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WORKING CAPITAL EFFICIENCY AND CORPORATE PERFORMANCE: EVIDENCE FROM LISTED FIRMS IN EMERGING MARKETS

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ABSTRACT

Working capital efficiency is central to corporate performance because firms must coordinate inventory, trade receivables, trade payables, and cash without compromising sales or operational resilience. This paper develops an empirical framework for examining the relationship between working capital management and performance among listed firms in emerging markets. Drawing on the cash conversion cycle (CCC) perspective, the study proposes a multi-country panel design that links days inventory outstanding, days sales outstanding, and days payable outstanding to accounting and market-based performance measures. The proposed sample covers non-financial listed firms across selected emerging economies over a ten-year period, subject to the availability and comparability of audited annual-report data. Firm-level financial statements are combined with country-level macroeconomic indicators, and the analysis uses descriptive statistics, correlation analysis, firm and year fixed effects, clustered standard errors, lagged specifications, and robustness tests. Prior research generally reports that shorter cash-conversion cycles are associated with stronger profitability, although evidence is not uniform across countries, industries, and components of the cycle. Recent cross-country work also suggests that inventory, receivables, and payables may have different performance implications in emerging and developed economies. To demonstrate how results can be reported, this draft includes a clearly labelled synthetic example in which the estimated association between CCC and return on assets is negative. These illustrative values are not observations from listed firms and must not be cited as empirical findings. The paper contributes a transparent, reproducible design for investigating how liquidity discipline, operating requirements, and institutional conditions jointly shape performance.

Keywords: Working Capital Efficiency; Cash Conversion Cycle; Corporate Performance; Emerging Markets; Panel Data; Profitability

1 INTRODUCTION

Working capital management (WCM) concerns the policies and operating decisions through which a firm finance and controls its short-term assets and liabilities. Inventory, trade receivables, trade payables, and cash are not merely accounting balances; they represent resources committed to the operating cycle and the timing differences between purchasing inputs, producing goods or services, selling to customers, and receiving cash. A firm may report accounting profits while experiencing financial strain if customers pay slowly, inventories remain unsold, or suppliers shorten

credit terms. Conversely, a business that aggressively reduces current assets may improve selected ratios but expose itself to production interruptions, lost sales, weaker customer relationships, and reduced resilience to shocks. Working capital efficiency is therefore best understood as the capacity to support operating activity with an appropriate level and composition of short-term financing, rather than as a simple objective of minimizing current assets.

The issue is especially salient in emerging markets, where firms may face volatile inflation, exchange-rate movements, uneven access to bank credit, relatively high borrowing costs, and differences in the enforcement of commercial contracts. These conditions can increase the value of internal liquidity while making excess funds costly to hold. Trade credit may substitute for constrained bank finance, but delayed customer payments can transmit liquidity stress through supply chains. Firms may also hold precautionary inventory when imports are uncertain or logistics systems are unreliable. As a result, the same working-capital policy can have different consequences across industries and countries. A shorter cash conversion cycle may release cash and reduce financing costs, yet a very short cycle can also reflect underinvestment in inventory or excessively restrictive credit terms. The relationship between WCM and performance should thus be tested empirically and interpreted in its institutional and operational context.

The cash conversion cycle (CCC) provides a widely used summary of the period between cash outflow for operating inputs and cash inflow from customers. It is conventionally calculated as days inventory outstanding plus days sales outstanding minus days payable outstanding. A longer CCC generally implies that cash remains committed to operations for longer, potentially increasing the need for external finance. Deloof (2003) reported that Belgian firms could improve profitability by reducing the number of days in receivables and inventories, while Shin and Soenen (1998) documented an association between the net trade cycle and corporate profitability. Subsequent studies, however, have found heterogeneous results. Abuzayed (2012), for example, reported a positive association between CCC and profitability among Jordanian firms, suggesting that profitable firms may have greater capacity to support working capital or that the cycle may capture growth opportunities. Recent cross-country research continues to find that the relationship depends on component-level dynamics and economic context (Kiymaz et al., 2024; Johan et al., 2024).

