

## **Assessing the Liquidity Position of Selected Pharmaceutical Companies in India: A Comparative Analysis Before and After COVID-19**

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### **Abstract**

This study aims to assess the liquidity position of selected pharmaceutical companies before and after the COVID-19 pandemic. Utilizing liquidity ratio data from 2018 to 2022, the research evaluates changes in financial health for companies like Sun Pharma, Aurobindo Pharma, Lupin Ltd, Cipla Ltd, Dr. Reddy, Cadila Healthcare, Glenmark, Torrent Pharma, Alkem Laboratories, and Divis Lab. The analysis highlights a mixed response in liquidity positions, with some measures showing slight decreases while others display significant increases post-pandemic. The findings suggest that while certain aspects of liquidity have improved, overall stability varies across different financial metrics. The findings of this study are expected to contribute to the existing literature on financial performance in the pharmaceutical sector during global crises, offering valuable insights for investors, policymakers, and corporate managers.

**Keywords:** Pharmaceuticals Industry, Covid19, Financial Ratios, India.

### **Introduction**

The COVID-19 pandemic has brought unprecedented challenges and opportunities to the global economy, affecting various industries in diverse ways. The pharmaceutical sector, in particular, has experienced significant shifts due to increased demand for medical supplies, vaccines, and therapeutic drugs. Understanding the financial implications of these changes is crucial for stakeholders within the industry.

Liquidity is a vital indicator of a company's ability to meet its short-term obligations and maintain operational stability. Evaluating the liquidity position before and after the COVID-19 pandemic provides insights into how companies have managed their resources during this pandemic period. This research focuses on ten prominent pharmaceutical companies in India: Sun Pharma, Aurobindo Pharma, Lupin Ltd, Cipla Ltd, Dr. Reddy, Cadila Healthcare, Glenmark, Torrent Pharma, Alkem Laboratories, and Divis Lab.

This study compares liquidity ratios from 2018 and 2019 (pre-COVID-19) with those from 2020, 2021, and 2022 (post-COVID-19). By analyzing these ratios, we aim to identify significant changes in financial health. The research hypotheses are formulated to test whether there is a significant difference in liquidity positions before and after the pandemic, providing a comprehensive understanding of the pandemic's impact on the pharmaceutical industry's financial stability.

### Literature Review:

**Omalioko et al. (2021)** found that COVID-19 significantly affected the liquidity and profitability of firms in Nigeria due to difficulties in exporting and importing goods.

**Devi et al. (2020)** observed that while some sectors in Indonesia experienced increased liquidity ratios during the pandemic, others, like finance and real estate, saw a decrease.

**Majumder and Rahman (2011)** noted that many pharmaceutical companies in Bangladesh had poor liquidity positions even before the pandemic.

**Ali (2020)** analyzed the financial performance of Indian pharmaceutical companies, finding no significant difference in short-term movement or sensitivity of profitability and firm size determinants.

**Maretha, D., Astuti, V. T., Hudzafidah, K., Hendra, J., & Hertina, D. (2023):** The study investigated the impact of liquidity and solvency on profitability at PT. Kalbe Pharmacy using quantitative analysis, revealing significant influence of liquidity (CR) and solvency (DER) on profitability (GPM).

**Omari, R. A. (2020):** This study examines the impact of liquidity and solvency on profitability in Jordan's pharmaceutical sector from 2005 to 2018, finding a negative correlation between liquidity (CR) and profitability (ROA), and a positive correlation between solvency (DE) and profitability. It suggests pharmaceutical companies prioritize liquidity policies for balanced performance.

**Morosan-Danila, L., Grigoras-Ichim, C. E., & Harasemciuc, E. (2023):** The paper conducts a comprehensive financial performance analysis of three prominent pharmaceutical companies in Romania over three key periods: pre-pandemic, pandemic, and post-pandemic, showcasing their resilience and potential growth amidst global crises. It highlights the significance of such analysis for investment decisions, risk assessment, and strategic planning, emphasizing the pharmaceutical sector's unique position for sustained expansion in a post-pandemic landscape.

**Akter, S. (2021):** The financial fitness assessment of leading pharmaceutical companies in Bangladesh using Altman's Z-score model reveals varying levels of stability. SQUARE Pharmaceuticals, Renata Limited, and IBN SINA Pharmaceutical are in strong positions, while ACI Limited and Beximco Pharmaceuticals face potential bankruptcy due to declining market value, low asset turnover, and inadequate profitability ratios.

### Objectives of the Study:

The primary objective of this study is to assess the liquidity position of selected pharmaceutical companies in India before and after the COVID-19 pandemic.

### Research Methodology:

#### Sample Design and Data Collection

The study utilizes systematic sampling to select ten pharmaceutical companies in India. Secondary data were collected from annual reports over five years (2018-2022). The financial analysis focuses on three key liquidity ratios:

**Current Ratio: Current Assets / Current Liabilities**

**Quick Ratio: (Current Assets - Inventories) / Current Liabilities**

**Cash Ratio: Cash & Cash Equivalents / Current Liabilities**

**Hypothesis:**

**Ho:** There is no significant difference between before covid19 and after covid19 pandemic in liquidity position.

**Ha:** There is a significant difference between before covid19 and after covid19 pandemic in liquidity position.

**Analysis & Interpretation:**

**Current Ratio:**

The current ratio measures a company's ability to pay short-term obligations. An optimum ratio is generally considered to be 2:1.

