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An Impact Analysis of Capital Expenditure on Financial Efficiency and Performance Analysis at Selected Companies

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Abstract: This paper aims to analyze the impact of capital asset investment on firm efficiency. Using an analytical research approach, the study examines data from secondary sources, specifically company financial statements, employing statistical techniques such as hypothesis testing, regression analysis, and cash flow statements. Findings suggest that the firm should pursue major expansion in the current economic conditions, as capital expenditure investments positively influence overall profitability. However, differences in financial reporting standards across companies may limit consistency and comparability, and focusing on specific financial metrics could overlook other factors affecting long-term performance. Practically, the expanding Indian economy offers ample opportunities for growth, with long-term asset investments generally yielding positive profitability outcomes.

Keywords: Long term Investments, capital Expenditure, profitability financial Statements etc.

1. Introduction

The businesses that are operating in the dynamic environment must periodically search for new ways to upgrade and stay innovative to develop efficient methods for digital transformation for the aspects of growth, efficiency, and agility. The change of three industries, namely, artificial intelligence (AI), machine learning (ML), and automation, by just following each of these three are combined properly, technologies support the manufacturers to have a better line insight into the operations than ever before. The competitors for the company are Honeywell International Inc., Schenider Electric, Siemens AG, ABB Ltd., Bosch Group, etc. These industries are valued at a market value of $200 billion as of 2023 reports, and it is further expected to grow at the compound value growth rate of 8% subsequently in upcoming years. Whereas, the home automation market share is $80 billion as of 2023 report. The technology evolves rapidly in the metaverse. Businesses are adopting the metaverse in an accelerated manner, merging AR/VR in order to provide immersive experiences and shifting how people interact, build networks, collaborate, and entertain themselves. As of the recent update of 2024, diverse industries, including healthcare, education, consumer entertainment, and real estate industries, facilitate considering medical consultations, medical training, simulations, and therapeutic interventions. In addition, organizations can solve customer service issues easily and quickly with a more efficient outcome by increasing service facilities and field technician productivity, which also helps in optimizing the self-service, while automating the manual tasks, which is also helpful in reducing time. It gradually supports in areas of administration, record keeping, asset registration, and benefit transfers. Companies are looking ahead to move beyond the experimentation.

2. Literature Review

Apriana, Y., Evana, E., & Syaipudin, U. (2024), The research states about the spin-off aspects that primarily focus on the divestment aspect, which is the division of the parent company, by creating a new independent in the findings aimed at the outcome of profitability, the growth sector, and that has a positive outcome on the firm's financial performance considering the criteria of the before and after spin-off process executed.
Chaerani, E. Y., & Firmansyah, A. (2024), It states the existence of policies that cause regional governments to engage in administrative activities. The research conducted in the local government of districts and cities in south Sulawesi had a negative influence on the local government's financial performance. While the audit

options show a positive impact on local government financial performance, capital expenditures do not play a role in these situations.

Sitorus, L., Harsoyo, A.T., & Firmansyah, A. (2024), The research states the influence of local government dependence on the level of regional government transparency. Capital expenditure cannot moderate association between regional governments on the basis of level of dependence on local government transparency. Considering the findings, the local government has an adverse impact on the transparency of local government financial information.

Muhammad Syafiuddin, Muaidy Yasin, & Adhitya Bagus Singandaru (2024), The study investigates the effect of total assets, capital expenditure, leverage, and PDRB in the NTB province. In consideration of the findings of the study, it indicates the total assets, capital expenditures, and leverage, given that there doesn't seem to be any significant effect regarding the financial independence of districts in NTB province. The implications of the research offer a warning signal to the local government to manage the productivity of assets.

Lestari, R.I., & Basuki, P. (n.d.) (2024), According to this research, it examines economic growth and regional development in order to reduce inequality and provide other services as per the requirements of local communities. The findings describes as it does not have a great influence on capital expenditure. The additional factors of special allocation funds significantly impact capital expenditure.

Rizka Ridha Aulia, Wahyunadi, W., & Eka Agustiani (2024), It explains about why economic growth are essentially important part of a country. It focuses on determining the impact of capital expenditure and investment on economic growth in West Nusa Tenggara province. The outcome states that using tools like linear regression, and t test, and it has a benefit showing a positive association, but it has no substantial impact on economic growth as it is according to the regression method. Whereas, the investments had influenced on the economy of the country.

Juhro, S.M., Kuantan, D.P., & Lim, C. (2024), The study states about the factors that are being influenced by the capital expenditure behavior of non-financial corporation's (NFCs). It is the study conducted in the major ASEAN countries in the past few years. The key indicators of the study are profitability, market value, and movement of cash rate, as these indicators possess a favorable association with capital expenditure. Conversely, nevertheless, the external factors in the macro-environment will also be impacted by the strategic decision-making activity.