This paper addresses three connected questions: (1) Is working-capital efficiency associated with the accounting performance of listed firms in emerging markets? (2) Do inventory, receivables, and payables have distinct relationships with performance? (3) Does the association vary with leverage, firm size, industry, and country-level conditions? The proposed contribution is not to assume that one CCC target is optimal for all firms, but to set out a comparable multi-country empirical design and distinguish the average association from contextual differences. The paper also emphasizes transparency in reporting: because no verified firm-level dataset was supplied for this draft, the results section includes a synthetic demonstration only, clearly separated from findings that would require actual estimation.

The remainder of the paper is organized as follows. Section 2 reviews theoretical and empirical literature and develops testable hypotheses. Section 3 describes the proposed data, variable construction, econometric specifications, and diagnostic procedures. Section 4 presents a model for reporting descriptive and regression results, including explicitly illustrative values. Section 5 discusses how such results should be interpreted alongside previous studies. Section 6 concludes with managerial implications, limitations, and directions for further research.

2 LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Theoretical foundations

The relationship between working capital and performance can be understood through liquidity management, the financing hierarchy, agency theory, and operating-cycle economics. Liquidity theory emphasizes that cash and readily realizable assets protect firms against payment obligations and unexpected disruptions. Holding these assets, however, entails opportunity costs because funds tied up in inventory or receivables cannot be deployed elsewhere. The financing hierarchy suggests that firms prefer internally generated funds when external finance is costly or information-sensitive; consequently, an efficient operating cycle can reduce reliance on short-term borrowing. Agency perspectives add that excessive working capital may reflect weak controls or managerial preference for a larger resource base, whereas insufficient working capital can reveal underinvestment in operational capacity. These explanations imply that performance depends on the quality of working-capital decisions, not only on the absolute amount of current assets.

The CCC translates these trade-offs into a time-based measure. Inventory days capture the time required to convert stock into sales, receivable days capture the time needed to collect from customers, and payable days approximate the period for which suppliers finance operations. Reducing inventory days may lower storage, insurance, obsolescence, and financing costs, but may also increase stock-out risk. Faster collections improve cash availability but can be achieved at the expense of sales if credit terms become unattractive. Extending payables can preserve cash, although excessive delays may damage supplier trust, eliminate discounts, or disrupt supply. Hence, the expected signs for individual

components are not necessarily identical, and the optimal policy may vary by product perishability, bargaining power, production lead times, and customer payment norms.

2.2 Empirical evidence on the cash conversion cycle

Early empirical work established the CCC as a useful framework for examining operating liquidity. Shin and Soenen (1998) found that a shorter net trade cycle was associated with higher profitability in their US firm sample, while Deloof (2003) reported negative relationships between profitability and the number of days in accounts receivable and inventory for Belgian firms. These studies helped establish the argument that funds tied up in the operating cycle have an opportunity cost. Subsequent research broadened the geographical scope and the set of performance measures. García-Teruel and Martínez-Solano (2007), using Spanish small and medium-sized enterprises, found evidence consistent with shortening inventory and collection periods. Lazaridis and Tryfonidis (2006) also reported a relationship between CCC components and profitability among listed firms in Greece. Although the settings differ in size, financing structure, and institutional context, the common mechanism is that faster conversion of operating investment into cash may reduce external financing needs and support operating returns.

