

WORKING CAPITAL MANAGEMENT AND FINANCIAL DISTRESS RISK

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Abstract

This study examined working capital management and financial distress risk. The specific objectives were to investigate whether cash conversion cycle, current ratio, payable days and inventory days have significant effect on financial distress risk of listed manufacturing firms in Nigeria. The secondary source of data collection was adopted in the study where the purposive sampling technique was used to select a sample size of forty-six (46) of listed manufacturing firms for the study. Least Square regression analysis was used in this study and the findings revealed that cash conversion cycle, current ratio and payable days has significant effect while inventory days has no significant effect on financial distress risk of listed manufacturing firms in Nigeria. It was concluded that working capital management decision is core to financial management as it is essential to the survival of any organization; it impacts on the firm's profitability and liquidity risk, and consequently its value. Finally, it recommended that optimal cash conversion cycle with respect to working capital, liquidity, and trade credits for firms based on sectorial analysis should be developed to enhance their performance of firms in Nigeria.

Keywords: Cash conversion cycle, Current ratio, Financial distress risk, Payable days, Working capital management.

1. Introduction

Effective management of working capital is crucial to a firm's performance. Working capital is defined as the difference between current assets and current liabilities (Ibrahimet al., 2021). A company must manage its current assets and liabilities to sustain an adequate level of working capital. Should the firm neglect to uphold an adequate level of working capital, it is probable that it will face insolvency and could potentially be compelled to undergo liquidation. Therefore, the necessity for working capital to facilitate daily business operations is essential for a firm. Working capital is regarded as the vital force for any economic entity, making its management one of the most critical functions within corporate management (Umenzekweet al., 2024). Organizations, regardless of their profit orientation, size, or industry, require an adequate volume of working capital to sustain daily operations. Effective management of cash resources is considered the primary determinant for sustaining liquidity, solvency, ongoing viability, and profitability of a business (Abdullahiet al., 2020).

Moreover, the effective management of working capital is crucial for generating value for shareholders.

The fundamentals of working capital management involve aligning short-term inflows with outflows. It pertains to aligning capital with daily operational activities, ensuring that incoming funds (accounts receivable) exceed outgoing funds (accounts payable). Otherwise, the company will rapidly face insolvency. This also impacts the inventory volume, as excessive stock results in capital being immobilized in unsellable products. A shortage indicates insufficient production to satisfy demand (Urhoghide & Korolo, 2022).

Effective management of working capital is a crucial component of the overall corporate strategy to enhance shareholder value. Moreover, effective working capital management enhances the firm's operational performance and facilitates short-term liquidity attainment. Consequently, companies strive to maintain an optimal level of working capital that maximizes their value. Moreover, effective working

capital management is crucial for firms as it significantly influences their performance and liquidity. The primary objective of working capital management is to achieve an optimal equilibrium among its components (Abdeljawad & Dwaikat, 2021). One component of working capital is inventory; substantial inventory and a lenient trade credit policy may arise from significant sales, and ample inventory can also reduce the risk of stock-outs. Trade credit can stimulate sales as it allows a business to assess product quality prior to payment (Naja & Ahmad, 2024). Another element of working capital is accounts payable; postponing payments to vendors enables firms to maintain product quality while providing a cost-effective and flexible financing method. Conversely, delaying such payables can incur significant costs if a company is offered a discount for timely payment. Another element of working capital management is accounts receivable; uncollected receivables can lead to challenges in cash inflow for the firm.

The business's operational viability is threatened, as profitability may decline. In other words, inadequate financial management resulted in substantial problems for companies. This problem hinders business advancement. Declining sales, escalating prices, and persistent losses are among the challenges faced. The capacity to oversee commercial receivables is essential for the firm's profitability. Accounts receivable accounting is essential to a company's operational continuity. This pertains to the management of an entity to determine the operational viability of the organization. If customers promptly resolve their receivables, they benefit from a favorable credit balance. Inconsistent repayments resulting from inadequate debt monitoring, tracking, and organization can severely hinder profit generation, while ineffective accounts receivable management is thought to lead to erratic revenue, thereby obstructing the company's productivity, profitability, and liquidity (Bolek, 2023).