Putra, A. M., & Usman, U. (2024), The study intends to estimate the effect of money designated for both special and general allocation, along with the capital expenditures, on the expansion of the economy in Ache province from 2010 to 2021. The factors describe the analysis that takes the economic growth into account as the dependent variable, and capital expenditures, exceptional distribution funds, and general allocation funds are independent variables. Updates from the research on the characteristics considered in earlier studies include the development in the economy, funds designated for general and particular purposes, and capital expenditures.

Research Gap: The research gap identified across the studies is the limited exploration of the moderating and mediating roles of capital expenditure in diverse organizational contexts, particularly in relation to different financial performance metrics. It is essential to have a comprehensive analysis in relation to two factors, the regional economic factors and capital expenditure, for the purpose to enhance financial transparency and lead with long-term financial independence.

3. Research Methodology

3.1 Research Design

The study uses an analytical research approach by obtaining information from secondary sources, i.e., from the company's financial statements. The following types of statistical techniques used such as: hypotheses testing, regression analysis, statement of cash flow, ratio analysis, trend analysis, etc., by using PSPP and Microsoft Excel as a statistical tools to know how it is being influenced by capital expenditure towards financial efficiency and performance.

3.2. Research gap

The research gap identified across the studies is the limited exploration of the moderating and mediating roles of capital expenditure in diverse organizational contexts, particularly in relation to different financial performance metrics. It is essential to have a comprehensive analysis in relation to two factors, the regional economic factors and capital expenditure, for the purpose to enhance financial transparency and lead with long-term financial independence.

3.3 Objective of the Study

a. To examines the association between Capital Expenditure and the profitability of the firms.
b. To evaluates the Investment in total assets as capital expenditure, and leverage on the financial Outcome of the firms.
c. To analyse the impact on Cashflow due to capital Investment.

3.4 Hypothesis Framework

Hypothesis Statement: To analyze the application of capital expenditure on profitability of the firm
Null Hypotheses (H0): There is no significant relationship between application of capital expenditure and profitability of firm.
Alternate Hypotheses (H1): There is significant relationship between the application of capital expenditure and profitability of firm.

3.5 Limitations of the Study

There is limited access to comprehensive financial data, which could lead to restrictions in analysis and incomplete conclusions. There are different methods in financial reporting standards of different companies that would affect the consistency and comparability of the outcome. The focus on specific financial metrics may lead to overlooking other similar factors that have an effect on long-term financial performance.

Data Analysis

To analyse the application of capital expenditure on profitability of the firm.
H0: There is no significant relationship between application of capital expenditure and the profitability of firm.
H1: There is a significant relationship between application of capital expenditure and profitability of firm.

TANGIBLE ASSETS

MODEL SUMMARY (PAT)

R	R Square	Adjusted R Square	Standard error of the estimate
.76	.58	.44	30.01

Table No. 4.1 showing model summary

ANOVA (PAT)

	Sum of squares	df	Mean square	F	Sig.
Regression	3761.80	1	3761.80	4.18	.134
Residual	2702.37	3	900.79		
Total	6464.17	4			

Table No. 4.2 showing anova (PAT)

COEFFICIENTS (PAT)

	Unstandardized Coefficients		Standardized Coefficients		
	B	Standard error	Beta	t	Sig.
(Constant)	77.01	41.67	.00	1.85	.138
Tangible assets	.32	.16	.76	2.04	.134

Table No. 4.1.3 showing coefficients (PAT)

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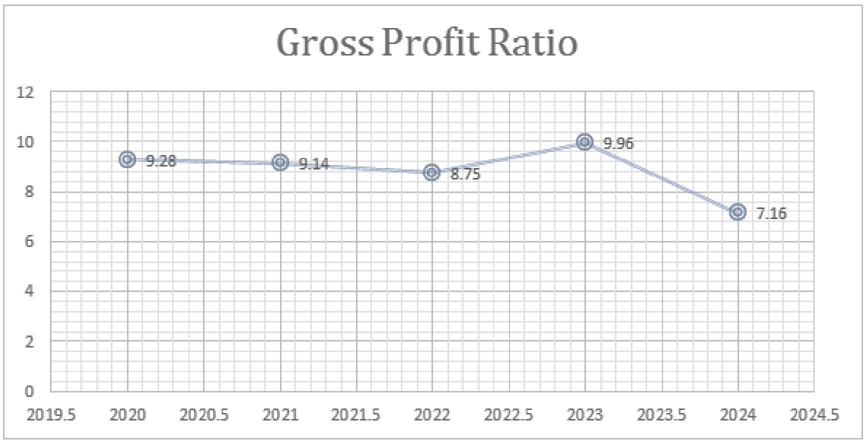
Interpretation: From the above analysis, the R square is 0.58, which has a moderate fit, stating tangible assets have 58% of the variance in profit after tax. ANOVA results state the significance value is 0.134, that is higher than differential factor of 0.5. Therefore, (H0) null hypotheses is accepted, from the table shown above it has no significant relationship among the application of capital expenditure and firm's profitability.