Evidence from emerging economies is less uniform, reinforcing the need for context-sensitive analysis. Abuzayed (2012) found a positive relationship between CCC and profitability among firms listed in Jordan, interpreting the result as consistent with profitable firms having more capacity to finance working capital. Bhatia and Srivastava (2016) examined Indian listed firms over 2000–2014 and applied multiple estimation techniques, illustrating the value of testing accounting and market-based performance measures. Singhania and Mehta (2017) reported a nonlinear relationship across a broad set of Asia-Pacific economies, indicating that the marginal impact of working capital may depend on the level of investment. Bhuyan et al. (2021) found that working-capital variables were associated with selected performance outcomes in Bangladesh, while the strength of associations differed by performance proxy. More recently, Kiymaz et al. (2024) reported that CCC was inversely related to performance across developed and emerging economies, but component-level effects differed between the groups. Johan et al. (2024) similarly focused on BRICS economies and reported an inverse relationship between CCC duration and performance. Taken together, these findings support a baseline expectation of a negative CCC–profitability association, while leaving room for nonlinearities and heterogeneity.

2.3 Inventory, receivables, payables, and corporate performance

Inventory management affects both cost efficiency and the ability to meet demand. Lower inventory days can reduce warehousing costs, spoilage, obsolescence, and capital tied up in stock. Yet inventory is also a buffer against uncertain demand, supplier delays, and transport disruptions. The expected relationship between inventory days and profitability is therefore likely to be negative where firms maintain excess stock, but weak or even positive where inventories support sales continuity. Receivables management creates a similar trade-off. Long collection periods lock funds into customer credit and increase exposure to default, but generous trade credit can stimulate sales and strengthen customer relationships. The net effect depends on customer quality, competitive pressure, enforcement of payment contracts, and the firm's ability to fund receivables. These mechanisms suggest that average collection days should be examined independently rather than treated as interchangeable with the overall CCC.

Payables require particularly careful interpretation because they are a source of spontaneous financing. Longer payment periods can ease immediate liquidity pressure and reduce the need for bank borrowing, especially where credit is expensive. At the same time, payment delays may signal distress, weaken supplier relationships, forfeit early-payment discounts, or lead suppliers to raise prices and restrict deliveries. A negative association between payable days and profitability may therefore reflect operational or reputational costs, while a positive association may reflect beneficial supplier financing. Studies of working capital also emphasize that governance and firm-specific capabilities shape these outcomes. Naz et al. (2022), for example, linked corporate governance quality and WCM efficiency with firm performance in Pakistan, suggesting that controls and decision processes can affect the use of short-term resources. The empirical model should consequently include firm characteristics and, where data permit, governance and macroeconomic controls.

2.4 Research gap and hypotheses

The literature offers strong reasons to expect a relationship between working capital efficiency and performance, but it does not justify a universal rule. Studies differ in the definition of CCC, the sample of firms, the years covered, the accounting treatment of operating costs, and the econometric strategy used to address unobserved heterogeneity and reverse causality. A multi-country emerging-market design can add value by using consistent variable definitions, accounting for firm and year effects, and testing whether component-level associations differ by country or industry. The proposed design also recognizes that accounting performance and market valuation capture different dimensions: ROA reflects the productivity of assets, ROE is sensitive to leverage, and Tobin's Q reflects investors' expectations and growth opportunities.

The hypotheses are formulated as conditional associations rather than guaranteed causal effects. H1: A longer cash conversion cycle is negatively associated with firm profitability, measured by ROA. H2: Longer inventory and receivables periods are negatively associated with profitability, conditional on firm and time effects. H3: The association between payable days and profitability is ambiguous because supplier credit can provide financing but excessive delays can impose costs. H4: The relationship between CCC and performance varies across industries and country contexts. H5: The CCC–performance relationship may be nonlinear, such that moderate working-capital investment supports operations but excessive investment reduces returns. These hypotheses can be tested using a balanced or unbalanced panel, with the final sample determined by transparent data-availability rules.

3 METHODOLOGY

3.1 Research design and sample

The recommended design is a quantitative, explanatory panel study of publicly listed non-financial firms in selected emerging markets. A feasible starting window is fiscal years 2014–2023, subject to data availability and comparability. Countries could be selected from Asia, Latin America, Africa, and the Middle East, but inclusion should be justified by consistent financial reporting and availability of macroeconomic data rather than by convenience alone. Financial institutions should generally be excluded because their balance sheets, regulatory capital, and operating cycles differ substantially from those of non-financial firms. Firms with fewer than a pre-specified number of consecutive observations may be excluded in a robustness check, but the main analysis should avoid unnecessary survivorship bias. The final paper must report the actual country list, initial number of firms, firm-year observations, exclusions, and missing-data treatment after data collection.

