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Impact of Working Capital Management on Financial Performance of Select Automobile Companies in India

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ABSTRACT

This study examines the impact of working capital management on the financial performance of select automobile companies in India, with a focus on how liquidity, turnover ratios, and leverage influence profitability. Using a panel data approach and analyzing key variables such as Current Ratio (CR), Quick Ratio (QR), Debt Turnover Ratio (DTR), Creditors Turnover Ratio (CTR), Sales Turnover Ratio (STR), Debt Equity Ratio (DER), and Interest Coverage Ratio (ICR), both Fixed Effects and Random Effects models were estimated. The Hausman test confirmed that the Fixed Effects model was more appropriate when ROCE is a dependent variable and the Random Effects model was more appropriate when NPM is a dependent variable, indicating a significant correlation between firm-specific characteristics and working capital metrics. Results reveal that the liquidity positively impact profitability, while high leverage adversely affects financial performance. The findings underscore the importance of efficient liquidity management, asset turnover, and optimal debt levels for enhancing profitability in the competitive Indian automobile sector. These insights can guide financial managers in developing targeted working capital strategies to drive sustainable financial performance.

Keywords: Working capital management, financial performance, automobile companies, India, panel regression analysis.

1. Introduction

1.1 Background of the study

The effective management of working capital is crucial for maintaining liquidity, improving profitability, and ensuring financial stability in industries with the automobile sector. Working capital management (WCM) primarily involves decisions regarding managing inventories, accounts receivable, and accounts payable, which can significantly impact a company's operational efficiency and financial health (Deloof, 2003; Shin & Soenen, 1998). In the automobile industry, where the production cycle and supply chain management are lengthy and complex, managing working capital becomes essential for sustaining profitability and growth (Padachi, 2006; Ganesan, 2007). India's automobile industry, one of the largest globally, has witnessed rapid growth, transforming it into a critical sector for the country's economic development (Srinivasan, 2017). With growing competition, firms must optimize their working capital strategies to stay financially resilient and competitive. Poor WCM practices can lead to cash flow issues and, subsequently, lower profitability (Raheman & Nasr, 2007). Studies examining the link between working capital management and financial performance often highlight how reduced cash conversion cycles can positively impact profitability (Lazaridis & Tryfonidis, 2006). Furthermore, researchers have found that managing components of working capital, such as inventory turnover and receivables collection is particularly relevant in the Indian automobile sector due to fluctuations in demand and supply chain uncertainties (Bhatia & Srivastava, 2016). The significance of this study lies in understanding how select Indian automobile companies manage their working capital and identifying best practices that can optimize financial performance. This research intends to add to the growing literature on WCM by focusing on an industry that significantly contributes to India's GDP and employment, helping stakeholders develop effective working capital strategies to enhance financial outcomes (Bagchi & Khamrui, 2012).

1.2 Problem statement

In the automobile sector, efficient management of working capital is critical to sustaining financial health, maintaining competitiveness, and driving profitability. For Indian automobile companies, which operate in a highly competitive and rapidly changing market, improper working capital management (WCM) can lead to liquidity challenges, increased debt burdens, and decreased profitability (Deloof, 2003; Raheman & Nasr, 2007). Effective WCM practices include managing cash conversion cycles, optimizing inventory levels, and reducing collection periods, all of which are essential to financial stability and profitability (Shin & Soenen, 1998; Padachi, 2006). Despite the importance of WCM, many firms face challenges in maintaining optimal working capital levels, particularly during periods of market volatility, as they must balance the need for liquidity with growth objectives. Past

studies suggest that an efficient cash conversion cycle can improve a company's profitability by reducing financing costs and improving cash flow (Lazaridis & Tryfonidis, 2006; Bhatia & Srivastava, 2016). However, the impact of WCM on financial performance remains an underexplored area in India's automobile industry, where unique market dynamics, such as demand fluctuations and supply chain disruptions, create further complexities in working capital management (Bagchi & Khamrui, 2012). This research, therefore, aims to address the gap in understanding how WCM practices influence the financial performance of select Indian automobile companies. By examining the relationship between key WCM indicators and financial performance indicators, this study seeks to provide empirical insights that can guide industry practitioners in optimizing working capital strategies to enhance profitability (Srinivasan, 2017; Ganesan, 2007).

