

FINANCIAL HEALTH AND EFFICIENCY OF SELECTS OF PAPER MANUFACTURING INDUSTRY IN INDIA

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Abstract

This article aims to assess the financial health and efficiency that reveals the growth and future sustainability of the selected paper manufacturing listed companies. For construction and drafting the article authors applied both qualitative (bibliometric analysis) and quantitative (statistical analysis) data and techniques. Ten listed PMC companies: JPL (JK Paper Limited), WCPM (West Coast Paper Mills Limited), APL (Andhra Paper Limited), TNPL (Tamil Nadu Newsprint & Paper Limited), YPL (Yash Pakka Limited), KPL (Kuantum Papers Limited), SIL (Satia Industries Limited), PPPL (Pudumjee Paper Products Limited), OPIL (Orient Paper and Industries Limited) and EPML (Emami Paper Mills Limited) are considered as samples. Data analyses were conducted for the financial year 2014-15 to 2023-24. Authors drew inspiration from the Altman Z score model and embrace a similar concept, named it as measure the financial health and efficiency of the selected paper manufacturing listed companies.

It was concluded that only JPL recorded high efficiency in all three-measurement parameter i.e, Growth, Operational and Profitability efficiency. Four companies (WCPM, APL, TNPL and EPML) recorded moderate efficiency in all three parameters tested and rest of the companies recorded least efficiency in their financial health. Through the assessment of the data collected for top 10 listed PMC (Paper Manufacturing Companies it has been well understood that only through effective use of various financial resources available to the PMC can earn more profits, which is purely influenced by the internal management efficiency of the company. Whereas, the growth factors are more influenced by the external factors like: Government Policies, economic situation of the country (inflation rate, exchange rate etc.), availability of raw materials, technology and various other factors, only with the support of the Government these factors could be strengthened.

Key Words: Listed Paper Companies, Financial Health, Financial Efficiency

Introduction

The manufacturing goods market in India has experienced both challenges and opportunity for growth over the past few years. Changing geopolitical instability across the globe and spread of Covid-19 virus have disturbed the SCM (Supply Chain Management) of manufactured goods and articles due to rise in goods transaction regulations. At the time, the manufacturers are realising continuous raise in the demand for various types of papers, acceptance of recycled papers among the users, technology advancement and moderanisation factors. In addition to this, growth in demand for flexible packaging provides wider opportunities to the paper manufacturers to product convenient, hygiene, sustainable and eco-friendly packages. Out of 23 million tonnes of paper and Paperboard market, 15 million tonnes is the packing paper and board market, as per 2024 financial year statistics.

Opportunities for Paper Industry

Indian paper industry operates with the installed capacity of 5,506 thousand tonnes per annum, while the production valued at 4920 thousand tonnes in the financial year 2023-24, of which domestic market sales valued at 4389 thousand tonnes and exports valued at 434 thousand tonnes, the industry has recorded 97.30 per cent efficacy of utilizing its install capacity. Total market valued at US \$ 9.26 million in 2022 and the market raises 6-7 per cent per annum, the market in 2023 valued at US \$ 9.61 million. The industry offers direct employment to 5 lakh people and indirect employment to 1.5 million

peoples.

Challenges Faced by the Industry

High raw material cost, increase in freight charges due to rise in the fuel cost and heavy import of special quality papers imported from China with duty-free import changes in turn making domestic market less competitive at international front. Issues in investment to be made in modernisation of the long-year functioning paper mills are considered some of the key factors that effects the profit earning efficiency of the paper mills operating in India, that has direct influences on the growth and sustainability of the industry.

Review of Past Literatures

Meta analysis on the financial performance and efficiency of the past studies are presented in this section.

