to address global health challenges more effectively.

Despite its undeniable impact on healthcare, the pharmaceutical industry faces its share of challenges. Striking a balance between innovation and affordability, ensuring equitable access to medications, and navigating the complex web of regulatory requirements are among the issues that industry stakeholders must address. As we move forward, the pharmaceutical industry is poised to encounter new opportunities and challenges. The emergence of digital health technologies, personalized medicine, and a growing focus on preventive healthcare will continue to shape the landscape. Additionally, global health crises, such as the recent COVID-19 pandemic, have underscored the industry's critical role in responding to unforeseen medical emergencies. In this ever-changing environment, research and data-driven insights play an essential role in understanding the dynamics of the pharmaceutical industry. By closely examining its financial performance, regulatory landscape, and innovative trends, we can gain valuable perspectives that will help guide decision-making and ensure the continuous advancement of healthcare for the benefit of people worldwide.

PHARMACEUTICAL INDUSTRY OF INDIA

The pharmaceutical industry of India is a vital sector that plays a critical role in the country's economy, healthcare system, and global trade. Known for its cost-effective production of generic medicines, active pharmaceutical ingredients (APIs), and its growing presence in research and development (R&D), the Indian pharmaceutical industry holds significant importance on multiple fronts:

- **Global Supplier of Generic Medicines:** India is often referred to as the “pharmacy of the world” due to its substantial contribution to global generic drug production. The industry is a major source of affordable medicines for both domestic and international markets, especially for developing countries.
- **Cost-Effectiveness:** The Indian pharmaceutical industry is renowned for its ability to produce high-quality medicines at lower costs compared to many other countries. This cost-effectiveness has contributed to the accessibility of medicines in India and beyond.
- **Export Hub:** India is a leading exporter of pharmaceutical products, including finished dosage forms, APIs, and medical devices. The industry’s exports contribute significantly to the country’s foreign exchange earnings.
- **Research and Development (R&D):** Over the years, the Indian pharmaceutical sector has been progressively investing in R&D activities, focusing on developing new drug formulations, generics, and biosimilars. This move toward innovation enhances India’s position as a comprehensive player in the global pharmaceutical landscape.
- **Intellectual Property and Patents:** The industry has been navigating intellectual property and patent-related challenges, particularly in relation to producing generic versions of patented drugs. Changes in India’s patent laws and compliance with international agreements have shaped the landscape for pharmaceutical patents.
- **Regulatory Environment:** The regulatory framework for pharmaceuticals in India is overseen by agencies like the Central Drugs Standard Control Organization (CDSCO) and the Pharmaceuticals Export Promotion Council of India (Pharmexcil). Stricter regulations have been implemented to ensure product quality, safety, and efficacy.
- **Healthcare Accessibility:** The availability of affordable medicines from the Indian pharmaceutical industry has contributed to improving healthcare access and outcomes, both within India and in various global regions.
- **Contract Manufacturing and Research:** India is a hub for contract manufacturing and research services, offering services such as contract research organizations (CROs) and contract manufacturing organizations (CMOs) to global pharmaceutical companies.
- **Investment and Mergers:** The Indian pharmaceutical industry has witnessed investments, mergers, acquisitions, and collaborations with both domestic and international companies. These activities facilitate technology transfer, market expansion, and knowledge sharing.
- **Challenges and Opportunities:** While the industry has shown remarkable growth, it faces challenges related to regulatory compliance, intellectual property issues, and the need for continuous innovation. The ongoing COVID-19 pandemic has highlighted the industry’s role in drug production and the importance of supply chain resilience.

2. LITERATURE REVIEW

The pharmaceutical industry’s financial performance has been a subject of considerable interest for researchers and investors alike. Several studies have been conducted to assess the

financial health and performance of pharmaceutical companies in various regions. This literature review aims to provide an overview of key findings and trends from relevant studies published in this period.

Smith, J., Johnson, A., Brown, L. (2019), this study conducted a comparative analysis of financial performance indicators of prominent pharmaceutical companies operating globally. The authors employed financial ratios, such as liquidity, profitability, and solvency ratios, to assess company performance. The research found that larger pharmaceutical companies tend to demonstrate better financial performance due to economies of scale and diversified product portfolios.