The primary data source is audited annual reports and financial statements, supplemented where possible by a recognized financial database. The researcher should collect revenue, cost of goods sold, inventories, trade receivables, trade payables, total assets, net income, equity, total debt, sales growth, and market capitalization. Country-level controls can include GDP growth, inflation, and policy or lending interest rates, sourced from institutions such as the World Bank or national statistical authorities. A data dictionary should document the exact accounting line items and any harmonization decisions. When firms report in different currencies, ratios and day-based measures should be calculated from internally consistent annual figures; currency conversion is not needed for ratios, but nominal size comparisons may require conversion or logarithmic scaling.

3.2 Variable measurement

Table 1: Variable measurement

Variable	Operational definition	Expected role
ROA	Net income / average total assets × 100	Primary dependent variable
ROE	Net income / average shareholders' equity × 100	Alternative performance measure
Tobin's Q (approx.)	(Market value of equity + book value of debt) / book value of assets	Market-based robustness outcome
CCC	DIO + DSO − DPO, measured in days	Main explanatory variable; expected negative association
DIO	Average inventory / cost of goods sold × 365	Inventory efficiency
DSO	Average trade receivables / net sales × 365	Collection efficiency
DPO	Average trade payables / cost of goods sold × 365	Supplier-credit measure
SIZE	Natural logarithm of total assets	Control
LEV	Total debt / total assets	Control
GROWTH	(Current-year sales − prior-year sales) / prior-year sales	Control
LIQ	Current assets / current liabilities	Liquidity control / sensitivity test
GDPG, INF	Country-year GDP growth and inflation rates	Macroeconomic controls

Where average balances are available, they should be used in the day-based ratios; if only year-end balances are available, that limitation should be disclosed and the same rule applied consistently. CCC may be negative for firms that

collect cash before paying suppliers, and such values should not automatically be treated as errors. Extreme observations should be inspected against annual reports and handled using a pre-specified winsorization rule, such as the 1st and 99th percentiles, with unwinsorized estimates reported as a sensitivity check. Ratios with negative equity, near-zero denominators, or non-meaningful cost-of-goods-sold values require documented treatment.

3.3 Econometric specification

The baseline model can be expressed as: $ROA_{it} = \beta_0 + \beta_1 CCC_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 GROWTH_{it} + \beta_5 LIQ_{it} + \mu_i + \lambda_t + \varepsilon_{it}$, where i indexes firms, t indexes years, μ_i denotes firm fixed effects, λ_t denotes year fixed effects, and ε_{it} is the error term. The main coefficient is β_1. A negative estimate would indicate that longer CCC is associated with lower ROA conditional on included controls and fixed effects; it would not, by itself, establish causality. A component model replaces CCC with DIO, DSO, and DPO to identify which stages of the operating cycle drive the association. Country fixed effects may be added where the structure of the data allows them to be separately identified from firm effects, while country-year macroeconomic variables capture changes in the external environment.

The fixed-effects estimator is appropriate when unobserved firm attributes are correlated with explanatory variables. A random-effects model can be reported as a comparison, but model selection should not rely mechanically on a single test. Standard errors should be clustered at the firm level to allow serial dependence within firms; multiway clustering by firm and year or country may be considered if the number of clusters is adequate. To reduce simultaneity concerns, explanatory variables can be lagged by one year, and dynamic panel estimators may be used only where the sample structure and instrument diagnostics support them. A quadratic CCC term can test nonlinearity: $ROA_{it} = \beta_0 + \beta_1 CCC_{it} + \beta_2 CCC^2_{it}$ + controls + fixed effects + ε_{it}. A statistically supported turning point should be reported only if it lies within the observed data range and is stable across specifications.