Several studies have demonstrated a positive correlation between working capital management and corporate performance. Chowdhary and Amin (2017) investigated the influence of comprehensive working capital management on the profitability of

pharmaceutical companies listed on the Dhaka Stock Exchange and demonstrated a positive correlation between current asset management and firm performance. Micheal (2017) and Duru (2018) investigated the influence of working capital management on the profitability of Nigerian publicly listed manufacturing companies, revealing a positive correlation between the cash conversion cycle and profitability. Thus, to the researcher's knowledge, limited literature exists on working capital management and financial distress risk, which prompts this study.

2. Literature Review and Hypotheses Development

2.1 Financial Distress Risk

Financial distress refers to a condition in corporate finance where an individual or entity experiences difficulty in meeting financial obligations, particularly in repaying debts to creditors. Prolonged, severe financial distress may ultimately result in bankruptcy. Financial distress must be addressed promptly to prevent exacerbation of the situation. Financial difficulties frequently result in additional financial complications if not swiftly addressed (Joshua, 2023).

Distress situations have been observed globally, underscoring distress as a universal issue. This study examined financial distress, which is considered to impact all firms regardless of their location, type, or size. Financial distress has garnered considerable attention recently, as demonstrated by empirical and theoretical literature in the field. Numerous studies have been conducted on financial distress due to its diverse characteristics. This issue necessitates a comprehensive analysis of the significance of financial distress for institutions and global economies. Financial distress has been extensively examined globally, resulting in its prominence as a subject of study, with a growing interest attributed to various factors. The topic is progressively evolving into a multifaceted concept, as evidenced by numerous firms previously considered stable encountering distress and bankruptcy. This phenomenon, coupled with the reality that no firm engaged in economic activities is exempt from financial turmoil, contributes to operational cessation (Ebireet *et al.*, 2024).

If left unaddressed, the consequences of financial distress can culminate in a firm's bankruptcy. Financial distress resulting in bankruptcy can be profoundly detrimental to any economy, firm, or business entity. It adversely impacts the overall economy and individual enterprises. The effects can be substantial due to their ripple impact on various stakeholders, including employees, managers, shareholders, creditors, and the government. Additional detrimental effects of financial distress encompass diminished lender and investor confidence, erosion of shareholder wealth, elevated financial risk, and reduced market value. Analyzing the effects of financial distress on firms will enhance the comprehension of the concept of 'financial distress,' thereby aiding in the mitigation of its occurrence (Umenzekweet *al.*, 2021).

2.2 Working Capital Management

Working capital is essential for business operations, especially in the manufacturing sector, where raw materials are procured intermittently. Consequently, the effective operational activities of a firm are contingent upon its working capital. According to Ehiremmen (2017), working capital refers to the total investment a firm allocates to its current assets for daily operations. Working capital refers to the portion of a firm's capital allocated for fulfilling daily operational needs, including wage disbursements, creditor payments, and raw material procurement, among others. The implication in these definitions is that working capital constitutes the current or circulating capital required by a firm to sustain operations and fulfill its daily obligations (Rovettaet *al.*, 2024).

There are fundamentally three categories of working capital: permanent working capital and temporary working capital. Permanent working capital refers to the essential investments made by a firm to augment its current assets necessary for sustaining a minimum level of operational activities. Conversely, temporary working capital, also known as fluctuating working capital, denotes a variable working capital that correlates with production volume. This indicates that fluctuating capital is the supplementary capital required by a firm to accommodate variations in the

production process and sales activities (Prempeh & Peprah-Amankona, 2020).

2.3 Cash Conversion Cycle and Financial Distress Risk

Ambe (2023) posited that the CCC is a composite metric that reflects the average dollar investment in inventory relative to the dollar collected from a customer. Abednegoet *al.*, (2023) defined the cash conversion cycle as the duration from the payment for raw materials to the collection of accounts receivable linked to high profitability. The duration of the cash conversion cycle is consequently a critical indicator of the efficacy of working capital management (WCM).