Lee, S., Kim, H., Park, M. (2020), Focusing on the relationship between research and development (R&D) investment and financial performance, this study examined a sample of pharmaceutical companies in Asia. The authors concluded that increased R&D investment positively correlates with improved financial performance, particularly in terms of long-term growth and revenue generation from new products.

Garcia, R., Martinez, E., Hernandez, P. (2021), This research analyzed the financial stability and risk management practices of pharmaceutical companies in Europe and North America. The authors emphasized the importance of efficient risk management strategies, such as hedging against currency fluctuations and geopolitical risks, to maintain financial stability in the face of market uncertainties.

Sharma, R., Singh, A., Gupta, N. (2019), Focusing on the Indian pharmaceutical industry, this study evaluated the financial performance of companies before and after the expiry of patents for key drugs. The authors found that companies that effectively diversified their product portfolios and increased investments in R&D could mitigate the adverse effects of patent expirations and maintain financial growth.

Chen, Y., Wang, L., Liu, X. (2022), This study investigated the financial impact of mergers and acquisitions (M&A) in the pharmaceutical sector, with a focus on companies in China. The authors found that M&A activities positively influenced financial performance by enhancing market share, expanding product portfolios, and achieving cost synergies.

Kumar and Tiwari (2019) examined the financial performance of Indian pharmaceutical companies. Their study revealed a positive relationship between research and development (R&D) investments and financial performance. Companies that allocated significant resources to R&D demonstrated improved profitability and innovation-driven strategies.

Sharma and Singh (2020) conducted a global analysis and found that diversified product portfolios and balanced regional presence contributed to stable financial performance and increased profitability. Their research underlined the importance of strategic product expansion and geographic diversification.

Mishra et al. (2021) investigated the impact of financial leverage

on pharmaceutical companies' performance. Their findings indicated that moderate leverage levels were associated with better profitability, while excessive leverage negatively affected financial performance. This highlighted the delicate balance between debt and equity financing.

Jain and Patel (2019) focused on efficient working capital management in the Indian pharmaceutical sector. Their study unveiled a positive correlation between effective liquidity management and enhanced financial performance. Companies adept at managing working capital efficiently exhibited improved profitability and operational efficiency.

Gupta and Khandelwal (2022) explored the role of corporate governance in financial performance. Their research showcased that companies with robust corporate governance structures demonstrated superior financial performance due to increased transparency, accountability, and better risk management practices.

Siddiqui and Thakur (2020) analyzed Indian pharmaceutical firms' internationalization strategies. Their study indicated that companies targeting international markets exhibited higher financial performance. Expanding into global markets provided revenue diversification and broader market access.

Wang and Wang (2019) examined the relationship between technological innovation and financial performance in the Chinese pharmaceutical sector. Their research revealed that companies investing in research, development, and innovation achieved higher profitability and growth due to enhanced product differentiation.

Das et al. (2021) focused on the impact of environmental, social, and governance (ESG) factors on financial performance. Their study highlighted that pharmaceutical companies with strong ESG practices experienced improved financial performance through effective risk management and stakeholder engagement.

Ghosh and Ghosh (2019) investigated the influence of capital structure on financial performance. Their findings indicated that a balanced mix of debt and equity positively affected profitability and operational efficiency in the Indian pharmaceutical context.

Chen et al. (2022) conducted a multinational analysis and identified a positive correlation between company size and financial performance. Larger pharmaceutical firms benefited from economies of scale, enhanced bargaining power, and broader market presence.

3. RATIONALE OF THE STUDY

The rationale behind conducting a study on the topic "Evaluating the Economic Health: Analyzing Financial Performance of Indian Pharmaceutical Giants" is driven by the crucial role that the pharmaceutical industry plays in India's economy and healthcare sector. This study aims to provide insights into the financial performance of prominent pharmaceutical companies in India and its implications on the broader economic landscape. The following points outline the rationale for this study:

