

Entrepreneurial Efficiency in Managing Working Capital: A Case Study of JK Paper Company Ltd., India

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Abstract: In today's manufacturing organizations, the efficient management of working capital has a direct impact on liquidity, profitability, continuity, and sustainability and is a key element of entrepreneurial and financial efficiency. The present study investigates the entrepreneurial efficiency of working capital management of JK Paper Ltd., one of the major paper manufacturing companies in India for the last five years (2021-2025). It examines the liquidity position of the company with the current ratio and the profitability position of the company with return on capital employed (ROCE) and the statistical relationship between the current ratio and ROCE. The study is based on secondary data using audited annual reports and financial statements. Financial ratio analysis, Karl Pearson's correlation coefficient, and an independent t-test were used to analyze the data. The liquidity position showed that JK Paper Ltd. has a consistently healthy status throughout the liquidity position during the study period (the current ratio has never exceeded the benchmark of 2:1). The profitability position has increased significantly from the year 2021 to 2023 (with the highest ROCE being 21% in 2023) and has declined in the year 2024 and 2025. The correlation analysis showed a weak positive coefficient ($r = 0.31$) and the t-test showed that the correlation was not significant ($t = 0.56$, $df = 3$, $p > 0.05$). The results indicate the importance of entrepreneurial efficiency in maintaining operational and financial stability, as well as the fact that profitability is influenced by a wider range of macroeconomic and operational factors than liquidity alone.

Keywords: Entrepreneurial efficiency, working capital management, liquidity, profitability, return on capital employed, and manufacturing firms.

Introduction

Working capital administration is one of the key areas of company finances and it has a direct impact on the liquidity, efficiency, profitability and sustainability of the enterprise [1]. In industrial economics, working capital is considered as the difference between current assets and current liabilities and is defined as liquidity for current activities. When organizations have ideal working capital, they can settle bills that are payable soon and allocate their funds to maximize profits.

The importance of working capital management can be felt in a manufacturing industry where huge amounts of investment are made in raw materials, stock and receivables. An imbalance in working capital due to either excess investment or lack of working capital can lead to production interruptions, delayed payments from suppliers and loss of business opportunities [2]. Working capital policy formulation works well in organizations, and they are more likely to achieve increased profitability, as cited by [3] and increase liquidity and value to the shareholders. Thus, entrepreneurial efficiency is the capacity of entrepreneurs/managers of organisations to make judicious use of funds, make optimisation of resources and adopt innovative strategies which improve productivity and profitability. Beyond simply establishing a new business, entrepreneurship encompasses strategic planning, risk management, cost control, and adaptable decision-making to maintain and expand new and established businesses [4]. With the industries in which they work being capital-intensive and highly competitive, entrepreneurial efficiency has grown as a crucial factor contributing to organizational success.

The setting in which the investigation is carried out is very interesting in the Indian paper manufacturing industry. Although it is a capital-intensive industry, it provides considerable employment to more than 500,000 people in India. It is required for industrial development and the provision of educational materials but faces problems like prices and availability of raw materials, energy costs and environmental enforcement, a competitive market, fluctuating raw material and energy costs [5]. JK Paper company Ltd is one of the top paper manufacturers in India, focusing on office papers, coated papers, packing boards, and specialty papers, which have been consistently growing due to technological advancements, strategic diversification, and financial management [6].

This will be particularly interesting to analyze the causal relationship between entrepreneurial efficiency in working capital management and financial performance through an empirical context in the company's financial performance from 2021 to 2025, which is characterized by an improvement in financial performance between 2021 and 2023 and a deterioration in financial performance in 2025.

Problem Statement

A lack of inventory management, delayed receivables collection, increasing costs of operations, and the lack of financial planning are consistent issues in many manufacturing companies that are causing liquidity issues. The

paper manufacturing industry is subject to such difficulties, which are exacerbated by volatile raw material costs, energy-intensive production and consumer demand trends. Although the role of working capital management is well understood, many organizations are often unable to achieve the right balance between liquidity and profitability. This study then examines the effect of entrepreneurial efficiency of working capital management on the financial stability and performance of JK Paper Company Ltd. for the last five years.

Objectives of the Study

The main purpose of the research is to study the efficiency of working capital management of the entrepreneurs of JK Paper Company Ltd. Specific objectives are:

1. To analyze the liquidity position of JK Paper company Ltd. during five years study period (2021 to 2025);
2. To evaluate the company's profitability and its impact on the effectiveness of the organization; and
3. To investigate the statistical relationship between liquidity and profitability in the study period.

Scope and Significance

This study has been limited to JK Paper company Ltd. only for a specific time period from 2021 to 2025. Single-firm case studies have the great disadvantage of restricting the generalizability of the findings, but they have the advantage of providing depth of contextual analysis, which is important to understanding the financial dynamics of the firm. The results will benefit practitioners, financial managers and policymakers in the Indian paper manufacturing industry to understand the importance of entrepreneurial efficiency in maintaining financial performance in times of macroeconomic fluctuations.

Literature Review

Conceptual Framework: Working Capital Management and Entrepreneurial Efficiency

Working capital management involves managing current assets and current liabilities to ensure efficient operations, maintain liquidity, and optimize profitability [7]. This has recently become a subject of scholarly interest, particularly since the onset of the COVID-19 pandemic, which has highlighted the need for managerial capabilities, entrepreneurial decision-making, macroeconomic conditions, and innovation as key determinants of working capital efficiency [8], [9].