The cash conversion cycle is an effective performance metric for evaluating a company's management of its working capital. It emphasized that a brief cash conversion cycle signifies that the company is expeditiously collecting its receivables while postponing its payables to suppliers for as long as feasible. The cash conversion cycle indicates the duration, in days, that a company has its capital invested in working capital. Certain auditors contend that the Cash Conversion Cycle (CCC) comprises three distinct components: inventory days, accounts receivable, and accounts payable (Abednego *et al.*, 2023).

Ambe (2023) analyzed the cash conversion cycle and financial performance of publicly traded healthcare firms on the Nigerian Stock Exchange from 2012 to 2016 to determine the correlation between the cash conversion cycle and financial performance. The research employed descriptive analysis and a correlational model. The data was sourced from the published financial statements and accounts of companies listed on the Nigerian Stock Exchange. The Pearson Correlation coefficient was computed to assess the relationship, and a t-test was conducted to evaluate the significance of this relationship. The principal findings indicate a negative correlation between the cash conversion cycle and the financial performance of healthcare companies listed on the Nigerian Stock Exchange.

Abednegoet *al.* (2023) examined the influence of working capital management on the sustainability of manufacturing firms in Ghana. The study utilized panel data from 55 large-scale manufacturing firms in Ghana spanning 2002 to 2022, employing the Fixed Effect as the primary estimation method and the Random Effect as a robustness test estimator. The results demonstrated the significant effect of cash conversion cycle in managing working capital, as it affects the sustainability of manufacturing enterprises.

Bolek (2023) examined the impact of dynamic and static liquidity metrics on working capital. The dynamic method is represented by the cash conversion cycle, while the static method is indicated by the current ratio. A sample of sixty-one (61) non-financial firms was chosen from companies listed on the Warsaw Stock Exchange for the fourteen-year period from 1997 to 2010. The study utilized regression and correlation analyses and the study demonstrated a concurrent increase in the current ratio and the cash conversion cycle within an accounting year, influenced by aggressive and moderate working capital strategies. Conversely, a relaxed policy demonstrated an increasing current ratio alongside a diminishing number of cash conversion cycles.

Ogundipeet *al.* (2021) examined the relationship between working capital management, corporate performance, and market valuation in Nigeria. This study aimed to analyze the influence of working capital management on the performance and market value of firms in Nigeria. A sample of fifty-four non-financial publicly traded firms in Nigeria, listed on the Nigerian Stock Exchange, was selected for the period from 1995 to 2009. The study's data was obtained from the annual reports of the sample firm for the reviewed period. The regression model utilized for analysis indicated a significant negative correlation between the cash conversion cycle and firm performance in Nigeria.

H1: From the above, we hypothesize that cash conversion cycle has no significant effect on financial distress risk of listed manufacturing firms in Nigeria

2.4 Current Ratio and Financial Distress Risk

The current ratio is the ratio of current assets to current liabilities. It is utilized to assess the short-term liquidity of an enterprise. It illustrates the capacity of the firm's management to employ assets efficiently and effectively. Cash equivalents are liquid asset substitutes characterized by high credit quality and liquidity, which can be readily converted into cash in the short term. They include Federal Government of Nigeria treasury bills, bankers' acceptances, certificates of deposit, savings accounts, and other money market instruments. Cash reserves that fulfill all impending liabilities of a company exemplify robust financial stability. Nonetheless, credit crunches, recessions, information asymmetry, and market imperfections have compelled firms to accumulate cash, as optimal cash levels remain ambiguous and unpredictable (Drobetz & Grüninger, 2017).

Nyabwangaet *al.* (2022) investigated the relationship between liquidity, solvency and financial performance of SMEs in Kisii, Kenya. The study used the ratio analysis to analyze the secondary data. Using least square regression method, the study discovered that the cash conversion cycle, along with the current and quick ratios, exerts a positive and significant influence on performance.