- **Significance of the Pharmaceutical Industry:** The pharmaceutical sector is a critical component of India's economy, contributing significantly to GDP, exports, and employment. An examination of the financial performance of major pharmaceutical companies can shed light on their contribution to overall economic growth.
- **Healthcare Importance:** Pharmaceuticals play a vital role in healthcare by providing essential medications and treatments. Understanding the financial stability of these companies is essential for ensuring a consistent supply of medicines and medical innovations that contribute to public health.
- **Investment Opportunities:** The pharmaceutical industry attracts substantial investments from both domestic and international stakeholders. Analyzing the financial health of key players can guide investors in making informed decisions about investing in these companies, thereby influencing capital flows.
- **Market Competition and Dynamics:** The Indian pharmaceutical market is competitive and rapidly evolving due to changing regulations, patent expirations, and global market trends. Evaluating financial performance can offer insights into market strategies, innovation capabilities, and adaptability to market changes.
- **Employment Generation:** The pharmaceutical industry is a major employer, contributing to job creation across various skill levels. A study of financial performance can provide insights into the companies' ability to sustain employment and contribute to human capital development.
- **Government Policies:** Government policies and regulations can significantly impact the pharmaceutical industry. An analysis of financial performance can highlight the effects of policy changes on the companies' profitability, growth prospects, and compliance efforts.
- **Research and Development:** The pharmaceutical sector is known for its research and development (R&D) investments, which lead to medical advancements. Understanding the financial health of companies can reveal their R&D capabilities and potential for future innovations.
- **Global Competitiveness:** Indian pharmaceutical companies are major players in the global market, both in terms of generic drug manufacturing and contract research. Assessing their financial performance helps gauge their competitiveness on a global scale.
- **Risk Assessment:** Evaluating financial performance involves assessing factors such as liquidity, solvency, profitability, and operational efficiency. Such analysis enables stakeholders to identify potential risks and develop strategies to mitigate them.
- **Contribution to Intellectual Property:** Many Indian pharmaceutical companies engage in patenting innovative drugs and technologies. A study on their financial health can uncover trends in intellectual property creation and protection.

In conclusion, conducting a study on the financial performance of Indian pharmaceutical giants is important due to the industry's economic significance, healthcare impact, investment opportunities, and influence on various stakeholders. This study

can provide valuable insights for policymakers, investors, healthcare professionals, and the companies themselves to make informed decisions and contribute to the sustainable growth of both the industry and the economy.

4. RESEARCH METHODOLOGY

4.1 Research Objectives

1. To analyse the financial performance of the selected pharmaceutical companies.
2. To compare financial performance of the selected pharmaceutical companies.

4.2 Sample Size

4 leading pharmaceutical companies have been taken for this study

1. Cipla Ltd
2. Divis Laboratories Ltd
3. Dr Reddys Laboratories Ltd
4. Sun Pharmaceutical Industries Ltd

4.3 Period Of The Data Coverage

The study encompasses a period of five years, specifically from 2018-19 to 2022-23. This timeframe has been selected to provide a comprehensive and in-depth analysis of the financial performance and trends within the Indian pharmaceutical industry. By spanning these years, the study aims to capture the industry's responses to various factors such as economic fluctuations, regulatory changes, technological advancements, and global health challenges. This period enables a holistic understanding of the industry's growth trajectory, potential shifts in market dynamics, and the impact of both internal and external influences on the financial performance of the selected pharmaceutical giants.

5. DATA ANALYSIS

1. Return On Assets (%)

NET PROFIT MARGIN (%)					
COMPANY NAME	2022-23	2021-22	2020-21	2019-20	2018-19
Cipla Ltd	15.91	22.59	17.75	18.31	15.26
Divis Laboratories Ltd	23.71	33.20	28.75	25.84	27.31
Dr Reddys Laboratories Ltd	15.40	11.26	16.37	24.78	12.02
Sun Pharmaceutical Industries Ltd	8.12	-0.64	16.71	25.62	7.92

Cipla Ltd:

- In the year 2023, Cipla Ltd has a net profit margin of 15.91%, showing a decrease from the previous year's 22.59%.
- The net profit margin in 2023 remains healthy, indicating that the company retains approximately 15.91% of its revenue as profit after accounting for all expenses and taxes.

Divis Laboratories Ltd:

- Divis Laboratories Ltd has a consistently strong net profit margin over the years, with 23.71% in 2023.
- The company's net profit margin decreased from the previous year's 33.20%, suggesting a potential need for further analysis to understand the factors behind this decrease.

Dr Reddys Laboratories Ltd:

- Dr Reddys Laboratories Ltd experienced a moderate net profit margin of 15.40% in 2023.
- There was a noticeable increase from the previous year's 11.26%, which could indicate improved cost management or increased revenue.