The methodological approach to studying the performance of service providers has evolved from ratio analysis to more sophisticated methods like Data Envelop Analysis (DEA), Structural Equation Modeling (SEM), and dynamic panel estimations (Seth et al., 2020). In addition, [10] found that the working capital behaviors vary widely among the various types of firms and governance structures. These developments all highlight the multi-faceted character of entrepreneurial efficiency in financial management.

Theoretical Foundations

Resource-Based View

The resource-based view suggests that entrepreneurial efficiency is based on the unique resources and skills of the organization which are difficult for others to replicate. The Resource -Based View can be applied to working capital management, where superior managerial ability is an intangible competitive resource. Empirically, [11] validated that managerial competence helps in improving the efficiency of the working capital by effective allocation of resources and financial planning.

The Resource-Based View's, Valuable Rare Inimitable Non-substitutable framework, valuable, rare, inimitable, and non-substitutable, explains why some working capital practices can provide a sustainable competitive advantage over others, which can be easily replicated by competitors [12]. A firm's cash conversion cycle, credit policy and inventory control systems are only strategic resources if they are not easily replicable by competing firms, usually because they are part of the firm-specific managerial routines, supplier and customer relationships or organizational learning that the firm has accumulated rather than being capitalized on by other firms with financial techniques that anyone could use. Looking at it with this lens, JK Paper company Ltd.'s regular liquidity discipline during the study period is not only a regular accounting result but also a tacit path-dependent organizational capacity. This view is consistent with the resource-based and dynamic capability views that see the source of sustained competitive advantage stem from firms' capacity to continuously integrate, reconfigure and leverage complementary managerial capabilities rather than simply possessing valuable resources [13], [14].

Agency Theory

According to agency theory, there is the possibility of conflict between managers and shareholders in making decisions on liquidity in the short term. Managers could pre-emptively engage in working capital policies at the cost of shareholders' value for their own benefit. [15] revealed that the link between working capital efficiency and firm performance can be mediated by managerial ability, and capable managers can be shown to achieve the optimal level of working capital, which can help increase firm valuation.

Trade-Off Theory

The theory suggests that companies need to consider both liquidity and profitability in managing their working capital as high levels of liquidity can negatively impact the profitability of their investment resources, and a lack of liquidity can increase the risk of insolvency [16]. Entrepreneurially efficient managers always strive to manage this trade-off in a way that keeps them flexible to operate and yet in a balanced financial position.

Dimensions of Working Capital Efficiency

In the literature, four dimensions of entrepreneurial efficiency in working capital management are recognized:

Cash Management: Entrepreneurs must make sure that there is enough liquidity to continue the business operations without any hindrance, but the idle money should be minimized. Companies that manage their cash efficiently exhibit better profitability, cash conversion cycle, and cash flow forecasting [17], [18].

Receivables Management: Cash flow is stabilised and customer relationships are strengthened with effective credit policies. The accounts receivable period and profitability of SMEs are found to be negatively correlated by [10], which found that the higher the ARP, the lower the profits as it affects the efficiency of the entrepreneur.

Inventory Management: Stock shortages and overstocking, high storage costs, and late deliveries are the consequences of inefficient inventory management [20]. Entrepreneurial efficiency is achieved by having the optimal inventory level, which is a balance of inventory availability and inventory holding costs [3].

Payables Management: Strategic Scheduling of Supplier Payments Preserving Liquidity while Maintaining Supplier Relationships [11]. While longer payment periods can temporarily ease cash flow, they can cause potential supply chain disruptions and damage to the company's reputation if payment is not made in a timely fashion [21], [22].

Entrepreneurial Ability and Working Capital Performance

An increasing amount of evidence highlights the managerial/entrepreneurial capabilities that are important in determining outcomes of working capital. The results of [11] revealed that managerial competence has a significant positive effect on working capital management efficiency among the Indian companies, and [15] also concluded that managerial competence positively mediates the relationship between working capital management and company performance, where high managerial competence fosters an optimal cash conversion cycle and efficient use of resources.

Working Capital Management and Firm Performance

[23] established that efficient working capital management improves profitability and operational sustainability, ability, and market competitiveness among Indian manufacturing exporters. [24] corroborated these findings, demonstrating that working capital management efficiency is positively associated with firm growth. At the macroeconomic level, [8] provided cross-country evidence that institutional conditions and macroeconomic stability significantly moderate the working capital profitability relationship.

Research Gap

Despite extensive inquiry, important gaps persist. Most existing studies concentrate on financial outcomes, profitability, liquidity, and firm value, while giving limited attention to the behavioral and entrepreneurial factors underlying working capital decisions, such as financial literacy, managerial innovation, and adaptive decision-

making. Additionally, most empirical research draws on large-scale panel data from publicly traded firms, leaving single-firm, longitudinal case analyses underrepresented. This study addresses this gap by providing a focused, five-year longitudinal analysis of JK Paper Company Ltd., complementing the broader literature with firm-specific evidence from the Indian paper manufacturing sector.

Methodology

Research Design

This study employs a quantitative, descriptive research design based on secondary longitudinal data. The descriptive approach is appropriate for characterising financial trends and assessing the relationship between financial variables over a defined period [24]. The study covers the financial years 2021 to 2025, providing a five-year window that encompasses both periods of growth and decline in the firm's financial performance.

Data Source

All data were obtained from the audited annual reports and published financial statements of JK Paper Ltd. for the fiscal years 2021 to 2025 [6]. Supplementary literature was sourced from peer-reviewed academic journals, textbooks, and online databases, including Scopus, Web of Science, and Google Scholar. The exclusive reliance on secondary data is a deliberate methodological choice consistent with archival financial research, though it represents a limitation discussed above.

