



A Study on Cash Flow Statements of ONGC Ltd and IOCL

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Abstract:

‘Cash is the king’ is an axiom for the existence of any business and hence, it is inevitable to record all cash transactions being carried out throughout the period. Cash flow statement is a tool which records such transactions systematically and so it is a highlighting statement of annual reports. In this particular study, cash flow statements of two leading Indian oil and gas companies- ONGC Ltd and IOCL has been studied for a three-year period.

Key Words: *Cash Flow Statements, Positive Cash Flow, Negative Cash Flow.*

Introduction:

The Cash Flow Statement is a financial statement which summarizes the movement of cash i.e., cash that comes into the business and that goes out of the business during an annual period of twelve months. Also referred to as Statement of Cash Flows, this financial statement records cash flow transactions after categorizing them into three broad categories- cash flow from operating activities, cash flow from investing activities and cash flow from financing activities. Cash Flow Statement is a crucial part of financial statements of the company and it also complements the balance sheet and income statement in its unique way. Cash flow statement may show up as positive cash flow or negative cash flow under all three sections. **Positive cash flow** indicates that a company has more cash inflow into the business than outflow and this is a very positive sign for the company. **Negative cash flow** means cash outflow is higher than cash inflow during a period. But it does not show that there is loss because it depicts that company is re-investing in the business.

Literature Review:

Suciani & Setyawan (2022)¹ had undertaken analysis to assess the company’s financial performance at PT Astra International Tbk. The study was descriptive in nature and completely based on secondary data in the form of cash flow reports for the period 2018-2021. Cash flow ratios were calculated to satisfy the study and it had been indicated from the findings of the calculated cash flow ratios that PT Astra International Tbk had a poor financial performance.

Barad and Dholu (2021)² had comparatively analysed cash flow statements of Sun Pharma Ltd and Dr Reddy’s Laboratories. The data had been collected from secondary sources for the period 2016-2020 and analysed with



mean, standard deviation, co-efficient of variation and t-test. The study stated that Dr Reddy's Laboratories had outperforming consistency in terms of operating cash flows and financing cash flows whereas Sun Pharma Ltd had better grounds in investing cash flows consistency.

Nishanthi (2019)³ had studied cash flow statements of Neycer India Ltd, Vadalur to analyse its strengths and weaknesses in terms of cash inflows and outflows management and liquidity position. It had been found from the data that the company needed to improve their inflows and control outflows to be successful with cash management. Moreover, the company had been performing exceptionally well with good liquidity position.

Research Gap:

As far as this particular study is concerned, there are only few articles being published and so, this research will add up to the existing literatures in its unique manner.

Research Methodology:

Research Aim:

The aim behind conducting this research study is to understand the cash flow from operating, investing and financing activities and check whether there are differences between performance of selected Indian oil and gas companies- ONGC Ltd and IOCL.

Research Hypotheses:

H₀₋₁: There is no significant difference between cash flow from operating activities of both selected companies.

H₁₋₁: There is significant difference between cash flow from operating activities of both selected companies.

H₀₋₂: There is no significant difference between cash flow from investing activities of both selected companies.

H₁₋₂: There is significant difference between cash flow from investing activities of both selected companies.

H₀₋₃: There is no significant difference between cash flow from financing activities of both selected companies.

H₁₋₃: There is significant difference between cash flow from financing activities of both selected companies.

Research Type & Significance:

The 'research design' type that fits in to the particular study is '**quantitative descriptive research design.**' Meanwhile, sample companies are randomly selected and hence, the 'sampling design' which suits the most



to the particular study is ‘**random sampling design.**’ The significance of this research study is that it is based on the standalone data which depicts the performance of the core business of the companies.

Research Data:

Standalone cash flow statements data has been extracted from the published annual reports of ONGC Ltd and IOCL for the period of three latest financial years starting from the year 2019-20 up to the year 2021-22.

Research tools and techniques:

T-test has been calculated in order to justify null hypotheses of this particular study. Data visualisation creation method has also been used to make data analysis and interpretation easily understandable.