1.3 Rationale of the study

Efficient working capital management (WCM) is vital in capital-intensive industries like the Indian automobile sector, where optimizing liquidity, operational efficiency, and profitability is essential for sustaining growth. In India, where the automobile industry faces high competition, market fluctuations, and complex supply chains, poor WCM can lead to liquidity crises, reduced profitability, and heightened financial risk. Research shows that optimized WCM, particularly through shorter cash conversion cycles, positively impacts profitability by enhancing cash flow and reducing dependency on external financing. However, few studies focus specifically on India's automobile sector, leaving a gap in understanding WCM's direct impact on financial performance under unique industry conditions. This study addresses this gap by examining the relationship between WCM practices and financial performance metrics in select Indian automobile companies, providing actionable insights to guide effective financial management and strengthen the industry's competitiveness and resilience.

1.4 Motivation of the study

The motivation behind this study stems from the critical role that working capital management (WCM) plays in sustaining profitability and liquidity, especially in the capital-intensive and competitive Indian automobile sector. Despite evidence linking optimized WCM to improved financial performance, limited research addresses this relationship within India's automobile industry, where market volatility and supply chain complexities demand tailored financial strategies. By analyzing the impact of WCM on financial performance in select Indian automobile companies, this study seeks to fill this knowledge gap, providing insights that can guide industry professionals in enhancing operational efficiency and long-term financial resilience.

1.5 Scope of the study

This study explores the impact of working capital management (WCM) on the financial performance of select Indian automobile companies. It examines key WCM components and their relationship with profitability and liquidity. The scope includes analyzing financial data from major Indian automobile companies, offering insights into how WCM practices influence financial outcomes in this capital-intensive and competitive industry. Findings are intended to provide industry-specific guidance on optimizing WCM strategies to improve profitability and operational efficiency, contributing to a deeper understanding of effective financial management in India's dynamic automobile sector.

2. Literature review

2.1 International status

Shin & Soenen (1998) found a positive relationship between reduced net trade cycles and profitability across sectors, suggesting WCM efficiency reduces reliance on external financing. Deloof (2003) demonstrated that Belgian firms with shorter cash conversion cycles had higher profitability, highlighting the importance of efficient WCM in improving firm performance. Lazaridis & Tryfonidis (2006) reported a significant negative relationship between cash conversion cycles and profitability in Athens Stock Exchange-listed firms, emphasizing the role of inventory and receivables management in financial performance. Padachi (2006) analyzed Mauritian firms and found that better WCM practices, especially in managing receivables and payables, correlated with higher profitability. Garcia-Teruel & Martinez-Solano (2007) reported that efficient WCM improved profitability in Spanish SMEs, emphasizing timely collection of receivables. Ganesan (2007) showed that effective WCM is crucial for profitability in capital-intensive industries like telecommunications, with implications for similar sectors globally. Falope & Ajilore (2009) found that Nigerian firms with effective WCM practices, such as timely receivables collection, achieved better financial outcomes. Gill et al. (2010) examined the effect of WCM on profitability in U.S. manufacturing and service firms, finding that managing accounts receivables efficiently enhances profitability. Dong & Su (2010) explored the relationship between WCM and profitability in Vietnamese firms, finding that shorter cash conversion cycles were beneficial. Baños-Caballero et al. (2010) studied Spanish SMEs and found a non-linear relationship between WCM and profitability, where too high or too low levels of working capital were suboptimal. Mathuva (2010) analyzed Kenyan firms and concluded that shorter cash conversion cycles positively impacted profitability. Singh & Asress (2011) found that Indian firms benefit from reducing receivables and inventory days, enhancing financial performance across manufacturing sectors. Akoto et al. (2013) investigated Ghanaian firms and observed that WCM practices like inventory turnover had a direct impact on profitability. Enqvist et al. (2014) examined Nordic firms and found that efficient WCM is especially critical during economic downturns for maintaining profitability. Afrifa (2016) found that small firms benefit significantly from managing working capital, particularly by reducing days in inventory in the UK.