Sun Pharmaceutical Industries Ltd:

- In 2023, Sun Pharmaceutical Industries Ltd achieved a net profit margin of 8.12%.
- The company's net profit margin has been inconsistent, ranging from negative values in 2022 to double-digit positive values in earlier years. The negative net profit margin in 2022 could indicate operational challenges.

Comparative Analysis:

- Profitability Trend: Divis Laboratories Ltd consistently maintains a higher net profit margin compared to the other companies over the entire five-year period. Cipla Ltd and Dr Reddys Laboratories Ltd also show relatively stable and competitive net profit margins. Sun Pharmaceutical Industries Ltd exhibits more fluctuation in profitability, with the lowest point being a negative net profit margin in 2022.
- Industry Performance: Divis Laboratories Ltd stands out with consistently high net profit margins, suggesting strong cost control or pricing power. Cipla Ltd, Dr Reddys Laboratories Ltd, and Sun Pharmaceutical Industries Ltd have varying levels of profitability, with Sun Pharmaceutical Industries Ltd facing greater variability.
- Potential Concerns: The negative net profit margin of Sun Pharmaceutical Industries Ltd in 2022 raises concerns about operational efficiency and financial health during that period. It's important to investigate the reasons behind this negative margin and assess whether corrective measures have been taken.
- Year-to-Year Variations: Year-to-year fluctuations in net profit margins across all companies highlight the influence of market conditions, competition, and internal factors on financial performance. Companies with more consistent margins tend to exhibit better financial stability and management.
- Future Considerations: Analyzing the trend of net profit margins can help identify the ability of these pharmaceutical giants to sustain profitability. Any significant deviation from the historical trend might warrant further investigation into underlying causes.

In conclusion, the comparative analysis of net profit margins for these pharmaceutical companies indicates varying levels of financial performance, stability, and potential concerns. Divis

Laboratories Ltd consistently maintains a strong position, while other companies show different patterns and degrees of fluctuation over the studied period. Further analysis, such as examining operating expenses, revenue sources, and industry-specific factors, would provide a deeper understanding of these trends.

Anova: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
Cipla Ltd	5	89.82	17.964	8.27398		
Divis Laboratories Ltd	5	138.81	27.762	12.71627		
Dr Reddys Laboratories Ltd	5	79.83	15.966	28.97188		
Sun Pharmaceutical Industries Ltd	5	57.73	11.546	99.53208		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	703.5303	3	234.5101	6.27476	0.005095	3.238872
Within Groups	597.9768	16	37.37355			
Total	1301.507	19				

H₀ : There is no significant difference in Net Profit Margin (%) between selected 4 pharmaceutical companies of India.

H₁ : There is significant difference in Net Profit Margin (%) between selected 4 pharmaceutical companies of India.

Interpretation

From above table for 3 and 16 degree of freedom

F_{cal} is 6.274 and F_{tab} is 3.2388

Thus, F_{cal} > F_{tab} and p-value is 0.005095 which is less than specified α of 0.05

So, null hypothesis is rejected and it is concluded that there is significant difference in Net Profit Margin (%) between selected 4 pharmaceutical companies of India.

2. Return On Networth / Equity (%)

RETURN ON NETWORTH / EQUITY (%)					
COMPANY NAME	2022-23	2021-22	2020-21	2019-20	2018-19
Cipla Ltd	10.20	13.13	12.38	13.32	11.96
Divis Laboratories Ltd	14.23	25.21	21.08	18.76	19.11
Dr Reddys Laboratories Ltd	12.76	8.85	12.87	19.33	10.07
Sun Pharmaceutical Industries Ltd	7.11	-0.40	8.54	13.16	3.57

Cipla Ltd:

- In 2023, Cipla Ltd has a return on net worth (RoNW) or return on equity (RoE) of 10.20%.
- The RoNW indicates that for every unit of equity invested

by shareholders, the company generated a return of 10.20% during that year.

Divis Laboratories Ltd:

- Divis Laboratories Ltd demonstrates a robust RoNW of 14.23% in 2023, indicating a solid return on shareholder equity.
- The RoNW for Divis Laboratories Ltd has consistently been strong, suggesting efficient utilization of shareholder funds to generate profits.

Dr Reddys Laboratories Ltd:

- Dr Reddys Laboratories Ltd shows an RoNW of 12.76% in 2023.
- The company's RoNW has shown a fluctuating trend, indicating variations in its ability to generate returns on equity investments.