Analytical Methods.

Three analytical approaches were employed:

Financial Ratio Analysis: The current ratio (current assets / current liabilities) was used to assess liquidity, and Return on Capital Employed ($ROCE = EBIT / \text{Capital Employed} \times 100$) was used to assess profitability). These ratios are widely adopted benchmarks in corporate financial analysis, providing standardized measures for evaluating and comparing firms' financial performance across industries and over time [25].

Karl Pearson's correlation coefficient: The correlation between the current ratio and ROCE was calculated to determine the direction and strength of the liquidity profitability relationship.

Student's t-Test: A t-test was applied to assess the statistical significance of the observed correlation at the 5% level of significance ($\alpha = 0.05$), with $n - 2 = 3$ degrees of freedom. The critical value at this threshold is $t_{0.05}(3) = 3.182$.

Results

Liquidity Position (2021 to 2025)

Table 1. Presents the annual current ratio and net working capital of JK Paper Company Ltd. for the study period

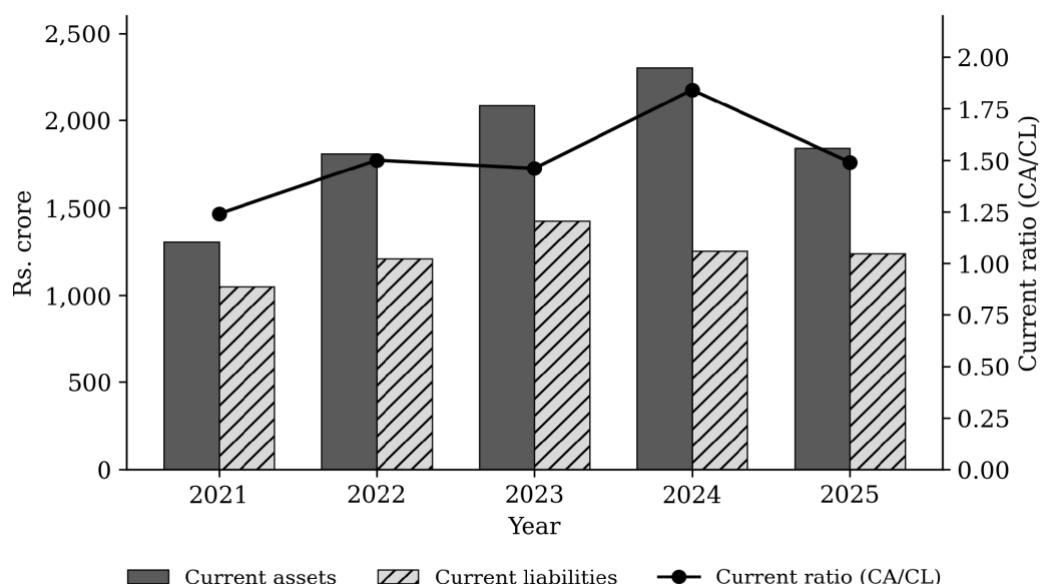
Year	Current Assets (Rs. Crore)	Current Liabilities (Rs. Crore)	Current Ratio CA/CL	Net Working Capital (Rs. Crore)
2021	1303	1048	1.24	255
2022	1,809	1,208	1.50	601
2023	2,085	1,425	1.46	661
2024	2,302	1,251	1.84	1,051
2025	1,841	1,235	1.49	606

Source: JK Paper Company Ltd. Annual Report (2025)

The data reveal that JK Paper Ltd. maintains a consistently healthy liquidity position throughout the five years. The current ratio improved from 1.24 in 2021 to a peak of 1.84 in 2024 before moderating to 1.49 in 2025. All recorded ratios do not exceed the minimum acceptable benchmark of 2:1, indicating that the organisation maintained adequate liquidity and could meet its short-term obligations through the study period.

Net working capital similarly expanded from Rs. 255 crores in 2021 to Rs. 1,051 in 2024 before contracting to Rs. 606 crores in 2025. The 2024 peak reflects the combined effect of growth in current assets and a reduction in current liabilities, indicative of deliberate working capital optimisation. The subsequent decline in 2025 coincided with a contraction in current assets, warranting further investigation into the operating conditions during the period.

Figure 1: Current Assets, Current Liabilities and Current Ratio (2021 to 2025)



Source: JK Paper Company Ltd. Annual Report (2025).

Note: Current assets and current liabilities (left axis, Rs.) are indicated by bars. The line is the current ratio (right axis).