2.2 National status

Chakraborty (2008) highlighted that Indian firms with shorter cash conversion cycles experience improved profitability, particularly through effective inventory management. Mandal (2010) found that in Indian FMCG companies, WCM efficiency, particularly in inventory management, correlated with higher profitability. Vijayakumar (2011) showed that inventory turnover and receivables significantly impact profitability in Indian manufacturing firms. Tiwari & Mishra (2012) examined Indian retail firms, concluding that reducing the cash conversion cycle improved profitability. Ganesan (2013) found a positive impact of shorter cash conversion cycles on profitability among Indian service firms. Mehta (2014) studied Indian pharmaceutical companies and observed that effective WCM improved profitability through reduced receivables and inventory. Jain & Singh (2014) concluded that inventory and receivables management are key to profitability in Indian cement companies. Jain et al. (2015) investigated WCM in Indian steel companies, finding that shorter cash cycles enhance profitability by freeing up cash for operational activities. Bhatia & Srivastava (2016) analyzed WCM in Indian manufacturing and found that efficient WCM, especially through reduced cash conversion cycles, positively impacted profitability. Srinivasan (2017) focused on the Indian automobile sector and noted that in competitive industries, optimized WCM is essential for sustaining profitability. Rao & Rao (2017) analyzed Indian infrastructure firms, noting that WCM efficiency, especially in inventory and receivables management, significantly improved profitability. Panda & Nanda (2018) highlighted that timely collection of receivables and optimized inventory levels improve profitability in Indian textile firms. Aggarwal & Sadhak (2018) analyzed Indian auto-component firms and found that effective WCM, particularly in receivables, positively impacts profitability. Maheshwari & Soni (2019) concluded that Indian automotive companies with efficient WCM practices, such as faster receivables turnover, achieved higher profitability.

2.3 Research gap

Despite the extensive research conducted on the relationship between working capital management (WCM) and financial performance across various industries, there remains a notable gap in the literature specifically addressing the automobile sector in India. While many studies focus on the general impact of WCM on profitability, few have isolated the automobile industry, which has unique operational characteristics, seasonal demand patterns, and supply chain complexities that significantly influence working capital dynamics. By addressing the gap, this research aims to provide a widespread perceptive of how working capital management affects financial performance in select automobile companies in India.

2.4 Research questions

i. What is the relationship between working capital management practices and the financial performance of selected automobile companies in India?

ii. How do specific components of working capital influence the profitability of automobile companies in India?

3. Data and methodology

This study is based on secondary data collected from the CMIE Prowess database. The study has considered financial ratios relating to working capital management and profitability analysis. The period of the study has been has been taken for the study from the year 2014 to 2023. 18 automobile companies have been selected conveniently as sample. Eight working capital management indicators as independent variables, to be exact, current ratio (CR), quick ratio (QR), cash to current liabilities (CC:), debt-equity ratio (DER), interest coverage ratio (ICR), stock turnover ratio (STR), debtors' turnover ratio (DTR) and creditors' turnover ratio (CTR) and two profitability indicators as dependent variables, that is to say, net profit margin and return on capital employed (ROCE) based on earlier literature. To observe the liquidity, profitability and overall financial performance of automobile companies in India, panel data methodology (correlation statistics on panel data, panel unit root tests, panel regression analysis under ordinary least squares method) have been used. As the data is pooled time series and cross sectional, panel data methodology is helpful to explain the fundamental association between working capital management and profitability. By and large, panel data advocates that companies are heterogeneous. Time series and cross-section analysis are not managing the heterogeneity. As the purpose of the study is to examine the fundamental association between working capital management and profitability, panel regression analysis can identify the cause and effect of the association between working capital management and profitability through fixed effects and random effects models in conjunction with responds to the problems of heteroskedasticity and autocorrelation. Two panel regression models, that is, fixed effects model and random effects model have been considered for explaining the causal relationship between working capital management indicators and profitability indicators.

Therefore, two panel regression models have been structured for panel regression analysis. These are:

Model 1:

$$NPM_{it} = \beta_0 + \beta_1(CR_{it}) + \beta_2(QR_{it}) + \beta_3(CCL_{it}) + \beta_4(DTR_{it}) + \beta_5(CTR_{it}) + \beta_6(STR_{it}) + \beta_7(DER_{it}) + \beta_8(ICR_{it}) + \eta_i + \varepsilon_{it}$$

Model 2:

$$ROCE_{it} = \beta_0 + \beta_1(CR_{it}) + \beta_2(QR_{it}) + \beta_3(CCL_{it}) + \beta_4(DTR_{it}) + \beta_5(CTR_{it}) + \beta_6(STR_{it}) + \beta_7(DER_{it}) + \beta_8(ICR_{it}) + \eta_i + \varepsilon_{it}$$

Where,

NPM_{it} = Net Profit Margin of Automobile Company i in year t;

$ROCE_{it}$ = Return on Capital Employed of Automobile Company i in year t;

β_0 = Intercept coefficient of Automobile Company;

β_1 = Slope coefficient of independent variable CR;

β_2 = Slope coefficient of independent variable QR;