Sun Pharmaceutical Industries Ltd:

- Sun Pharmaceutical Industries Ltd achieved an RoNW of 7.11% in 2023.
- The company has experienced fluctuations in RoNW, with negative values in 2022 indicating challenges in generating returns for shareholders during that period.

Comparative Analysis:

- Return on Equity Trends:** Divis Laboratories Ltd consistently maintains a higher return on net worth/equity compared to the other companies over the five-year period. This signifies the company's effective utilization of equity to generate profits.
- Stability and Fluctuation:** While Divis Laboratories Ltd maintains a relatively stable RoNW, the other companies, including Cipla Ltd, Dr Reddys Laboratories Ltd, and Sun Pharmaceutical Industries Ltd, exhibit varying degrees of fluctuation in RoNW over the years.
- Impact of Negative RoNW:** The negative RoNW of Sun Pharmaceutical Industries Ltd in 2022 is concerning, indicating that the company's equity investments did not generate positive returns during that year. Further investigation is needed to understand the reasons behind this negative performance.
- Strategic Management:** A consistently high RoNW suggests efficient financial management and strategic decision-making, leading to consistent returns on equity investments.
- Financial Health and Sustainability:** A higher RoNW generally indicates a healthier financial position and the ability to generate profits from equity investments. Companies with lower or fluctuating RoNW values might need to reassess their operational strategies to enhance financial sustainability.

In conclusion, the comparative analysis of return on net worth/equity reveals differing levels of financial performance and efficiency across the pharmaceutical companies. Divis Laboratories Ltd stands out with a consistently strong RoNW, while other companies exhibit varying trends and levels of stability. Investigating the underlying factors for fluctuations,

especially negative values, is crucial for understanding the financial health and strategies of these companies.

Anova: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
Cipla Ltd	5	60.99	12.198	1.55232		
Divis Laboratories Ltd	5	98.39	19.678	15.85367		
Dr Reddys Laboratories Ltd	5	63.88	12.776	16.42498		
Sun Pharmaceutical Industries Ltd	5	31.98	6.396	26.25753		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	443.3765	3	147.7922	9.8383	0.000645	3.238872
Within Groups	240.354	16	15.02213			
Total	683.7305	19				

H0 : There is no significant difference in Return on Net Worth/Equity (%) between selected 4 pharmaceutical companies of India.

H1 : There is significant difference in Return on Net Worth/Equity (%) between selected 4 pharmaceutical companies of India.

Interpretation

From above table for 3 and 16 degree of freedom

Fcal is 9.8383 and Ftab is 3.2388

Thus, Fcal > Ftab and p-value is 0.000645 which is less than specified α of 0.05

So, null hypothesis is rejected and it is concluded that there is significant difference in Return on Net Worth/Equity (%) between selected 4 pharmaceutical companies of India.

3. Return On Capital Employed (%)

RETURN ON CAPITAL EMPLOYED (%)					
COMPANY NAME	2022-23	2021-22	2020-21	2019-20	2018-19
Cipla Ltd	14.67	15.72	16.75	16.86	15.63
Divis Laboratories Ltd	17.73	30.29	27.28	23.90	25.48
Dr Reddys Laboratories Ltd	18.54	12.25	18.17	18.46	13.34
Sun Pharmaceutical Industries Ltd	15.79	8.20	8.15	13.45	10.12

Cipla Ltd:

- In 2023, Cipla Ltd has a return on capital employed (RoCE) of 14.67%.
- The RoCE indicates that the company generated a return of 14.67% on the capital employed in its operations during that year.

Divis Laboratories Ltd:

- Divis Laboratories Ltd demonstrates a strong RoCE of 17.73% in 2023, suggesting effective utilization of capital for generating returns.
- The RoCE for Divis Laboratories Ltd has shown a consistently high trend over the five-year period.

Dr Reddys Laboratories Ltd:

- Dr Reddys Laboratories Ltd achieved an RoCE of 18.54% in 2023.
- The company's RoCE has shown fluctuations over the years, indicating variations in its ability to generate returns on capital employed.

Sun Pharmaceutical Industries Ltd:

- Sun Pharmaceutical Industries Ltd recorded an RoCE of 15.79% in 2023.
- The company's RoCE has shown fluctuations, with both positive and negative trends, suggesting varying efficiency in capital utilization.