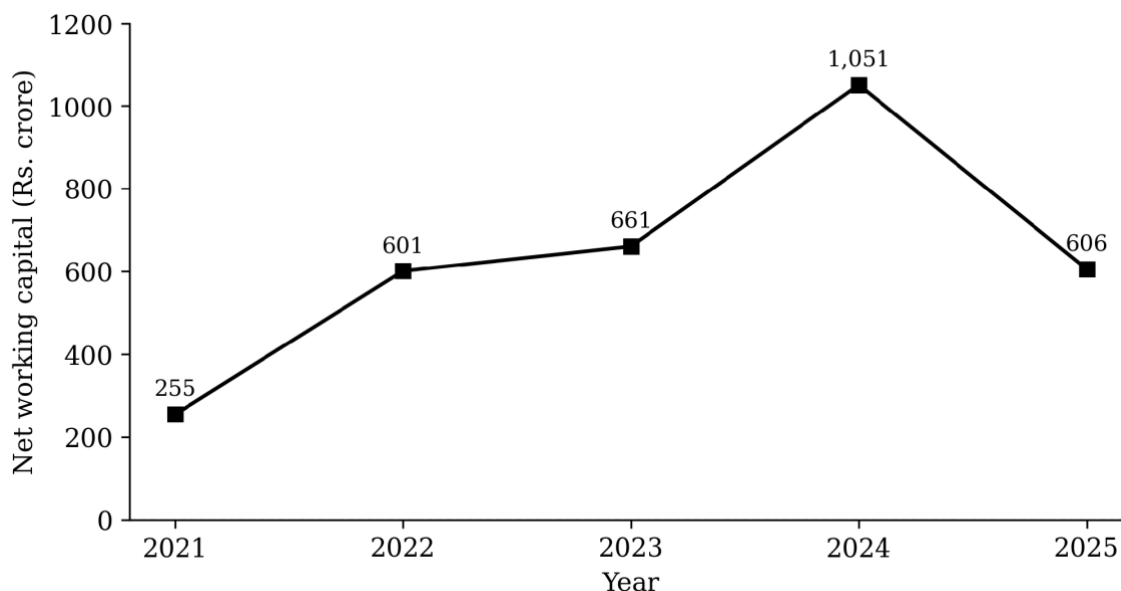
Figure 1 is a combination chart where the ground columns represent the current assets and current liabilities (left axis), and an overlaid line represents the current ratio (right axis) for five fiscal years (Rs. crore). The dual-axis design enables to read the absolute level of the balance sheet components in parallel with the derived liquidity ratio in a single frame, as is common in the presentation of liquidity analysis in finance and accounting research. Current assets have increased virtually all the time from Rs. 1,303 crores in 2021 to a four-year peak of Rs. 2,302 crores in 2024. Year-on-year growth was 38.8% in 2022, 15.3% in 2023 and 10.4% in 2024, indicating a decelerating growth pattern. The current assets grew by 76.6% or an average of about 21.0% per year over the three years. This growth is in line with a solid growth of inventory, as well as receivables and liquid balances in line with increases in revenue or capacity utilisation. This quickly changes in 2025 as current assets shrink by 20.0% to Rs. 1,841 crores. This is the single largest year-on-year increase or decrease on record for this series of 1,841 crore.

There is a less monotonic trend for current liabilities. It increased from Rs. 1,048 crores in 2021 to Rs. 1,425 crores in 2023 (36% growth compared to 2021). After a year-on-year increase of 15.3% and 18%, respectively, it reached Rs. 1,251 crores in 2024 (-12.2%) and is stabilizing at Rs. 1,235 crores in 2025 (-1.3%). On a compound annual rate basis, current assets increase at a far faster rate (about 9%) than current liabilities increase (about 4.2%) and the difference between these two compound annual rates is the primary arithmetic cause of the net improvement in the current ratio over the five years, despite the reversal in the current ratio at the end of the fifth year.

The current ratio itself fluctuates between 1.24 (2021) and 1.50 (2022), with the only year in which current liabilities increased at a faster rate (18.0%) than the current assets (15.3%) being 2023 at 1.46, but it climbs to a five-year high of 1.84 in 2024 and then drops by more than a year to reach 1.49 in 2025. The ratio averaged 1.51 during the period and had a standard deviation of about 0.21, representing a moderately variable position that never approached the conventional 2:1 ratio that some use as a rule of thumb for a good short-term solvency position or balance-improving liquidity position. The ratio's decline in 2025 is purely due to the decrease in current assets and not necessarily due to an increase in current liabilities, so it shouldn't be interpreted as an increase in financial risk.

per se. To differentiate between these explanations, one would need additional evidence such as the quick ratio or a cash decomposition or inventory and receivables turnover ratio that is not provided in Figure 1.

Figure 2. Net Working Capital Trend of JK Paper Ltd. (2021–2025)



Source: JK Paper Company Ltd. Annual Report (2025)

Note: Net working capital (in crore) = Current assets – current liabilities.

Figure 2 presents the trend in net working capital, which is the difference between current assets and current liabilities, for the same five fiscal years. This figure is a single derived series and not a ratio between two components, which makes the absolute measure of the rupee value of the liquidity buffer more easily understood than the current ratio in Figure 1, but loses the relative (assets-to-liabilities) context provided by the current ratio. Net working capital increased by Rs. 255 crore in 2021 to Rs. 601 crore in 2022, a 135.7% increase in a single year, before moderating to a 10% gain in 2023 (Rs. 661 million) and then gradually increase it to a high of Rs. 1,051 crore in 2024, a 59% year-on-year increase. The CAGR of the net working capital for the period 2021-2024 is nearly 60.3% and the average net working capital over the complete period is Rs. 634.8 crore. This represented a gradual increase over the four years, suggesting the firm gradually increased its short-term liquidity buffer. This is the same trend as that found in the current ratio in Figure One, and indeed it is mathematically impossible to separate them as they both use the same two elements of the balance sheet.

The series turns negative in 2025 with a decrease of 42.3% or Rs. 445 crore) to Rs. 606 crore. In 2025, current liabilities were virtually unchanged (-1.3%), which accounts, mathematically speaking, for almost all of this decline, as a decline in current assets was observed in the discussion of Figure One. The size and timing of the turnaround, coupled with the largest year-over-year drop in the five-year set, following the largest year-over-year rise in the same set, led to the selection of 2024-2025 as a structural inflection point rather than a typical year-to-year fluctuation, and this is the central empirical pattern the results section was built around these two figures.