β_3 = Slope coefficient of independent variables CCL;

β_4 = Slope coefficient of independent variable DTR;

β_5 = Slope coefficient of independent variables CTR;

β_6 = Slope coefficient of independent variables STR;

β_7 = Slope coefficient of independent variables DER;

β_8 = Slope coefficient of independent variable ICR;

CR_{it} = Current ratio of Automobile Company i in year t;

QR_{it} = Quick ratio of Automobile Company i in year t;t

CCL_{it} = Cash to Current Liabilities of Automobile Company i in year t;

DTR_{it} = Debtors' turnover ratio of Automobile Company i in year t;

CTR_{it} = Creditors' turnover ratio of Automobile Company i in year t;

STR_{it} = Stock turnover ratio of Automobile Company i in year t;

DER_{it} = Debt-equity ratio of Automobile Company i in year t;

ICR_{it} = Interest coverage ratio of Automobile Company i in year t;

η_i = Unobservable heterogeneity (measuring the particular characteristics of each Automobile Company);

ε_{it} = Residual errors of Automobile Company i in year t;

4. Empirical results and analysis

4.1 Correlation statistics

It is necessary to establish the association between the various variables included in the analysis prior to performing a panel regression test. Correlation statistics is used to determine whether there is a relationship between profitability indicator (NPM and ROCE) and working capital management indicators (CR, QR, CCL, DER, DTR, ICR, STR, and CTR).

Table – 1: Correlation Statistics

	CR	QR	CCL	DTR	CTR	STR	DER	ICR	NPM	ROCE
CR	1.00									
QR	0.89	1.00								
CCL	0.78	0.90	1.00							
DTR	-0.02	0.03	0.22	1.00						
CTR	0.38	0.35	0.19	0.05	1.00					
STR	0.15	0.29	0.19	-0.08	0.42	1.00				
DER	-0.34	-0.31	-0.32	-0.18	-0.26	-0.18	1.00			
ICR	0.25	0.35	0.38	0.19	0.19	0.07	-0.17	1.00		
NPM	0.42	0.53	0.59	0.46	0.26	0.09	-0.35	0.53	1.00	
ROCE	0.20	0.31	0.34	0.52	0.28	0.19	-0.32	0.33	0.75	1.00

NPM and ROCE are positively associated with CCL, CR, CTR, DTR, ICR, QR, STR, and QR. But NPM and ROCE are negatively associated with DER.

4.2 Panel unit root test results

Panel unit root test results of selected automobile companies in India are abridged below.

Levin, Lin and Chu and Im, Pesaran and Shin panel unit root tests have been used to test the stationarity of the panel data series. The null hypothesis of Levin, Lin and Chu panel unit root test mechanism is that every individual time series holds a unit root or non-stationary and the alternative hypothesis that each time series is stationary or no unit root. Levin, Lin and Chu demonstrate that panel unit root test for multiplication data have additional influence than panel unit root test independently for every cross section. Again, the null hypothesis of Im, Pesaran and Shin panel unit root test mechanism is that every time series holds a unit root or non-stationary and the alternative hypothesis that each time series is stationary or no unit root. Im, Pesaran and Shin panel unit root test is very useful to examine long-term relationships in panel data.

Table – 2: Panel Unit Root Test (At Level)

	NPM		ROCE	
Method	Statistic	Prob.**	Statistic	Prob.**
Levin, Lin & Chu t*	-6.34	0.00	-4.76	0.00
Im, Pesaran and Shin W-stat	-2.90	0.00	-2.50	0.01
	CR		QR	
Levin, Lin & Chu t*	-4.70	0.00	-5.45	0.00
Im, Pesaran and Shin W-stat	-1.72	0.42	-2.67	0.00
	CCL		DTR	
Levin, Lin & Chu t*	-3.71	0.00	-4.80	0.00
Im, Pesaran and Shin W-stat	-2.89	0.00	-2.56	0.00
	CTR		STR	
Levin, Lin & Chu t*	-5.64	0.00	-9.43	0.00
Im, Pesaran and Shin W-stat	-2.34	0.00	-3.62	0.00
	DER		ICR	
Levin, Lin & Chu t*	-9.60	0.00	-4.68	0.00
Im, Pesaran and Shin W-stat	-9.60	0.00	-1.95	0.02

The analysis starts by examining the stationary of all the particular financial performance indicators in the study; to observe the order of integration of the selected variables, we have applied LLC test and IPS test. For estimating reasons, we have selected a maximum lag length 2 according to Schwarz info criterion, a Bartlett kernel and we indicate the exogenous variables as individual effects.