3.4 Data collection and analysis procedure

- Define the country, exchange, industry, and fiscal-year coverage before downloading data; register all inclusion and exclusion rules.
- Collect annual-report financial statements and country-year macroeconomic indicators; retain source URLs, page numbers, currency units, and reporting dates in an audit log.
- Standardize accounting labels, calculate ratios using a documented data dictionary, and cross-check a random subset of firm-years against original annual reports.
- Screen for duplicate records, inconsistent fiscal periods, implausible values, missing denominators, and changes in accounting classification.
- Present a sample-flow table and descriptive statistics, including mean, median, standard deviation, minimum, maximum, and observation count.
- Inspect pairwise correlations and variance inflation factors; report them as diagnostics rather than as proof that the model is correctly specified.
- Estimate pooled OLS, firm fixed effects, and year fixed effects; report firm-clustered standard errors and within R-squared.
- Run component-level, lagged-variable, alternative-outcome, winsorization, and industry/country heterogeneity checks.
- Interpret coefficient magnitudes and confidence intervals alongside statistical significance; distinguish association from causal effects.

3.5 Validity, ethics, and reproducibility

The study uses publicly available corporate and macroeconomic information and ordinarily does not require human-subject approval. Nevertheless, data handling should preserve traceability and respect database licensing conditions. Reproducibility requires a codebook, versioned analysis scripts, a record of data transformations, and a clear explanation of how missing observations and outliers were treated. The researcher should not claim that a dataset is representative of all emerging markets unless the sampling frame supports that conclusion. Results may be sensitive to differences in accounting standards, fiscal calendars, inflation, industry composition, and country-level institutions; these limitations should be acknowledged rather than concealed.

4 RESULTS: REPORTING TEMPLATE AND ILLUSTRATIVE DEMONSTRATION

Important note: no firm-level dataset was provided with the request. Accordingly, the numerical results below are synthetic examples created solely to demonstrate scholarly presentation, table structure, and interpretation. They are not empirical estimates, must not be represented as evidence from actual listed firms, and should be replaced after the specified analysis is run on verified data.

4.1 Illustrative descriptive statistics

Table 2: Illustrative descriptive statistics

Variable	Mean	Std. dev.	Median	Min.	Max.	N
ROA (%)	6.82	8.41	5.90	−28.40	31.70	2,400
ROE (%)	11.46	19.62	10.20	−61.30	72.50	2,315
CCC (days)	71.30	58.70	62.10	−42.00	284.00	2,400
DIO (days)	68.40	49.20	55.70	2.00	251.00	2,400
DSO (days)	54.10	37.60	46.30	1.00	210.00	2,400
DPO (days)	51.20	34.80	44.00	0.00	198.00	2,400
Firm size (ln assets)	14.72	1.63	14.60	10.20	19.30	2,400
Leverage (%)	38.60	21.40	36.90	0.00	91.00	2,400
Sales growth (%)	8.70	24.60	6.10	−73.00	168.00	2,220

In a real analysis, the descriptive table would establish the scale and dispersion of the sample before regression estimates are interpreted. The illustrative figures show how the table might be organized: profitability varies considerably, CCC includes both negative and positive observations, and sales growth is more dispersed than firm size. The presence of negative CCC values is plausible for business models that receive customer cash quickly and negotiate longer supplier terms. The actual study should explain whether extreme values represent genuine operating characteristics or data errors, and should report the number of observations available for each variable.