Saravanan and Nandini (2014) assessed the financial performance of selected PMC (paper manufacturing companies) with application of Altman's Z score model. The study found that the financial health of the PMC is severely influenced by the challenges encountered by the industry. The authors suggest the PMC to re-orient its performance strategies that will enhance their performance in domestic and international market. Foo and Pathak (2016) applied Altman's Z score model to measure the financial health of manufacturing companies in China and India for a period of 14 years (2000 to 2013). The study findings is expected to influence the investors' decision in the stocks, the study found that the financial health of the manufacturing companies is influenced by the ROE (Return on Equity). Nimala and Kanagaraj (2017) documented that there were many time-period BSE (Bombay Stock Exchange) PMC had faced hardship (world economic changes, issues in short-term payment cycle, payment settlement delay, issues faced in realising balanced growth, etc.) that directly influenced its growth. Karpagalakshmi and Muthusamy (2019) assessed the financial performance of five listed PMC (Ballarpur Industries Limited, JK Paper Limited, Rainbow Papers Limited, Seshasayee Paper & Boards Limited and Kuantum papers Limited) for the five years (2013-14 to 2017-18). The article identified that ROI, DER, working capital to total assets, ATO (Assets Turnover Ratio) are found to be very satisfied.

Goyal (2020) compared the FP of three PMCs (South India Paper Mills Ltd., Rama Pulp and Papers Ltd. and West Coast Paper Mills Ltd.) by assessing their short-term financial position, profitability and growth trends between 2015-16 to 2018-19. It was notified that during the stipulated period net profit, current ratio and overall financial parameters of the paper companies fluctuated as the sale varied from one year to another. It was observed that the cost of working capital increased and whereas, the companies exhibited poor efficiency in assests utilisation. Sawarni et al., (2022) assessed the WCE (Working Capital Efficiency) of 431 non-financial listed companies between the years 2012-2019. The article disclosed that the WCE efficiency of the manufacturing companies directly influences its profitability and the growth of the listed companies. Kute's (2023) article examined the performance of paper companies in India. The PMC are experiencing fast growth due to an increase in the demand for different varieties of papers. This trend directly influences the positive performance of the paper companies and increases the companies' profit margins. Chirodiya (2024) assessed selected five paper companies (JK Papers, Tamil Newsprint, West Coast Paper, Emami Paper and Seshasayee Paper) financial status through examining liquid ratios and inventory turnover ratios. The article revealed that compared to other four companies Seshasayee Paper recorded efficiency in liquidity and inventory turnover management.

Authors understood that not much studies have been conducted in the past that assessed the financial performance of listed paper companies in India. Realised research gap provided wider scope for conduct of this article study.

Theme of the Article

This article aims to assess the financial health and efficiency that reveals the growth and future sustainability of the selected paper manufacturing listed companies.

Methodology and Design

For construction and drafting the article authors applied both qualitative (bibliometric analysis) and quantitative (statistical analysis) data and techniques. Ten listed PMC companies: JPL (JK Paper Limited), WCPM (West Coast Paper Mills Limited), APL (Andhra Paper Limited), TNPL (Tamil Nadu Newsprint & Paper Limited), YPL (Yash Pakka Limited), KPL (Kuantum Papers Limited), SIL (Satia Industries Limited), PPPL (Pudumjee Paper Products Limited), OPIL (Orient Paper and Industries Limited) and EPML (Emami Paper Mills Limited) are considered as samples. Data analyses were conducted for the financial year 2014-15 to 2023-24.

Criterion Considered for Measuring Financial Health and Efficiency

Authors drew inspiration from the Altman Z score model and embrace a similar concept, named it as measure the financial health and efficiency of the selected paper manufacturing listed companies. This ratio supported in measuring financial health and efficiency of the listed paper manufacturing companies. The authors computed:

- Growth Efficiency (GE) of the paper companies by assessing four variables i.e., Net Sales, Net Profit, Current Assets and Total Assets.
- Operational Efficiency (OP) was measured with the use of eight ratios i.e., Current Ratio, Quick Ratio, Inventory Turnover, Return on Networth, Return on Capital, Return on Assets, Debt Equity Ratio and EPS.
- Profitability Efficiency (PE) position of the listed paper companies are measured using of three variables: Profit Before Deduction, Profit After Deduction and Net Profit Margin.
- Financial Efficiency score was computed as mean of: $FE = GE + OP + PE$.
- Researcher applied the measure distance by computing: $Mean \pm SD$ (Standard Deviation) i.e., $Mean + SD: 1.95 + 0.112 = 2.06$ and $Mean - SD: 1.95 - 0.112 = 1.84$.
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Results and Discussions

Financial health and efficiency of the selected ten listed paper companies are assessed under three parameters i.e., measure of growth efficiency, operational efficiency and profitability efficiency.

TABLE: 4.1 GROWTH OF SELECTED PAPER COMPANIES IN INDIA

Companies	Net Sales	Current Assets	Total Assets	Net Profit	Efficiency (in %)
JPL	High	High	High	High	100.00
WCPM	Moderate	Moderate	Moderate	Moderate	66.67
APL	Moderate	Moderate	Low	Moderate	58.33
TNPL	High	High	High	Moderate	91.67
YPL	Low	Low	Low	Moderate	41.67
KPL	Low	Low	Low	Moderate	41.67
SIL	Low	Low	Low	Moderate	41.67
PPPL	Low	Low	Low	Moderate	41.67
OPIL	Low	Low	Moderate	Moderate	50.00
EPML	Moderate	Moderate	Moderate	Moderate	66.67
Mean	15099.59	5547.15	21053.07	1194.66	-
SD	4758.02	1517.32	4404.38	931.16	-
Mean +SD	19857.61	7064.47	25457.45	5547.15	-
Mean-SD	10341.57	4029.84	16648.68	263.49	-

Source: Computed from Data Collected from Moneycontrom.com

Data analysis inferred that the only JPL excels in all four parameters i.e., net sales, current assets, total assets and net profit earning. TNPL have registered best performance in three parameters net sales, current assets, total assets and moderate efficiency in term of profit earning. WCPM and EPML have recorded growth efficiency. APL (net sales and current assets) and OPIL (total assets and net profit) recorded efficiency in two parameters each. Rests of the four companies YPL, KPL, SIL and PPPL exhibited moderate efficiency in profit earning and recorded poor performance in net sales, current assets and total assets.

TABLE: 4.2 FINANCIAL POSITION AND ASSESSMENT OF FINANCIAL HEALTH OF SELECTED PAPER COMPANIES IN INDIA

Companies	Current Ratio	Quick Ratio	Inventory Turnover	Return on Net Worth	Return on Capital	Return on Assets	Debt Equity Ratio	EPS	Efficiency (in %)
JPL	Moderate	High	High	High	High	High	High	High	95.83
WCPM	High	Moderate	Moderate	High	High	High	Moderate	High	87.50
APL	High	High	High	High	High	High	Low	High	91.67
TNPL	Low	Moderate	Moderate	Moderate	Moderate	Low	High	High	66.67
YPL	Moderate	Moderate	Moderate	High	High	High	High	Low	79.17
KPL	Moderate	Moderate	High	Moderate	Moderate	Moderate	Moderate	High	75.00
SIL	High	Moderate	High	High	High	High	Moderate	High	91.67
PPPL	High	High	Moderate	Moderate	High	Moderate	Low	Low	70.83
OPIL	Moderate	Moderate	High	Low	Low	Low	Moderate	Low	54.17
EPML	Moderate	Moderate	Moderate	Moderate	Moderate	Low	High	Low	62.50
Mean	13.12	7.81	54.96	121.27	127.34	58.07	9.14	203.36	-
SD	3.09	2.85	15.10	55.45	72.94	36.13	3.57	124.43	-
Mean +SD	16.21	10.65	70.07	176.72	200.28	94.20	12.71	327.78	-
Mean-SD	10.03	4.96	39.86	65.82	54.40	21.94	5.57	78.93	-

Source: Computed from Data Collected from Moneycontrom.com

Detailed assessment of data reveals that, except JPL (except current assets) all other nine companies recorded higher disproportionate operational efficiency. However, the operational efficiency of the six sample companies recorded higher efficiency in paying higher EPS, except YPL, OPIL, PPPL and EPM. Operational efficiency of three companies JPL, APL and SIL recorded efficiency of more than 90 per cent.