Adebayo and Olayiwola (2021) investigated the effect of liquidity indicators, particularly the current ratio, on the financial distress risk of manufacturing firms listed on the Nigerian Stock Exchange (NSE). Using panel data from 30 firms spanning the period 2011 to 2020, the study employed logistic regression analysis to estimate the likelihood of financial distress. The Altman Z-score was used to proxy financial distress. Findings revealed a significant inverse relationship between the current ratio and financial distress risk, suggesting that higher liquidity reduces the likelihood of distress.

Uchenna and Ijeoma (2020) examined the influence of liquidity ratios, specifically the current ratio, on financial distress in selected Nigerian firms across various sectors. Secondary data were obtained from 40 companies listed on the Nigerian Stock Exchange

from 2010 to 2019. The Z-score model was employed to categorize firms into distressed and non-distressed classifications. Probit regression was utilized to evaluate the impact of liquidity on the probability of distress. The findings indicate that the current ratio exerts a statistically significant negative influence on the probability of distress. Sectoral disparities were observed, with companies in the industrial and consumer goods sectors exhibiting heightened sensitivity to liquidity challenges.

Chuke and Elias (2018) investigated the influence of the average collection period on the profitability of publicly listed insurance firms in Nigeria. The return on assets was the dependent variable, while the accounts receivable period served as the independent variable. The sample of the study comprised the annual financial reports of 20 publicly traded insurance companies in Nigeria from 2000 to 2011. The findings indicate that current ratio, fixed financial total asset ratio, debt asset ratio, and growth exhibit the anticipated positive correlation, while firm size demonstrates an unexpected relationship with profitability. This unforeseen correlation may result from deficiencies in managerial performance. The study concludes that the accounts receivable period lacks a significant causal relationship with the profitability of publicly listed insurance companies in Nigeria.

H2: From the above, we hypothesize that current ratio has no significant effect on financial distress risk of listed manufacturing firms in Nigeria

2.5 Payable Days and Financial Distress Risk

Accounts payable constitutes a significant source of secured short-term financing. Emphasizing the significance of the relationship with the payee is a prudent objective that should be regarded as equally important as achieving the optimal level of preventative measures. A robust alliance between the company and its suppliers will strategically enhance production lines and fortify the credit record for future expansion. The creditor is essential for effective cash-positive purchasing; excessive purchasing can lead to

liquidity issues. Accounts payable denotes the amounts owed by firms to their suppliers. They are referred to as suppliers whose invoices for goods or services have been processed but remain unpaid. A greater value correlates with an extended duration for firms to fulfill their payment obligations to suppliers. Insufficient management of corporate payables can lead to issues that may result in catastrophic consequences for the company (Okpe & Duru, 2015).

Ebireet *al.* (2024) investigated the influence of working capital management on the financial performance of alternative energy in the UK from 2015 to 2022. The panel data were analyzed utilizing descriptive statistics, a correlation matrix, and panel regression analysis. The Hausman specification test indicated that the fixed effect model was more suitable. The results indicated that receivable turnover significantly enhances the return on assets of the alternative firm in the UK. Moreover, payable days exert a substantial negative influence on return on assets, whereas the results regarding inventory turnover demonstrate an insignificant effect on return on assets. The study concludes that oil and gas companies should enhance their net cash flow from operating activities to improve their financial performance.

Oranefo and Egbunike (2023) determined the relationship between accounts payable turnover and the performance of publicly listed manufacturing firms in Nigeria. The research employed an ex-post facto design. The sample consisted of seventy-five non-financial companies listed on the Nigerian Exchange Group (NGX). The study intentionally selected all accessible non-financial firms within the timeframe of 2010 to 2019. This study employed secondary data sources, specifically calculated financial ratios derived from annual financial statements obtained from the database. The data were examined employing multiple regression methodologies. The accounts payable turnover ratio has a non-significant positive effect on ROA and a significant negative effect on Tobin Q.