The build-up of working capital between 2021 and 2024 and the drawdown in 2025 can be explained from two directly opposite perspectives with respect to working capital management, which do not exclude each other based on the working capital figures. One possibility is that the firm had accumulated an inefficiently large liquidity buffer by 2024, reflecting lower inventory turnover or receivables collection and that 2025 reflects a deliberate efficiency improvement that releases tied-up capital for productive redeployment such as capital expenditure or debt repayment. An alternative possibility is that softer demand, desk stocking, or reduced production constrained the accumulation of current assets in 2025, which would be a less favourable signal about the firm's near-term operating trajectory. Adjudicating between these two readings would require triangulation with revenue and margin trends from the income statement, operating cash flow relative to net income from the cash flow statement and inventory or receivables turnover ratios.

Profitability Position (2021 to 2025)

Table 2. Present the profitability indicators for JK Paper Ltd. over the study period.

Year	CA (Rs. crore)	Fixed Assets (Rs. crore)	Total Assets (Rs. crore)	Current Liabilities (Rs. crore)	Capital Employed (Rs. crore)	EBIT	ROCE
2021	1,303	4,732	6,035	1,048	4,987	453	9%
2022	1,809	5,308	7,117	1,208	5,908	761	13%
2023	2,085	5,716	7,801	1,425	6,377	1,312	21%
2024	2,302	5,600	7,902	1,251	6,651	996	15%
2025	1,841	5,984	7,825	1,235	6,590	559	7%

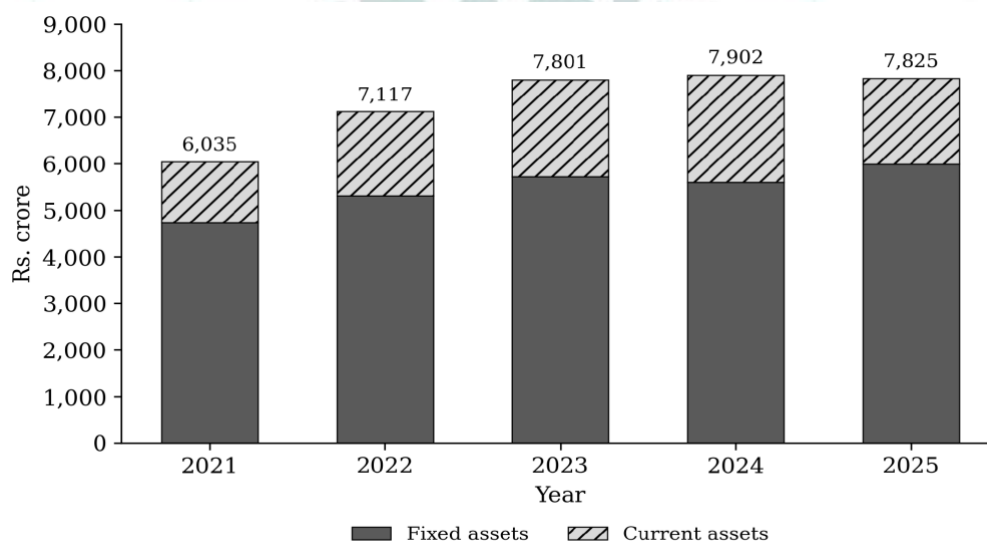
Source: JK Paper Company Ltd. Annual Report 2025.

JK Paper Company Ltd.'s profitability (Return on capital employed) has exhibited mixed performance over the study period (2021-2025). Return on capital employed has been consistently rising from 2021 (9%) to 2023 (13%) and peaked in 2023 (21%) due to the substantial growth in Earnings before interest and tax from Rs. 453 crore to Rs. 1,312 crore. This means that the company has better used its capital and had excellent operational performance in these years.

The profitability, however, has dropped since, to 15% in 2024 and to 7% in 2025, primarily as a result of a significant decrease in Earnings before interest and tax against the backdrop of relatively stable levels employed. The company did manage to keep a strong asset base, but the operating earnings indicate that it has not been using the invested funds as efficiently.

Overall, the analysis suggests that JK Paper Company Ltd. has seen a remarkable improvement in profitability up to 2023, with a significant drop in 2024 and 2025. This shows the need for better efficiency and optimization of their operations and capital utilization to ensure long-term profitability.

Figure 3. Composition of Total Assets: Fixed Assets and Current Assets of JK Paper Company Ltd. (2021–2025)



Source: JK Paper Company Ltd. Annual Report (2025).

It is seen from the above figure that the total assets of JK Paper Company Ltd. have been growing steadily from Rs. 6,035 crores in 2021 to a peak of Rs. 7,902 in 2024; it fell slightly to Rs 7,825. This means that it will be 7,825 crores in 2025, growing overall, though with some marginal dip in the last year. The increase was mainly due to the rise in fixed assets and current assets with the assets showing more fluctuation.