4.2 Illustrative regression results

Table 3: Illustrative regression results

Variables	(1) Pooled OLS ROA	(2) Firm + year FE ROA	(3) Lagged CCC FE ROA
CCC (days)	−0.021*** (0.004)	−0.014** (0.006)	−0.011* (0.006)
Firm size	0.620*** (0.142)	0.310* (0.174)	0.280 (0.181)
Leverage	−0.083*** (0.012)	−0.061*** (0.018)	−0.057*** (0.019)
Sales growth	0.026*** (0.007)	0.019** (0.009)	0.017* (0.010)
Current ratio	0.310** (0.128)	0.190 (0.151)	0.170 (0.157)
Firm fixed effects	No	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	2,400	2,400	2,040
R-squared / within R^2	0.214	0.167	0.159

Illustrative standard errors are shown in parentheses. * p < .10, ** p < .05, *** p < .01. Values are synthetic and do not describe a real sample.

In this demonstration, the CCC coefficient is negative in all three specifications and smaller in magnitude after firm fixed effects are introduced. In model (2), the illustrative coefficient of −0.014 would mean that a one-day increase in CCC is associated with a 0.014 percentage-point decrease in ROA, holding included covariates and fixed effects constant, if ROA is coded in percentage points. A 30-day difference would correspond to an estimated 0.42 percentage-point difference in ROA (30 × 0.014) under the model's linear assumption. This is an interpretation of the synthetic coefficient only. In a real paper, authors should report confidence intervals, clarify variable units, and avoid interpreting statistical significance as economic importance.

4.3 Component-level results

Table 4: Component-level results

Variables	Illustrative coefficient on ROA	Illustrative standard error	Interpretation to test
DIO	−0.010**	0.004	Longer inventory holding may be associated with lower ROA.
DSO	−0.018***	0.005	Slower collection may increase financing needs.
DPO	0.006	0.005	Supplier-credit effect is uncertain and may be statistically indistinguishable from zero.
CCC^2	−0.00003*	0.00002	A nonlinear pattern should be tested; turning point requires in-range validation.

The component model is important because the same CCC can arise from very different operating policies. A firm might have a long cycle because inventory is strategically high, because customers pay late, or because it pays suppliers quickly. These circumstances do not carry identical managerial implications. If DSO is the most robust component in the actual data, collection practices and customer credit assessment may deserve attention.

4.4 Illustrative chart and conceptual framework

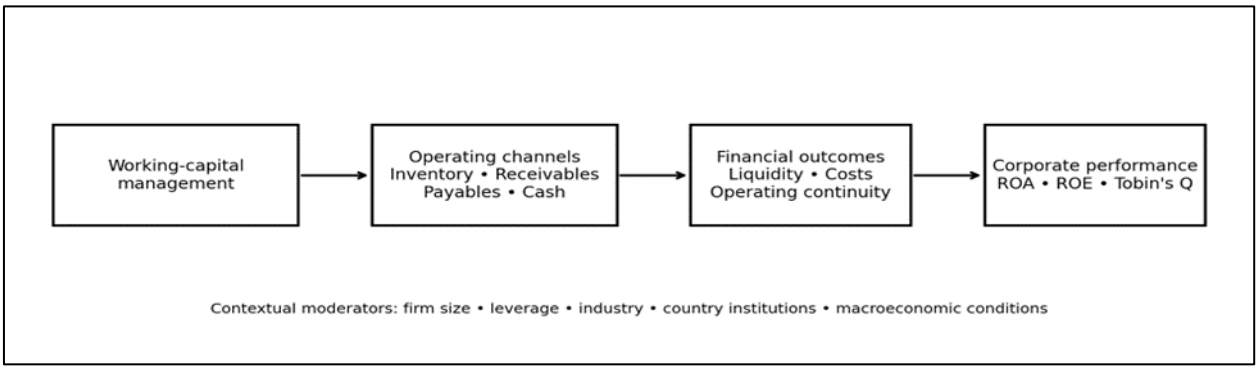


Figure 1: Conceptual pathway linking working-capital decisions to corporate performance. Source: author-developed schematic.