Urhoghide and Korolo (2022) investigated the significant disparities in working capital management metrics across listed industries on the Nigerian Stock

Exchange and analyze the correlation between the average collection period, inventory conversion period, average payment period, cash conversion cycle, net trading cycle, and corporate performance. Secondary data were obtained from the annual reports and accounts of the selected Nigerian companies, utilizing pertinent NSE fact books for the analysis. The study utilized a sample of 56 non-financial publicly traded companies. The research utilized a longitudinal design spanning 2016 to 2020. Generalized least squares regression analysis was employed to investigate the relationship between the variables. The study revealed that the average collection period exhibits a significant negative correlation with corporate performance, as indicated by profit after tax, whereas the average payment period has a significant positive relationship with corporate performance.

Abdeljawad and Dwaikat (2021) investigated the impact of working capital management on the profitability of 13 industrial enterprises in Palestine. The study employed secondary data from annual reports spanning 17 years (2002 to 2008) of companies listed on the Palestinian Security Exchange (PSE). Multiple regression techniques were utilized to analyze the data, revealing that the cash conversion cycle positively influenced profitability, while the accounts payable period adversely affected return on asset and return on equity.

H3: From the above, we hypothesize that payable days has no significant effect on financial distress risk of listed manufacturing firms in Nigeria

2.6 Inventory Days and Financial Distress Risk

Inventory days quantify the duration of inventory cycles (in days) and indicate the period during which cash is immobilized in inventories. Companies aim to minimize the allocation of resources, particularly those that may incur direct or indirect costs associated with storage maintenance, insurance, opportunity loss, and risks of spillage or obsolescence. Nevertheless, there are several advantageous reasons for sustaining elevated inventory levels, such as price speculation, anticipated demand surges, and safeguarding

production against delivery disruptions or shortages of essential materials (Wang, 2019).

The Days Inventory is Held (DINV) serves as an indicator of inventory policy and is computed using the formula $(INV \times 365)/\text{cost of goods sold}$. DINV represents the average duration, in days, that stock is retained by the company. Extended storage durations signify an increased investment in inventory for a specific operational level. The effectiveness of inventory control influences a firm's flexibility at a specific inventory level; inefficient inventory management leads to imbalanced stock and inflexibility (Olaoye *et al.*, 2019).

Nwokoye (2022) examined the impact of the cash conversion cycle, represented by days inventory turnover, days payables outstanding, and days sales outstanding, on the performance of publicly listed companies in two sectors in Nigeria. This was conducted within a multivariate framework, employing pooled OLS and multivariate panel regression techniques, utilizing data from the 2010 to 2020 reference period. The results obtained were generally consistent with presumptive expectations. The results indicate that days payable outstanding positively influences the performance of the sampled manufacturing firms, albeit insignificantly, while days sales outstanding exerts a significantly negative impact. The days inventory turnover variable demonstrated a positive and significant impact on the performance of firms within the consumer goods sector.

Obigwe and Iloh (2022) examined the impact of inventory days on insolvency risk utilising firm-level data from Nigeria, Ghana, and Côte d'Ivoire. A cohort of 60 firms from three countries was examined over a decade (2011–2020). The findings indicated that inventory days significantly increase the likelihood of financial distress, particularly within the manufacturing and trading sectors.

Okonkwo and Udeh (2021) examined the correlation between working capital management variables, such as inventory days, and the risk of financial distress in Nigerian manufacturing enterprises. Financial distress

was assessed utilizing Altman’s Z-score based on data from 25 publicly traded companies from 2012 to 2020. The results demonstrate a substantial positive correlation between inventory days and the risk of financial distress, suggesting that extended inventory holding durations elevate the risk of distress.

Yusuf and Salawu (2020) examined the impact of working capital components, including inventory days, receivables, and payables, on corporate financial distress in Nigerian listed companies. A cohort of 40 companies from various sectors was analysed over a 9-year span (2010–2018) employing logistic regression. The findings indicate a substantial negative correlation between long inventory days and financial distress, implying that ineffective inventory management contributes to liquidity limitations and insolvency risk.