**Table 1**

Company	2022	2021	2020	2019	2018
Sun Pharma	0.24	0.31	0.31	0.30	0.26
Aurobindo Pharma	2.35	1.83	1.77	1.55	1.56
Lupin Ltd	2.38	3.72	4.24	4.75	3.73
Cipla Ltd	4.41	3.79	3.45	4.00	2.91
Dr Reddy	2.28	2.40	2.42	2.90	1.91
Cadila Healthcare	1.70	1.25	1.39	1.52	1.27
Glenmark	1.28	1.96	1.85	2.25	2.69
Torrent Pharma	0.98	0.94	0.99	1.47	1.58
Alkem Laboratories	1.66	1.94	1.64	1.84	1.64
Divis Lab	7.10	5.63	5.16	5.58	7.11
Mean	2.438	2.377	2.322	2.616	2.466

**Quick Ratio**

The quick ratio excludes inventories to measure the ability to meet short-term liabilities with more liquid assets.

Table 2

Company	2022	2021	2020	2019	2018
Sun Pharma	0.62	1.07	0.83	0.63	0.59
Aurobindo Pharma	1.55	1.12	1.09	0.96	0.97
Lupin Ltd	1.49	2.67	3.27	3.59	2.8
Cipla Ltd	4.41	3.79	3.45	4.00	2.91
Dr Reddy	1.73	1.78	1.89	2.25	1.52
Cadila Healthcare	1.22	0.88	0.99	0.99	0.8
Glenmark	1.00	1.66	1.50	1.85	2.18
Torrent Pharma	0.90	0.85	0.86	1.26	1.39
Alkem Laboratories	1.18	1.42	1.22	1.25	1.07
Divis Lab	4.84	3.75	3.23	3.58	5.11
MEAN	1.894	1.899	1.833	2.036	1.934

### Cash Ratio

The cash ratio measures the company's ability to cover short-term liabilities with cash and cash equivalents.

Table 3

Company	2022	2021	2020	2019	2018
Sun Pharma	0.05	0.03	0.06	0.03	0.01
Aurobindo Pharma	1.55	0.06	0.01	0.01	0.04
Lupin Ltd	0.02	0.11	0.51	0.03	0.05
Cipla Ltd	0.52	0.32	0.20	0.07	0.08
Dr Reddy	0.34	0.29	0.01	0.04	0.03
Cadila Healthcare	0.08	0.03	0.11	0.04	0.07
Glenmark	0.01	0.01	0.04	0.11	0.08
Torrent Pharma	0.04	0.04	0.05	0.11	0.11
Alkem Laboratories	0.56	0.58	0.30	0.24	0.16
Divis Lab	2.40	1.97	0.12	0.13	0.14
MEAN	0.557	0.344	0.141	0.081	0.077

### Data Analysis:

Before COVID-19 (2018 and 2019):

Table 1: Mean =  $(2.466 + 2.616) / 2 = 2.541$

Table 2: Mean =  $(1.934 + 2.036) / 2 = 1.985$

Table 3: Mean =  $(0.077 + 0.081) / 2 = 0.079$

**After COVID-19 (2020, 2021, and 2022):**

Table 1: Mean =  $(2.322 + 2.377 + 2.438) / 3 = 2.379$

Table 2: Mean =  $(1.833 + 1.899 + 1.894) / 3 = 1.875$

Table 3: Mean =  $(0.141 + 0.344 + 0.557) / 3 = 0.347$

**Comparative Analysis:****Table 1:**

Before COVID-19: 2.541

After COVID-19: 2.379

Difference:  $2.541 - 2.379 = 0.162$

**Table 2:**

Before COVID-19: 1.985

After COVID-19: 1.875

Difference:  $1.985 - 1.875 = 0.110$

**Table 3:**

Before COVID-19: 0.079

After COVID-19: 0.347

Difference:  $0.347 - 0.079 = 0.268$

**Conclusion**

The study concludes that Table 1 and Table 2 show a slight decrease in the liquidity position after the COVID-19 pandemic. Table 3 shows a significant increase in liquidity position after the COVID-19 pandemic. For this study we conduct a paired T test, based on the above test we conclude that the notable increase in Table 3, we rejecting the null hypothesis ( $H_0$ ) in favor of the alternative hypothesis ( $H_a$ ), indicating a significant change in the liquidity position of the selected pharmaceutical companies post-pandemic. Table 1 and Table 2 is not give significant evidence against the null hypothesis. So we fail to reject the null hypothesis in favor of alternate hypothesis.

**References**

- Omaliko, E. E., et al. (2021). "Effect of COVID-19 on the Performance of Nigerian Firms." *Journal of Finance and Accounting*.
- Devi, et al. (2020). "Liquidity Analysis of Indonesian Firms during COVID-19." *Indonesian Journal of Business*.
- Majumder, T. H., & Rahman, M. M. (2011). "Financial Performance of Pharmaceutical Companies in Bangladesh." *Journal of Accounting and Finance*.
- Ali, I. (2020). "Analysis of Financial Performance of Indian Pharmaceutical Companies." *Indian Journal of Finance*.

Maretha, D., Astuti, V. T., Hudzafidah, K., Hendra, J., &Hertina, D. (2023). The Effect of Liquidity and Solvency On Profitability in Pt. Kalbe FarmaTbk. Jurnal Info Sains: InformatikadanSains, 13(02), 184-189.

Morosan-Danila, L., Grigoras-Ichim, C. E., &Harasemciuc, E. (2023). Performance Analysis of Pharmaceutical Companies During the Pandemic Crisis. The USV Annals of Economics and Public Administration, 23(1 (37)), 162-171.

Akter, S. (2021). Financial fitness of selected pharmaceuticals companies of Bangladesh: A Comparative Assessment. American Economic & Social Review, 7(1), 10-24.

Omari, R. A. (2020). The Impact of Liquidity, Solvency on Profitability: An Analysis of Jordanian Pharmaceutical Industries Sector. Systematic Reviews in Pharmacy, 11(11).