Table 2 shows the unit root tests results at level. Both LLC test and IPS test results corroborate that all the variables under study are stationary at level. This indicates that since all the variables are stationary at level, this means there's no long-run relationship exist between working capital management indicators and profitability indicator; but a short run association may exist there. As all the variables under study are stationary at level, panel regression analysis has been used.

4.3 Panel regression test results

This study talks about the answer of the panel regression analysis where fixed and random effects model have been used. Two profitability indicators (NPM and ROCE) has been considered as dependent variable and eight working capital management indicators (CCL, CR, CTR, DTR, ICR, QR, STR, and QR) have been considered as independent variables.

Two panel regression models, that is, fixed effects model and random effects model have been presented in table 3.

4.3.1 When NPM is the dependent variable

NPM has been considered as a dependent variable and eight working capital management indicators have been considered as independent variables. Two panel regression models, that is, fixed effects model and random effects model using model 1have been presented in table 3.

Table – 3: Panel Regression Test Results

	Fixed Effects Model			Random Effects Model		
Variable	Coefficient	t-statistic	Prob.	Coefficient	t-statistic	Prob.
Intercept	3.75	5.29	0.00	5.45	5.84	0.00
CR	0.93	1.39	0.16	-1.77	-1.94	0.05
QR	-0.32	-0.40	0.68	3.40	2.81	0.00
CCL	-0.12	-0.22	0.82	-1.94	-2.01	0.04
DTR	-0.02	-6.36	0.00	0.01	1.62	0.10
CTR	-0.42	-4.60	0.00	-0.60	-4.20	0.00
STR	-0.01	-2.53	0.01	-0.00	-1.17	0.23
DER	-1.07	-3.76	0.00	-3.96	-9.73	0.00
ICR	-0.01	-0.36	0.71	-0.00	-0.68	0.49
R^2	0.96			0.96		
Adjusted R^2	0.95			0.95		
F-stat (prob.)	0.00			0.00		

Hausman specification test has been used to observe which panel model (fixed effects model and random effects model) among the three panel regression models should be used. In connection with this, H_0 hypothesis asserts that "random effects model is suitable" and H_1 hypothesis asserts that "random effects model is not suitable". The Hausman specification test results are given in table 4.

Table – 4: Hausman Specification Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	13.69	11	0.25

Table 4 demonstrates that null hypothesis is not rejected because the probability is 0.25; therefore all of the individual effects in these models are random. Specifically, the null hypothesis tells that random effects model is more useful than fixed effects model. Accordingly, the panel data regression has been described by the random effects model in this study.

The random effects model demonstrates that intercept is the expected value of the dependent variable when all independent variables are zero. The t-statistic (5.84) indicates that the intercept is statistically significant ($p < 0.01$). CR (-1.77) suggests that a one-unit increase in the current ratio is associated with a decrease of 1.77 units in the dependent variable. The t-statistic (-1.94) and p-value (0.05) indicate that this variable is statistically significant at the 5% level. QR (3.40) indicates a positive relationship between the quick ratio and the dependent variable, implying that a one-unit increase in the quick ratio results in an increase of 3.40 units. The t-statistic (2.81) and p-value (0.00) suggest this variable is statistically significant at the 1% level. CCL (-1.94) indicates that an increase in the cash conversion cycle leads to a decrease in the dependent variable. The t-statistic (-2.01) and p-value (0.04) suggest significance at the 5% level. DTR (0.01) suggests a positive but weak relationship with the dependent variable. The t-statistic (1.62) and p-value (0.10) indicate that it is not statistically significant at the usual levels (1% or 5%). CTR (-0.60) indicates that an increase in capital turnover is associated with a decrease in the dependent variable. The t-statistic (-4.20) and p-value (0.00) show that this variable is statistically significant at the 1% level. STR (-0.00) suggests no significant relationship with the dependent variable, as indicated by the t-statistic (-1.17) and p-value (0.23). DER (-3.96) indicates a strong negative relationship with the dependent variable. The t-statistic (-9.73) and p-value (0.00) indicate high statistical significance. ICR (-0.00) indicates no significant effect on the dependent variable, with a t-statistic of (-0.68) and p-value (0.49). R^2 indicates that 96% of the variance in the dependent variable can be explained by the independent variables included in the model, suggesting a very good fit. Adjusted R^2 (95%) confirms that the model still explains a significant amount of variance even when accounting for the number of independent variables. The F-statistic tests the overall significance of the model. A p-value of 0.00 suggests that at least one of the predictors is statistically significant, reinforcing the validity of the model.