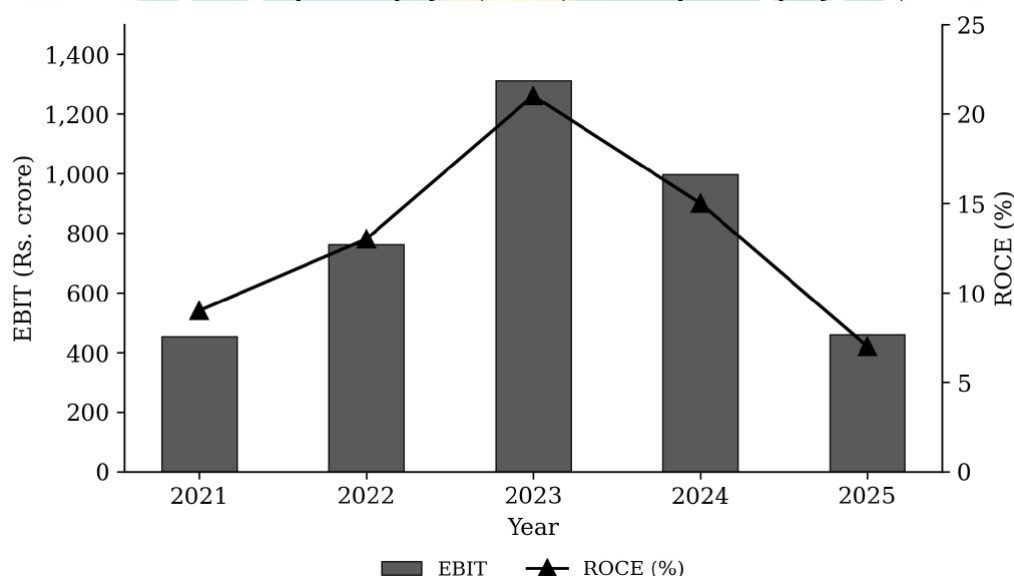
The current assets also rose steadily during the study period, but the change was most pronounced through 2024, after which it dropped precipitously in 2025, while fixed assets continued to grow steadily during the study period and dominated the company's asset base. The fixed asset ratio thus decreased first and then increased in 2025, while the current asset ratio increased from 21.6% in 2021 to 29.1% in 2024 but subsequently decreased to 23.5% in 2025.

Overall, the asset composition suggests that JK Paper Company Ltd. continued to be a capital-intensive manufacturing business with fixed assets consistently making up more than 70% of total assets, and that the current asset fluctuations were not indicative of any changes in the long-run investment structure but rather a result of changes in the working capital management of the firm.

Combination (Dual-Axis) Chart: EBIT and ROCE

The profitability series is recommended to be plotted in a combination chart with the column series showing earnings before interest and tax (in Rs. crore, on the left axis) and the line series showing return on capital employed (in percentage, on the right axis), due to their relationship by construction. Return on capital employed is also expressed in incompatible units (an absolute rupee figure divided by a percentage), since it is earnings before interest and tax / capital employed. It is a standard practice in finance and accounting research to plot the numerator (earnings before interest and tax) and the denominator (capital employed) on a common horizontal axis, with independent vertical scales, to enable a reader to compare the movements in the numerator with a movement in the denominator, i.e., return on capital employed, without the need to study a separate figure for capital employed.

Figure 4. EBIT and Return on Capital Employed (ROCE) of JK Paper Company Ltd. (2021 to 2025)



Source: JK Paper Company Ltd. Annual Report (2025).

Note. The bars are for earnings before interest and tax (in Rs. crore) and the line is for return on capital employed (in %).

Earnings before interest and tax increases in a straight line from Rs. 453 crores in 2021 to a five-year peak of Rs. 1,312 crores in 2023 before posting a sharp drop in 2024 and 2025 of 24.1 percent and 53.9 percent, respectively. At an absolute level, it is virtually the same as the starting point in 2021, which was 459 crores. The average amount of earnings before interest and tax for the period is Rs. 367.0 crore and a coefficient of variation of about 46 percent, suggesting that the year-on-year operating profitability volatility is very high compared to the average level of operating profitability.

Return on capital employed follows a very similar pattern, peaking at 21 percent in 2023, down to 15 percent in 2024 and 7 percent in 2025, a bit lower than it was at the start of the series in 2021. The five-year average return on capital employed is 13 percent with a standard deviation of around 5.5 percentage points, meaning the company's return on capital employed varied by between 14 percentage points over the course of the last five fiscal years, which is unusually large for a single profitability ratio over a short period of five fiscal years.

The dual-axis display is useful for diagnostics because ROCE is the ratio of the two. The capital employed expands from Rs. 4,987 crores in 2021 to Rs. 6,651 crores in 2024 (CAGR of ~10.1 percent), followed by a small fall of 0.9 percent in 2025 to Rs. 6,590 crores, which was a tight and clean margin compared to the wide range seen in the case of earnings before interest and tax. The denominator changes marginally and gradually, while the numerator changes sharply and significantly, indicating that the return on capital employed high of 2023 and the return on capital employed downfall of 2024-2025 are due to the movements in operating profit (earnings before interest and tax) and not caused by the change in the capital base, including asset disposals, write-downs, or a significant fresh deployment of capital. This is a material difference for a results section because it identifies the source of volatility in profitability as the income statement, not the balance sheet and suggests factors more credibly attributable to the paper and packaging industry, such as the cycle in raw-material input costs (pulpwood, wastepaper or chemicals) or in energy costs or in the selling cycle.

Relationship Between Liquidity and Profitability.

Table 3 summarizes the paired liquidity and profitability data used in the correlation analysis.

Year	Current Ratio (Liquidity)	ROCE % (profitability)
2021	1.24	9
2022	1.50	13
2023	1.46	21
2024	1.84	15
2025	1.49	7

Source: JK Paper Company Ltd. Annual Report (2025).