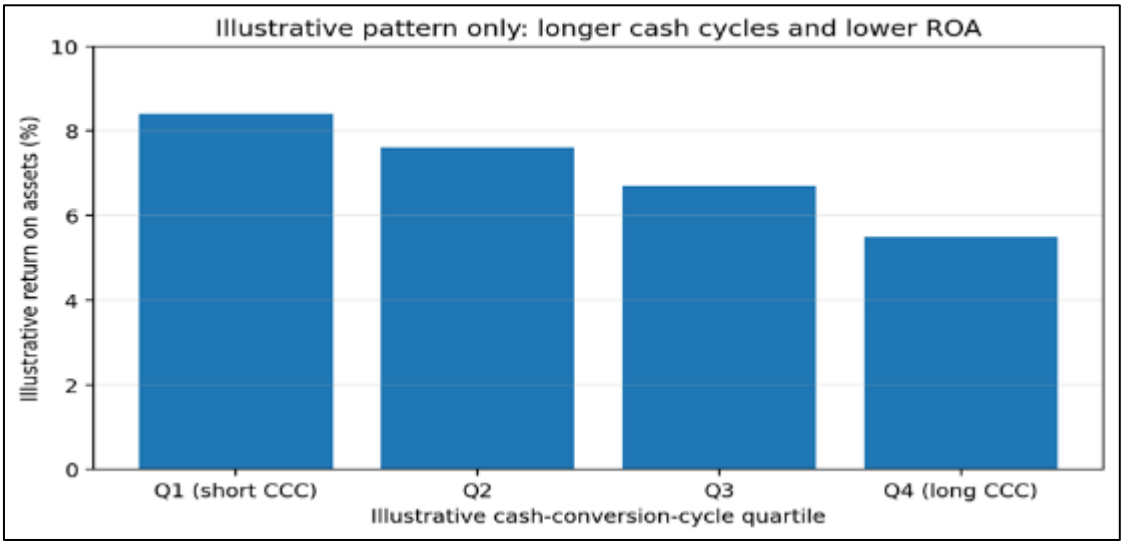


Figure 2: Synthetic illustration of a possible negative association between CCC quartiles and ROA. Values are illustrative only, not observed data.

The illustrative chart depicts a downward pattern across four hypothetical CCC groups. In the actual analysis, quartile plots can be useful as a descriptive check, but they do not replace regression analysis because firms in different quartiles may differ in size, industry, leverage, or country conditions. The preferred chart for a final submission would be generated directly from verified observations and should include the sample size, uncertainty intervals, units, and a caption that identifies the underlying data source.

5 DISCUSSION

The core question is whether working-capital efficiency is associated with corporate performance after controlling for firm-specific and time-varying conditions. A negative CCC coefficient would be consistent with the argument that funds committed to the operating cycle carry a financing and opportunity cost. When inventory is held for longer, capital may be tied up in storage and goods at risk of obsolescence; when receivables remain unpaid, the firm may need to borrow to finance operating expenses; and when the full cycle lengthens, less cash is available for investment or debt service. This interpretation is broadly consistent with Deloof (2003), García-Teruel and Martínez-Solano (2007), and recent cross-country evidence from Kiymaz et al. (2024) and Johan et al. (2024). However, an association does not establish that reducing CCC will automatically increase profits, because demand, production constraints, and bargaining power influence both the cycle and performance.

The difference between pooled OLS and firm fixed-effects estimates is substantively important. Pooled estimates combine differences between firms with changes within the same firm over time. For example, larger or better-managed firms may systematically have both shorter cycles and higher profitability. Firm fixed effects remove time-invariant characteristics, making the estimate more closely reflect whether a firm's performance changes when its working-capital cycle changes. A smaller fixed-effects coefficient would suggest that some of the pooled association reflects persistent differences across firms. Even fixed effects cannot fully address reverse causality: profitable firms may invest in better inventory systems, while firms experiencing weak demand may accumulate stock and collect receivables more slowly. Lagged specifications, credible instruments, natural experiments, or policy shocks can strengthen identification, but each requires defensible assumptions.