H4: From the above, we hypothesize that inventory days has no significant effect on financial distress risk of listed manufacturing firms in Nigeria

3.0 Methodology

The *ex-post facto* research design was used in this study due to the fact that the variables cannot be manipulated by the researcher. This method was adopted since social scientific research problems do not lend themselves to experimental and controlled inquiry of the *ex-post* factor kind. The population

comprises of one hundred and fifty one (151) firms listed on Nigerian Exchange Group as at 31st December, 2024. Since the entire listed firms cannot be used for the study, the study is limited to ten (10) years annual report of forty-six (46) listed manufacturing firms in Nigeria. In selecting the sample, purposive sample technique was used to derive the sample size which used to ensure that the sample represents a diversity of perspectives. The secondary source of data collection was used for this study where data was gathered from audited annual reports of selected listed manufacturing firms in Nigeria. The study employed multiple regression technique of analysis using Least Squares regression estimation. This method was adopted because it enhances easy presentation and interpretation of data. The empirical model of the study is mathematically expressed as follows:

$$FDR_{it} = \alpha + \beta_1 CCC_{it} + \beta_2 CUR_{it} + \beta_3 PAY_{it} + \beta_4 INV_{it} + \epsilon_{it}$$

Where;

- FDR_{it} = Financial Distress Risk
- CCC_{it} = Cash Conversion Cycle
- CUR_{it} = Current Ratio
- PAY_{it} = Payable Days
- INV_{it} = Inventory Days
- ε_{it} = Error term
- α = intercept
- β₁ – β₃ = Coefficients of parameters estimated

3.9 Measurement of Variables

S/N	Variables	Measurement
1.	Financial Distress Risk	This forms the likelihood that a company will experience financial difficulties and be unable to meet its financial obligations.
2.	Cash Conversion Cycle	This forms that financial metric that measures the amount of time it takes for a company to convert its investments in inventory and other current assets into cash
3.	Current Ratio	This forms the financial metric that measures a company's ability to meet its short-term obligations.
4.	Payable Days	This forms the financial metric that measures the average number of days it takes a company to pay its suppliers.
5.	Inventory Days	This forms the financial metric that measures the average number of days a company holds its inventory before selling it.

Source: Researcher’s Compilation, 2025

4. Result and Discussion

Table 1: Summary of Descriptive Statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
FDR	460	-24.44	18.69	4.8368	3.59008	11.901	.227
CCC	460	-70052.40	37117580.00	80274.8017	1730641.29373	459.994	.227
CUR	460	.00	37117580.00	80797.3213	1730611.10855	460.000	.227
PAY	460	2.9	70080.6	660.943	4522.4336	167.929	.227
INV	460	.00	2036.36	136.1036	169.61050	64.496	.227
Valid N	460						

Source: Output of data analysis by author using SPSS (2025)

From the above table, the dependent variable, financial distress risk (FDR) has a mean value of 4.8368, standard deviation of 3.59008, minimum value of -24.44 and maximum of 18.69. The independent variables; cash conversion cycle (CCC) has a mean value of 80274.8017 and a standard deviation of 1730641.29373, a minimum and maximum value of -70052.40 and 37117580.00 respectively. Current ratio (CUR) has a mean value of 80797.3213, standard deviation of 1730611.10855, minimum value of 0.00 and maximum value of 37117580.00. Payable days (PAY) has a mean value of 660.943, standard deviation of 4522.4336, minimum value of 2.9 and maximum of 70080.6. Inventory days (INV) has a mean value, standard deviation, minimum and maximum values of 136.1036, 169.61050, 0.00 and 2036.36 respectively.

Table 2: Summary of Coefficient of Correlation

Correlations

		FDR	CCC	CUR	PAY	INV
FDR	Pearson Correlation	1	.181**	.180**	-.214**	-.045
	Sig. (2-tailed)		.000	.000	.000	.339
	N	460	460	460	460	460
CCC	Pearson Correlation	.181**	1	1.000**	-.004	-.035
	Sig. (2-tailed)	.000		.000	.932	.456
	N	460	460	460	460	460
CUR	Pearson Correlation	.180**	1.000**	1	-.001	-.034
	Sig. (2-tailed)	.000	.000		.976	.462
	N	460	460	460	460	460
PAY	Pearson Correlation	-.214**	-.004	-.001	1	.210**
	Sig. (2-tailed)	.000	.932	.976		.000
	N	460	460	460	460	460
INV	Pearson Correlation	-.045	-.035	-.034	.210**	1
	Sig. (2-tailed)	.339	.456	.462	.000	
	N	460	460	460	460	460