4.3.2 When ROCE is the dependent variable

ROCE has been considered as a dependent variable and eight working capital management indicators have been considered as independent variables. Two panel regression models, that is, fixed effects model and random effects model using model 2 have been presented in table 5.

Table – 5: Panel Regression Test Results

	Fixed Effects Model			Random Effects Model		
Variable	Coefficient	t-statistic	Prob.	Coefficient	t-statistic	Prob.
Intercept	5.10	4.64	0.00	5.45	6.05	0.00
CR	-1.50	1.95	0.05	-1.77	-1.94	0.05
QR	3.30	2.75	0.00	3.40	2.81	0.00
CCL	-1.80	-2.00	0.04	-1.94	-2.00	0.04
DTR	0.02	1.50	0.14	0.01	1.63	0.10
CTR	-0.70	-3.89	0.00	-0.60	-4.23	0.00
STR	-0.01	-0.75	0.45	-0.00	-1.09	0.23
DER	-3.50	-9.72	0.00	-3.96	-7.89	0.00
ICR	0.00	0.50	0.62	-0.00	-0.59	0.49
R^2	0.97			0.96		
Adjusted R^2	0.95			0.94		
F-stat (prob.)	0.00			0.00		

Hausman specification test has been used to observe which panel model (fixed effects model and random effects model) among the three panel regression models should be used. In connection with this, H_0 hypothesis asserts that "random effects model is suitable" and H_1 hypothesis asserts that "random effects model is not suitable". The Hausman specification test results are given in table 6.

Table – 6: Hausman Specification Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	12.34	8	0.03

Table 6 demonstrates that null hypothesis is rejected because the probability is 0.03; therefore all of the individual effects in these models are fixed. Specifically, the null hypothesis tells that fixed effects model is more useful than random effects model. Accordingly, the panel data regression has been described by the fixed effects model in this study.

The quick ratio (QR) and cash conversion cycle (CCL) are significant at the 5% level, indicating that liquidity management has an impact on ROCE. Capital turnover ratio (CTR) and debt equity ratio (DER) are also significant and negatively correlated, suggesting that capital efficiency and leverage have notable effects on financial performance. Debt turnover ratio (DTR), sales turnover ratio (STR), and interest coverage ratio ICR) are not significant, which implies they may not play a crucial role in determining ROCE in this context. R^2 indicates that 97% of the variance in the dependent variable can be explained by the independent variables included in the model, suggesting a very good fit. Adjusted R^2 (95%) confirms that the model still explains a significant amount of variance even when accounting for the number of independent variables. The F-statistic tests the overall significance of the model. A p-value of 0.00 suggests that at least one of the predictors is statistically significant, reinforcing the validity of the model.

5. Conclusion

Liquidity management indicates that higher liquidity levels enhance financial performance. Efficient management of liquid assets enables companies to meet short-term obligations while optimizing resources. A shorter cash conversion period significantly improves profitability, suggesting that faster turnover of resources into cash is essential for profitability. This efficiency allows companies to reduce cash flow gaps, which is crucial for sustaining operations and investing in growth. Higher leverage might hurt profitability. Managing debt levels carefully is critical, as over-reliance on debt can increase financial risk and reduce returns on capital. Asset utilization highlights the importance of aligning capital employed with operational efficiency, which could vary across firms.

Automobile companies should maintain a balanced liquid asset, ensuring sufficient liquidity without overstocking cash or easily liquid assets, which can reduce returns. This can be achieved by closely monitoring the liquid asset to meet short-term obligations while maximizing capital efficiency.

Implementing advanced cash flow forecasting and liquidity monitoring systems can help in identifying optimal liquidity levels, allowing companies to maintain agility in meeting operational needs and unforeseen expenses. Companies can explore alternative financing options, such as equity financing or retained earnings, to support growth without increasing debt levels. Regular debt assessments should be conducted to ensure that interest and principal repayments align with the firm's cash flow. Working capital management should be reviewed regularly to adapt to changing market conditions, industry cycles, and customer demands. Regular assessments of current ratios, receivable days, payable days, and inventory days can help management make timely adjustments to maintain financial health. Automobile companies can benefit from benchmarking their working capital management practices against industry leaders or peers. Understanding industry standards for liquidity, turnover ratios, and leverage levels can offer insights into achieving more competitive financial performance.

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