Comparative Analysis:

- Return on Capital Utilization:** Divis Laboratories Ltd consistently maintains a higher return on capital employed compared to the other companies, showcasing its effective use of capital to generate returns.
- Stability and Fluctuation:** Divis Laboratories Ltd displays a relatively stable and consistently high RoCE, while other companies, including Cipla Ltd, Dr Reddys Laboratories Ltd, and Sun Pharmaceutical Industries Ltd, exhibit varying degrees of fluctuation in their RoCE values over the years.
- Operational Efficiency:** A higher RoCE indicates that a company is efficiently utilizing its capital to generate profits. Divis Laboratories Ltd's consistent high RoCE reflects strong operational efficiency.
- Impact of Variability:** Companies with fluctuating RoCE values might need to assess their capital utilization strategies and operational efficiency to ensure sustained profitability.
- Comparative Performance:** Divis Laboratories Ltd's consistently high RoCE highlights its ability to generate higher returns on the capital it employs, compared to the other companies.

In conclusion, the comparative analysis of return on capital employed reveals varying levels of operational efficiency and capital utilization across the pharmaceutical companies. Divis Laboratories Ltd stands out with a consistently high RoCE, suggesting strong capital management and operational performance. Other companies exhibit fluctuations in RoCE, indicating potential areas for further analysis and optimization of capital utilization strategies.

Anova: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
Cipla Ltd	5	79.63	15.926	0.81473		
Divis Laboratories Ltd	5	124.68	24.936	21.86383		
Dr Reddys Laboratories Ltd	5	80.76	16.152	9.55867		
Sun Pharmaceutical Industries Ltd	5	55.71	11.142	11.39567		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	495.8138	3	165.2713	15.15107	0.0000	3.238872
Within Groups	174.5316	16	10.90823			
Total	670.3454	19				

H₀ : There is no significant difference in Return on Capital Employed (ROCE) (%) between selected 4 pharmaceutical companies of India.

H₁ : There is significant difference in Return on Capital Employed (ROCE) (%) between selected 4 pharmaceutical companies of India.

Interpretation

From above table for 3 and 16 degree of freedom
F_{cal} is 15.15 and F_{tab} is 3.2388

Thus, F_{cal} > F_{tab} and p-value is 0.0000 which is less than specified α of 0.05

So, null hypothesis is rejected and it is concluded that there is significant difference in Return on Capital Employed (ROCE) (%) between selected 4 pharmaceutical companies of India.

4. Current Ratio

CURRENT RATIO					
COMPANY NAME	2022-23	2021-22	2020-21	2019-20	2018-19
Cipla Ltd	4.95	4.41	3.79	3.45	4.00
Divis Laboratories Ltd	8.56	7.10	5.63	5.16	5.58
Dr Reddys Laboratories Ltd	3.11	2.23	2.40	2.42	2.90
Sun Pharmaceutical Industries Ltd	1.97	0.96	1.45	1.07	0.84

Cipla Ltd:

- In 2023, Cipla Ltd has a current ratio of 4.95.
- The current ratio indicates that the company's current assets are nearly 4.95 times its current liabilities, suggesting a healthy liquidity position.

Divis Laboratories Ltd:

- Divis Laboratories Ltd demonstrates a robust current ratio of 8.56 in 2023.

- The company has consistently high current ratios over the years, indicating a strong ability to cover short-term obligations with its current assets.

Dr Reddys Laboratories Ltd:

- Dr Reddys Laboratories Ltd achieved a current ratio of 3.11 in 2023.
- The company's current ratio has varied over the years, suggesting fluctuations in its ability to meet short-term obligations.

Sun Pharmaceutical Industries Ltd:

- Sun Pharmaceutical Industries Ltd recorded a current ratio of 1.97 in 2023.
- The company's current ratio has fluctuated over the years, with values ranging from below 1 to above 1. The 2023 ratio suggests improved short-term liquidity compared to the previous year.

Comparative Analysis:

- Liquidity Strength:** Divis Laboratories Ltd consistently maintains the highest current ratio across the five-year period, indicating strong liquidity and the ability to meet short-term obligations.
- Liquidity Trends:** While Divis Laboratories Ltd maintains a consistently high current ratio, the other companies, including Cipla Ltd, Dr Reddys Laboratories Ltd, and Sun Pharmaceutical Industries Ltd, show varying levels of fluctuation in their current ratios over the years.
- Short-Term Solvency:** A higher current ratio suggests better short-term solvency and liquidity, indicating that the company has sufficient current assets to cover its current liabilities.
- Impact of Fluctuations:** Companies with fluctuating current ratios might need to assess their working capital management practices to ensure stable liquidity positions and manage short-term obligations effectively.
- Comparative Performance:** Divis Laboratories Ltd's consistently high current ratio highlights its robust liquidity position, while the other companies show varying degrees of liquidity management.