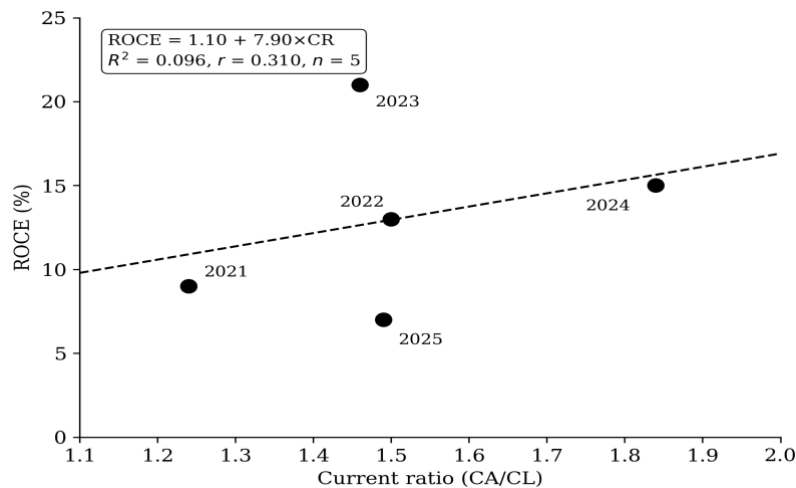
Note: Current ratio is used for liquidity while ROCE (%) is used for profitability.

The correlation coefficient between current ratio and ROCE was found to be $r = 0.31$, which shows that there is a weak positive correlation between liquidity and profitability. A t-test was performed to determine if the values were statistically significant, with $t = 0.56$.

The computed t-value (0.56) is significantly lower than this, so the null hypothesis that there is no significant relationship between liquidity and profitability is not rejected. This means that the relationship is statistically insignificant ($P > 0.56$) and is weak.

This finding indicates that the profitability and liquidity of the company improved simultaneously in the years of 2021–2023, but the profitability in the years of 2023–2025 was not in line with the liquidity ratio as the highest liquidity ratio was seen in 2024, while the return on capital employed remained on the decline. The low correlation indicates that other factors beyond liquidity management, such as macroeconomic conditions, input cost dynamics or capital expenditure cycles, are more important in determining the profitability results.

Figure 5. Scatter Plot of Current Ratio and ROCE, with Fitted Regression Line, JK Paper Company Ltd. (2021–2025)



Source: JK Paper Company Ltd. Annual Report (2025).

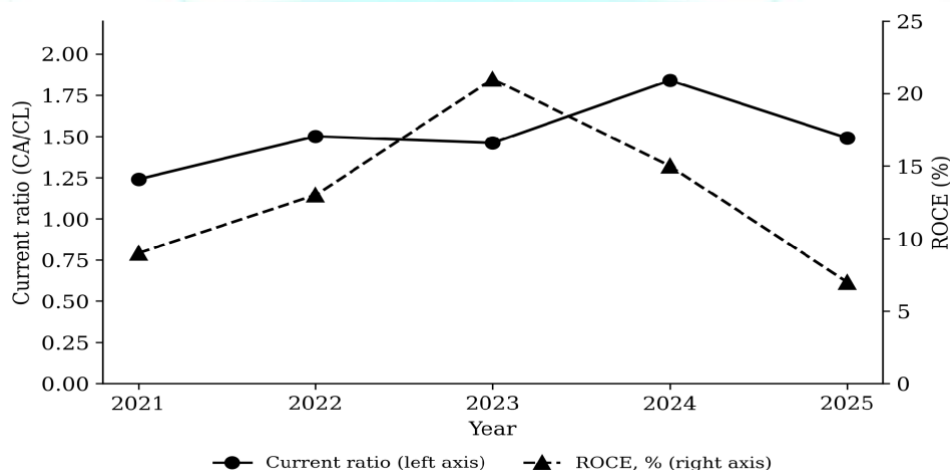
This figure looks at the current ratio and return on capital employed (ROCE) of JK Paper Ltd. from 2021 to 2025. The relatively stable range of the current ratio (1.24 – 1.84) and the fluctuating ROCE (7% to 21%) throughout the study period revealed that the profitability level was higher than the liquidity level.

The regression results show a weak positive correlation ($r = 0.310$; $R^2 = 0.096$) between liquidity and profitability measured by the current ratio; less than 10% of the variation in ROCE is explained by the current ratio. In addition, the correlation was non-significant ($P > 0.05$), which indicates that the liquidity change alone was not important enough to have a significant impact on profitability. The current ratio for 2023 was like that of 2025, while the ROCE for the years 2023 and 2025 showed significant differences, indicating that there can be vast variations in profitability results from similar liquidity positions.

Overall, it is concluded that good liquidity is essential, but the current ratio has been weak in predicting the profitability of JK Paper Ltd. during the study period; operational parameters like operational efficiency, cost management and revenue generation have seemed to be exerting a far greater impact on return on capital employed as compared to liquidity.

As a complementary figure, a dual-axis line chart is suggested, showing both current ratio (left axis) and return on capital employed (right axis) as a function of fiscal year; this line chart will show the temporal pattern behind the cross-sectional scatter in Figure 5. What Figure 5 has done is to treat the years as independent data points, but Figure 6 retains the order of the years, information a scatter plot by design loses, and this allows you to determine if the two series are moving together, moving apart or leading and lagging one another.

Figure 6. Current Ratio and ROCE Over Time, JK Paper Company Ltd. (2021–2025).



Source: JK Paper Company Ltd. Annual Report (2025).

Note. The solid line and circular markers represent the current ratio (left axis); the dashed line and triangular markers represent return on capital employed (right axis, %).