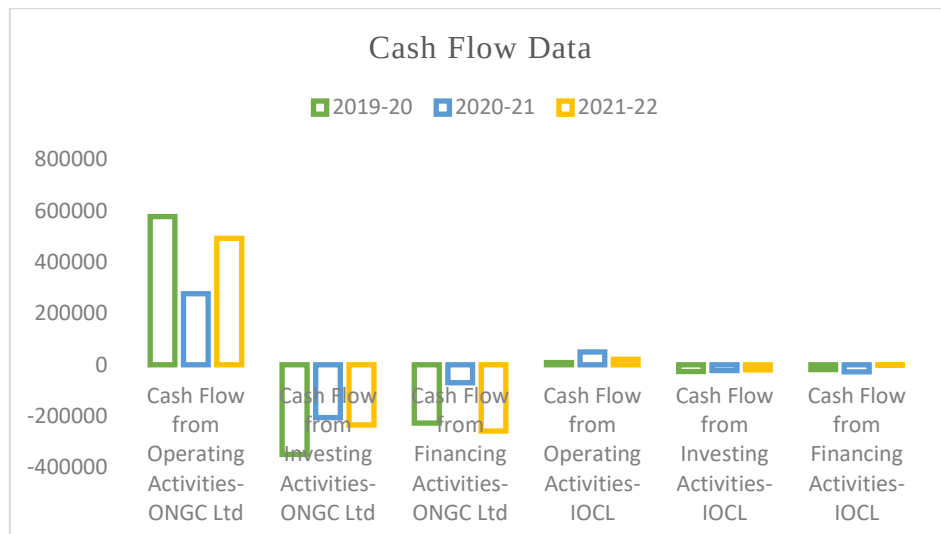
Limitations & Future Scope to the Study:

This whole research has been carried out on the basis of secondary data. Any manipulations or inaccuracies in the published data may have led to different findings. The framed objectives have been satisfied using limited feasible research tools which may have resulted into restricted conclusions. This limitation to the study opens up the future scope of application of other feasible research tools and techniques. The other limitation to the study is that it has been carried out for a three-year period which can be heightened to long-term period in the future studies.

Data Analysis & Interpretation:

- **Cash Flow Data:**

Particulars	ONGC Ltd - Cash flow from			IOCL - Cash flow from		
	Operating Activities	Investing Activities	Financing Activities	Operating Activities	Investing Activities	Financing Activities
2019-20	577852.5	(349582.65)	(227471.04)	8639.36	(26877.43)	(18735.32)
2020-21	276650.94	(206569.63)	(69842.52)	49095.79	(22153.95)	(27163.76)
2021-22	493014.25	(235020.23)	(258692.01)	21177.34	(20096.83)	(684.34)



Interpretation:

ONGC Ltd: It can be clearly seen from the cash flow data and its graphical representation that this company has highest generating operating cash flow in the year 2019-20 i.e., 577852.5 in comparison to other two years. Similarly, the company has maximum investing cash flow in the same year with (349582.65). For the financing cash flow, it can be seen that in the year 2021-22 the company has major changes in capital structure with (258692.01). But it is also visible that there are high fluctuating differences in the performance for the two rest years.

IOCL: From the cash flow data and its graphical representation, it can be interpreted that this company has its maximum operating cash flow generation of 49095.79 in the year 2020-21. In the case of investing cash flow, it can be seen that year 2019-20 has the highest cash flow with (26877.43). Just like operating cash flow, financing cash flow are maximum with (27163.76) in the year 2020-21. Moreover, it can be remarked that this company has close performance in the other two years also.

- **Testing of hypotheses using t-test runs:**

The below tables show the results for t-test runs tested in Microsoft excel. Statistically, if the calculated t-score equals or exceeds the value of t indicated in the table, then there is a significant probability that the relationship between the two variables exists and null hypothesis should be rejected. Moreover, when $p < 0.05$, null hypothesis is supposed to be rejected.



t-Test: Paired Two Sample for Means		
Particulars	Operating Activities-ONGC Ltd	Operating Activities-IOCL
Mean	449172.5633	26304.16333
Variance	24122165054	428893920.20
Observations	3	3
Hypothesized Mean Difference	0	
df	2	
t Stat	4.161196953	
P(T<=t) two-tail	0.053186113	
t Critical two-tail	4.30265273	

Interpretation:

From the table of t-test run for operating activities, it is seen that calculated value of t-score is 4.161196953 and the table value of t-score is 4.30265273. Hence, the calculated value is less than the table value and so the null hypothesis is accepted. Moreover, $p > 0.05$ and this also suggests that the null hypothesis should be accepted.

t-Test: Paired Two Sample for Means		
	Investing Activities-ONGC Ltd	Investing Activities-IOCL
Mean	-263724.17	-23042.7
Variance	5731118101.02	12086590
Observations	3	3
Hypothesized Mean Difference	0	
df	2	
t Stat	-5.737775812	
P(T<=t) two-tail	0.029057351	
t Critical two-tail	4.30265273	

Interpretation:

From the table of t-test run for operating activities, it is seen that calculated value of t-score is -5.737775812 and the table value of t-score is 4.30265273. Here, the minus can be ignored as it is two-tailed t-test. Hence, the calculated value is more than the table value and so the null hypothesis is rejected. Moreover, $p < 0.05$ and this also suggests that the null hypothesis should be rejected.



t-Test: Paired Two Sample for Means		
	Financing Activities-ONGC Ltd	Financing Activities-IOCL
Mean	-185335.19	-15527.80667
Variance	10247604859.73	183006027.22
Observations	3	3
Hypothesized Mean Difference	0	
df	2	
t Stat	-2.606956369	
P(T<=t) two-tail	0.121006459	
t Critical two-tail	4.30265273	

Interpretation:

From the table of t-test run for operating activities, it is seen that calculated value of t-score is 4.161196953 and the table value of t-score is -2.606956369. Here, the minus can be ignored as it is two-tailed t-test. Hence, the calculated value is less than the table value and so the null hypothesis is accepted. Moreover, $p > 0.05$ and this also suggests that the null hypothesis should be accepted.

Findings, Conclusions & Suggestions:

- It has been found that ONGC Ltd has maximum operating cash flow and investing cash flow for the year 2019-20 and financing cash flow for the year 2021-22. This concludes that this company has generated more operating cash inflow than cash outflow in this year and this is a positive sign to have more operating cash inflow. For the same year, this company has maximum investing cash flow concluding that the company has invested much amount in its long-term assets. In the year 2021-22, financing cash flow are maximum concluding that in this year there are major changes in the company's capital structure. It has also been found that the performance in the other two years is highly different. This recommends to the company to maintain consistency in its performance over the period and balance its financial stability.
- It has been found that IOCL has highest operating cash flow and financing cash flow for the year 2020-21 and investing cash flow for the year 2019-20. This concludes that this company has sufficiently more operating cash inflow than cash outflow in this year and this is a good sign. For the same year, this company has maximum financing cash flow concluding that the company has major changes in the capital structure. In the year 2020-21, investing cash flow are maximum concluding that in this year the company has invested much amount in its long-term assets. It has also been found that the



company has close performance in the other two years. This recommends to the company to keep this strategy of consistency and balance alive over the period.

- It has been found for the first null hypothesis ‘There is no significant difference between cash flow from operating activities of both selected companies’ from t-test run that it should be accepted. Hence, it can be concluded that the cash flow from operating activities of both selected companies have no differences in between them. This cannot be considered as a good sign because both the companies are supposed to have differences in their operating cash flows in order to stand out individually. Thus, it is recommended that these companies should focus on strategically improving operating cash inflows and efficiently carrying out working capital cycles.
- It has been found for the second null hypothesis that ‘There is no significant difference between cash flow from investing activities of both selected companies’ from t-test run that it is supposed to be rejected. This concludes that both the companies have different cash flow from investing activities and this is a positive sign. Both the companies are supposed to have differences in their investing cash flows and it is recommended to both the companies that they should keep investing into their long-term assets for business growth and expansion.
- It has been found for the third null hypothesis that ‘There is no significant difference between cash flow from financing activities of both selected companies’ from t-test run that it should be accepted. Thus, it can be concluded that the cash flow from financing activities of both the selected companies have no differences. Having no differences is actually not a good sign as the companies are supposed to have differences in their financing cash flows for the reason, they have different capital structure. Hence, it is recommended that these companies should maintain their capital structure and timely payment of dividends.

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A Study on Cash Flow Statements of ONGC Ltd and IOCL

Published in Volume 01, Issue 01, June 2023.

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