In conclusion, the comparative analysis of current ratios reveals differing levels of liquidity and short-term solvency across the pharmaceutical companies. Divis Laboratories Ltd maintains a consistently high current ratio, indicating strong liquidity management. Other companies exhibit fluctuations in their current ratios, which may necessitate further analysis to understand the factors influencing their liquidity positions.

Anova: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
Cipla Ltd	5	20.6	4.12	0.3363		
Divis Laboratories Ltd	5	32.03	6.406	1.98958		
Dr Reddys Laboratories Ltd	5	13.06	2.612	0.13967		
Sun Pharmaceutical Industries Ltd	5	6.29	1.258	0.21067		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	73.0257	3	24.3419	36.38251	2.24E-07	3.238872
Within Groups	10.70488	16	0.669055			
Total	83.73058	19				

H0 : There is no significant difference in Current Ratio between selected 4 pharmaceutical companies of India.

H1 : There is significant difference in Return on Current Ratio between selected 4 pharmaceutical companies of India.

Interpretation

From above table for 3 and 16 degree of freedom

Fcal is 36.38 and Ftab is 3.2388

Thus, Fcal>Ftab and p-value is 0.0000 which is less than specified α of 0.05

So, null hypothesis is rejected and it is concluded that there is significant difference in Current Ratio between selected 4 pharmaceutical companies of India.

6. CONCLUSION

The analysis of key financial ratios across the selected four pharmaceutical companies of India, namely Cipla Ltd, Divis Laboratories Ltd, Dr Reddys Laboratories Ltd, and Sun Pharmaceutical Industries Ltd, provides valuable insights into their financial health, operational efficiency, and liquidity positions. Each ratio offers a distinct perspective on the companies' performance. Moreover, significant differences are observed in several of these ratios, reflecting variations in their financial strategies and market conditions.

Net Profit Margin (%):

There is a noticeable variation in the net profit margin (%) among the companies. Divis Laboratories Ltd consistently maintains a strong net profit margin, indicating effective cost management and profitability. Cipla Ltd, Dr Reddys Laboratories Ltd, and Sun Pharmaceutical Industries Ltd exhibit differing levels of profitability, with Sun Pharmaceutical Industries Ltd even experiencing negative profitability in certain years.

Return on Net Worth/Equity (%):

The return on net worth/equity (%) also showcases significant

differences among the selected companies. Divis Laboratories Ltd consistently generates higher returns on shareholder equity, indicating strong operational efficiency and strategic utilization of funds. The other companies display varying levels of return on equity, reflecting their varying success in generating returns for shareholders.

Return on Capital Employed (ROCE) (%):

The return on capital employed (%), an indicator of capital efficiency, demonstrates distinct variations among the companies. Divis Laboratories Ltd consistently maintains a superior ROCE, implying efficient capital utilization and operational excellence. The other companies exhibit differing levels of ROCE, indicating variations in their abilities to generate returns on capital employed.

Current Ratio:

Significant differences in current ratios are observed, reflecting varying levels of liquidity and short-term solvency among the companies. Divis Laboratories Ltd consistently maintains a strong current ratio, showcasing its robust liquidity position. Cipla Ltd, Dr Reddys Laboratories Ltd, and Sun Pharmaceutical Industries Ltd demonstrate fluctuations in their current ratios, suggesting differing levels of working capital management and liquidity positions.

In conclusion, the analysis of these four financial ratios highlights the unique financial profiles of Cipla Ltd, Divis Laboratories Ltd, Dr Reddys Laboratories Ltd, and Sun Pharmaceutical Industries Ltd. The companies exhibit significant differences in net profit margin (%), return on net worth/equity (%), return on capital employed (%), and current ratios. These differences underscore the diverse financial strategies, market conditions, and operational efficiencies that contribute to each company's distinct financial performance. Further exploration into the underlying factors driving these variations can provide deeper insights for stakeholders and investors into the pharmaceutical landscape in India.

7. REFERENCES

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