From 2021 to 2023, the two series rise together: the current ratio increases from 1.24 to 1.50 and then eases slightly to 1.46, while return on capital employed rises continuously from 9 percent to 13 percent and then to a peak of 21 percent. This sub-period is broadly consistent with a positive liquidity profitability association, since both series trend upward over the same two years even though the current ratio's movement is comparatively muted next to the much larger rise in return on capital employed.

The pattern decouples sharply thereafter. In 2024, the current ratio rises to its five-year high of 1.84, yet return on capital employed falls to 15 percent from its 2023 peak of 21 percent, the first year in the series in which the two measures move in opposite directions. In 2025, both series fall together (the current ratio is 1.49 and the return on capital employed to 7 percent, the lowest value in the series), but by this point, return on capital employed has already been declining for two consecutive years, while the current ratio only began declining in the final year. The net effect is that the return on capital employed peaks a full year before the current ratio does, a one-year lead that is the direct visual explanation for the weak scatterplot correlation reported in Figure 1: a simple linear, contemporaneous relationship between the two series cannot accommodate a pattern in which one variable's turning point precedes the others by a full year.

If this lead-lag pattern were to recur in a longer time series, it would carry a specific and testable implication that changes in capital efficiency (return on capital employed) precede, rather than follow, changes in short-term liquidity (the current ratio) for this firm, which would itself be a noteworthy finding for the working capital management literature. However, with only five annual observations and a single one-year lead documented in a single sub-period (2023–2024), this pattern should be treated as a descriptive observation rather than a confirmed lead–lag relationship; confirming it would require a longer time series and a formal lagged-regression specification of the form return on capital employed on current ratio $t-1$, which is not feasible with the present data.

Discussion

The results of this study have three main implications about the efficiency of entrepreneurs in managing the working capital of JK Paper Company Ltd.

First, the sustained liquidity performance of the company with current ratios that are greater than 1.0 in all the study periods indicates good performance of entrepreneurial liquidity management in the current assets of the company. The highest liquidity level in 2024, which resulted from an increase in current assets and a decrease in current liabilities, aligns with the Resource-Based View literature which considers managerial ability as a source of financial efficiency (Roy et al., 2025a). The result is consistent with Farhan et al. (2021), who found that proactive working capital strategies help in sustaining operations in Indian manufacturing companies.

Secondly, on the other hand, the return on capital employed has grown sharply from 9% in 2021 to 21% in 2023, indicating an increase in the efficiency of capital use by entrepreneurs, which is in line with the prescriptions of the trade-off theory that balances liquidity and profitability (Baños-Caballero et al., 2014). The decrease from 2024 to 2025 indicates that something beyond the firm's working capital management practices caused the balance, possibly macroeconomic factors or increased operational expenses. This is in line with what Jaworski and Czerwinka (2024) found showing that the working capital–profitability relationship is moderated by macroeconomic volatility across the institutional context.

Thirdly, the insignificant and weak correlation between liquidity and profitability ($r = 0.31$, $p > 0.05$) is consistent with the previous study of Indian firms by Sawarni et al. (2020), which found that the relationship between liquidity and profitability is not consistent across firms and across time. Similarly, Panda et al. (2021) also reported that macroeconomic conditions play a significant intervening role in this relationship among Indian small and medium enterprises. The results indicate that in 2024–2025, the high liquidity is accompanied by falling profitability, suggesting that managers holding excess liquidity are not necessarily able to generate more value, especially in times of adverse market conditions.

All the evidence taken together indicates that the entrepreneurial efficiency in working capital management has been a necessary, but not sufficient, condition for the profitability of JK Paper Ltd. While the company was able to keep liquid, it could be noted that the profitability was affected by the pressures on input costs, market dynamics and capital intensiveness and would require more strategic focus in the medium term.

Conclusion

The present study investigated the entrepreneurial efficiency of working capital management of JK Paper Company Ltd. for the years 2021 to 2025 from the perspective of liquidity position, profitability position, and the statistical relationship between liquidity and profitability position. Evidence shows that the company's liquidity position remained stable throughout the study period with current ratios always above the benchmark. This performance shows that the business has good management of its assets and liabilities and that it can continue to operate in a capital-intensive and competitive manufacturing sector.

Profitability, as measured by return on capital employed, also took a non-linear path, with its numbers rising sharply from 9% in 2021 to a maximum level of 21% in 2023 before dropping to 7% in 2025. The correlation analysis indicated that there was a weak positive but statistically insignificant relationship between liquidity and profitability ($r = 0.31$; $t = 0.56$, $df = 3$, $p > 0.05$), indicating that factors other than working capital management such as macroeconomic conditions, input cost dynamics and capital expenditure cycles are closer determinants of profitability at the firm level.

The practical implications of these findings are discussed. In the context of macroeconomic uncertainty, JK Paper Company Ltd. should continue improving its cash flow management, receivables collection system and inventory optimization practices. Furthermore, investing in digital financial management solutions such as enterprise resource planning systems and artificial intelligence-assisted forecasting could help to improve the accuracy and agility of working capital decisions. It is advisable to monitor the KPIs (current ratio, cash conversion cycle, return on capital employed, etc.) regularly so that potential financial stress may be identified early and corrective measures may be taken at the appropriate time.

There are some limitations in this study. The use of secondary data only limits the depth of interpretation of the results obtained, because there are other qualitative factors and managerial decisions that cannot be reflected in the published financial statements. The number of annual observations is also small ($n = 5$) and so the statistical power of the correlation and t-test analyses is limited. Future studies should use primary data from financial managers and multi-firm comparative designs and should expand the analysis to include the cash conversion cycle, quick ratio and inventory turnover as additional measures of working capital efficiency.

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