b. Analysis of Investment on Gross profit and efficiency of the firm GROSS PROFIT RATIO

Year	Total investments	Gross profit	Gross profit ratio
2020	2346.57	252.88	9.28
2021	2288.86	250.33	9.14
2022	2437.18	278.54	8.75
2023	3108.43	312.24	9.96
2024	3569.85	498.74	7.16



Interpretation: In the analysis shown above, the overall investments have grown from 2020 to 2024, in an upward trend. The gross profit during the period of 2024 had dropped, indicating that when the investment yields a higher profit, the efficiency with respect to the investment has declined. The variance in the gross profit ratio determines about the return on investment over the years.

C. Analysis of Statement of Cash Flow due to Capital Investment

PARTICULARS	2020	2021	2022	2023	2024
Cash flow from operating activities	**102**	**197**	**91**	**63**	**130**
Profit from operations	149	223	239	272	289
Receivables	(73)	43	(64)	(189)	(228)
Inventory	(5)	7	(53)	(41)	3
Payables	68	43	(10)	28	114
Loans advances	(7)	6	(7)	3	5
Other Working capital items	5	(76)	59	65	22

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Working capital changes	(11)	24	(76)	(134)	(84)
Direct taxes	(36)	(50)	(71)	(75)	(75)
Total of operating activity	**(17)**	**(27)**	**(93)**	**(41)**	**(160)**
Cash flow from investing activities	**(32)**	**(30)**	**(50)**	**(60)**	**(120)**
Fixed assets purchased	0 00	0 00	0 00	0 00	0 00
Fixed assets sold	0 00	0 00	0 00	0 00	0 00
Investments sold	22	00	00	00	0 00
Interest received	18	37	20	27	34
Dividends received	0 00	0 00	0 00	0 00	0 00
Acquisition of companies	0 00	0 00	0 00	0 00	(12)
Other investing items	(26)	(34)	(63)	(8)	(62)
Total of investing Activities	**(17)**	**(27)**	**(93)**	**(41)**	**(160)**
Cash flow from financing activities	**(28)**	**(75)**	**(27)**	**(15)**	**8**
Proceeds from shares	0 00	0 00	0 00	0 00	1
Proceeds from borrowings	40	7	20	26	91
Repayment of borrowings	(28)	(55)	(19)	(16)	(50)
Interest paid	(13)	(12)	(8)	(8)	(12)
Dividends paid	(12)	(3)	(12)	(12)	(15)
Financial liabilities	(13)	(12)	(8)	(6)	(13)
Other financing items	(2)	0 00	1	1	6
Total of financing activities	**(28)**	**(75)**	**(27)**	**(15)**	**8**
NET CASH FLOW	**56**	**96**	**(28)**	**6**	**(22)**

Interpretation: From the above table, the cash flow of net is being decreased to a (22) decline from the last year's positive cash flow of 6. It determines whether there are high cash outflows from the investing activity during a particular period also whether there is growth in cash from operating activities. The financing activity had also contributed to the minimum of cash flow, highlighting the challenges that hinder liquidity management. Therefore, the cash flow indicates there are increased investment costs and a limit of financial support.

Findings & Suggestions

Findings of the study indicates that the firm should go for major expansion in the given state of nature of economy and Investment in capital expenditure leads to positive impact on overall profitability of the firm. The major suggestion of the study indicates on following outcomes:

a. It must look for global expansion in order to reach a large number of customers by building a strategic partnership and leveraging digital marketing in order to make its presence in different geographical locations.
b. It is recommended for the company to adopt eco-friendly practices and energy- efficient technologies in the areas of its operations and product development.

c. The company must conduct comprehensive market research so that it helps them to identify the changes in the business and understand the customer requirements to take decisions in competitive dynamics to make informed investments and decisions.
d. The company must implement the marketing strategies so that it helps them to build stronger customer relationships in order to retain its existing customers by supplying quality-based products and increasing sales
e. It is suggested for the company to regularly assess and adjust the pricing strategies to reflect market conditions, cost changes, and customer value perceptions.

4. Conclusion

Overall, the study states about the insights into the association between capital expenditure and financial outcomes. It consists of both tangible assets and intangible assets, wherein it states that the tangible assets explain 58% of the variance in profit after tax. Therefore, the relationship lacks statistical significance. Similarly, the intangible assets account for 31% of difference in profit. Therefore, the capex is not having a strong, measurable impact on the firm's profitability.

In contrast, the results of investments on liquidity are substantial and statistically significant, where the investments explain 91% of difference in liquidity. In addition, the investments in fixed assets has influence. It indicates that investments have a direct impact on gross profit, while their impact on net profit is indirect.

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