TABLE: 4.3 PROFITABILITY PERFORMANCE OF SELECTED PAPER COMPANIES IN INDIA

Companies	PBD	PAD	NPM	Efficiency (in %)
JPL	High	High	High	100.00
WCPM	Moderate	High	Moderate	77.78
APL	Moderate	Moderate	Moderate	66.67
TNPL	Moderate	Moderate	Moderate	66.67
YPL	Moderate	Low	Moderate	55.56
KPL	Moderate	Moderate	Moderate	66.67
SIL	Moderate	Moderate	Moderate	66.67
PPPL	Moderate	Moderate	Moderate	66.67
OPIL	Low	Low	Low	33.33
EPML	Moderate	Moderate	Moderate	66.67
Mean	1615.12	1192.19	68.45	-
SD	1293.62	933.34	37.38	-

Mean +SD	2908.74	2125.53	105.84	-
Mean-SD	321.50	258.86	31.07	-

Source: Computed from Data Collected from Moneycontrom.com

Note: PBD: Profit Before Deduction, PAD: Profit After Deduction, NPM: Net Profit Margin

Data discussion revealed that Only JPL has successful earned higher profit before deduction, after deduced and NPM (also known as return on sales i.e., net income (Net Profit / Total Revenue X 100)). All other-nine companies had registered moderate profit earning efficiency.

TABLE: 4 FINANCIAL GROWTH IN TERM OF Z-SCORE

Companies	Average			Overall Average	Efficacy
	Growth Efficiency	Operational Efficiency	Profitability	Z Score	
JPL	High	Moderate	High	2.560	High
WCPM	Moderate	Moderate	Moderate	2.000	Moderate
APL	Moderate	Moderate	Moderate	1.880	Moderate
TNPL	High	Moderate	Moderate	2.210	Moderate
YPL	Moderate	Moderate	Moderate	1.710	Low
KPL	Moderate	High	Moderate	1.830	Low
SIL	Moderate	Moderate	Moderate	1.790	Low
PPPL	Moderate	High	Moderate	1.830	Low
OPIL	Moderate	Low	Moderate	1.710	Low
EPML	Moderate	Moderate	Moderate	2.000	Moderate
Mean	1.80	1.99	2.07	1.95	-
SD	0.643	0.189	0.212	0.112	-
Mean + SD	2.44	2.18	2.28	2.06	-
Mean - SD	1.16	1.80	1.86	1.84	-

Source: Computed from Data Collected from Moneycontrom.com Note: Measure of Distance: Mean \pm SD.

With the support of financial health test analysis, it has been inferred that only JPL recorded high efficiency in all three-measurement parameter i.e, Growth, Operational and Profitability efficiency. Four companies (WCPM, APL, TNPL and EPML) recorded moderate efficiency in all three parameters tested and rest of the companies recorded least efficiency in their financial health.

Finding and Conclusion

It was concluded that only JPL recorded high efficiency in all three-measurement parameter i.e, Growth, Operational and Profitability efficiency. Four companies (WCPM, APL, TNPL and EPML) recorded moderate efficiency in all three parameters tested and rest of the companies recorded least efficiency in their financial health. Through the assessment of the data collected for top 10 listed PMC (Paper Manufacturing Companies it has been well understood that only through effective use of various financial resources available to the PMC can earn more profits, which is purely influenced by the internal management efficiency of the company. Whereas, the growth factors are more influenced by the external factors like: Government Policies, economic situation of the country (inflation rate, exchange rate etc.), availability of raw materials, technology and various other factors, only with the support of the Government these factors could be strengthened.

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