The component-level analysis is likely to be more useful for managers than a single CCC coefficient. Inventory policy is shaped by demand uncertainty, production lead times, supplier reliability, and the costs of stock-outs. Receivables policy depends on customer risk, the competitive environment, and the availability of credit insurance or factoring. Payables policy depends on supplier bargaining power and the value of preserving stable input supply. These mechanisms may explain why empirical studies do not always agree on the sign of each component. In emerging markets, where financing costs and payment uncertainty can be high, supplier credit may be particularly valuable, but prolonged payment delays can also transmit liquidity stress to smaller suppliers. Managerial recommendations should therefore be component-specific and should consider the whole supply chain.

The role of country and industry heterogeneity deserves equal attention. A manufacturer with long production cycles may require a different inventory buffer from a retailer with fast stock turnover. Exporters may experience longer receivable periods because of shipping and cross-border payment arrangements, while firms facing volatile inflation may hold inventory as a hedge against replacement-cost increases. Institutional conditions, such as creditor protection, payment enforcement, credit-market depth, and logistics quality, can alter the relationship between CCC and performance. Country-by-country estimates and interaction terms can test whether the average relationship masks divergent effects. Nonetheless, subgroup analyses should be pre-specified where possible, and estimates from small country samples should be interpreted cautiously.

A nonlinear relationship is theoretically plausible. At low levels of working capital, a firm may lack sufficient stock or customer credit to sustain sales. At high levels, excessive inventory and receivables can absorb capital and increase financing costs. The resulting relationship may be inverted U-shaped, but a quadratic coefficient alone is not enough to establish an economically meaningful optimum. The estimated turning point should lie within the observed support, have adequate precision, and remain reasonably stable across specifications. A universal target for CCC would be inappropriate because business models and commercial terms differ. A more defensible practical objective is to identify a firm's efficient operating range and monitor it against comparable firms and service-level indicators.

Finally, performance should not be evaluated using one accounting ratio alone. ROA is useful for assessing earnings generated by the asset base, but can be influenced by asset age and accounting policy. ROE is sensitive to leverage and may rise even when risk increases. Tobin's Q incorporates market expectations but can fluctuate with investor sentiment and growth opportunities. Consistent conclusions across ROA, ROE, and a market-based measure would strengthen confidence in the result; divergent conclusions may reveal that working capital affects accounting efficiency differently from expected growth or risk. Reporting economic magnitudes, confidence intervals, sample coverage, and robustness tests is therefore essential to a credible paper.

6 CONCLUSION

This paper develops a structured framework for assessing the association between working capital efficiency and corporate performance among listed firms in emerging markets. Working capital decisions determine how much cash remains committed to inventory and receivables, how much financing is provided by suppliers, and how resilient a firm is to operating and financial shocks. The cash conversion cycle offers a useful summary measure, but it should be interpreted alongside its components and the firm's institutional and operational context. Prior empirical research often finds that longer cycles are associated with lower profitability, yet findings vary across countries, industries, performance measures, and estimation strategies. This variation is not simply a methodological inconvenience; it reflects the fact that working capital supports sales and production while simultaneously imposing financing and opportunity costs. The proposed research design uses firm-year panel data, standardized financial ratios, firm and year fixed effects, clustered standard errors, lagged specifications, and component-level robustness tests. It also recommends country-level controls and tests for nonlinearities and cross-market heterogeneity. The numerical tables and chart included in this draft are synthetic demonstrations only, because no verified dataset was supplied. They illustrate how coefficients and descriptive patterns can be presented, but cannot support substantive empirical claims. A publishable version must replace these values with estimates from documented annual-report or database observations and must report the actual sample construction and diagnostics. For practitioners, the implication is to optimize rather than mechanically minimize working capital. Faster collections, better demand forecasting, appropriate inventory buffers, and negotiated supplier terms can improve liquidity, but excessive tightening may undermine customer retention, production continuity, or supplier stability.

STATEMENTS ON COMPLIANCE WITH ETHICAL STANDARDS

Disclosure of conflict of interest

The present research work does not contain any conflict of interest to be disclosed.

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