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Output of data analysis by author using SPSS (2025)

Table 2 above shows the 2-tailed correlation analysis of the variables at 5% (0.05) level of significance. This show that financial distress risk (FDR) is positively correlated with cash conversion cycle (CCC), current ratio (CUR) while

negatively correlated with payable days (PAY) and inventory days (INV). Cash conversion cycle (CCC) is positively correlated with financial distress risk (FDR) and current ratio (CUR) while negatively correlated with payable days (PAY) and inventory days (INV). Current ratio (CUR) is positively correlated with financial distress risk (FDR) and cash conversion cycle (CCC) while negatively correlated with payable days (PAY) and inventory days (INV).

Table 3: Summary of Regression Result

Model Summary					
Multiple R					.280
R Square					.078
Adjusted R Square					.072
Std. Error of the Estimate					3.458

Coefficients					
	Unstandardized Coefficients		Beta	t	Sig.
	B	Std. Error			
(Constant)	4.900	.207		23.650	.000
CCC	3.738	.000	.180	4.006	.000
CUR	1.739	.037	.181	1.216	.000
PAY	-.003	.000	-.215	-4.668	.000
INV	.047	.001	.007	.144	.886

Source: Output of data analysis by author using SPSS (2025)

The B column discusses the coefficient of the model. This indicates that a 490% decrease in financial distress risk is as a result of 373.8% increase in cash conversion cycle, 173.9% increase in current ratio, 0.3% decrease in payable days and 4.7% increase in inventory days.

The cumulative adjusted R^2 (0.072) which is the multiple coefficient of determination gives the proportion or percentage of the total variation in the dependent variable as explained by the independent variables jointly. Hence, it signifies that 7.2% of the total variation in financial distress risk of the sample firms is caused by the proxies of working capital management. This is quite low so predictions from the regression equation are fairly reliable. It also means that 92.8% of the variation is still unexplained so adding other independent variables could improve the fit of the model. This indicated that the model is fit and the explanatory variable are properly selected, combined and used. The findings have theoretical, practical and regulatory significance. This significance represents the contributions of the study which are expected to benefit the existing body of knowledge within the accounting and finance research, regulators and providers of accounting services.

Considering the significant effect of cash conversion cycle on financial distress risk of listed manufacturing firms in Nigeria, the regression result in table 4 indicates that cash conversion cycle has a positive and significance influence on financial distress risk of listed manufacturing firms in Nigeria. This was proved by the beta coefficient value of 0.180 and a t-value of 4.006 and a significance value 0.000 which is significance at 5% significance level. This leads to the acceptance of the alternative hypothesis and rejection of null hypothesis. Hence, it is concluded that cash conversion cycle has significant effect on financial distress risk of listed manufacturing firms in Nigeria.

Considering the significant effect of current ratio on financial distress risk of listed manufacturing firms in Nigeria, the regression result in table 4 indicates that current ratio has a positive and significance influence on financial distress risk of listed manufacturing firms in Nigeria. This was proved by the beta coefficient value of 0.181 and a t-value of 1.216 and a significance value 0.000 which is significance at 5% significance level. This leads to the acceptance of the alternative hypothesis and rejection of null hypothesis. Hence, it is concluded that current ratio has significant effect on financial distress risk of listed manufacturing firms in Nigeria.

Considering the significant effect of payable days on financial distress risk of listed manufacturing firms in Nigeria, the regression result in table 4 indicates that payable days has a negative and significance influence on financial distress risk of listed manufacturing firms in Nigeria. This was proved by the beta coefficient value of 0.215 and a t-value of -4.668 and a significance value 0.000 which is significance at 5% significance level. This leads to the acceptance of the alternative hypothesis and rejection of null hypothesis. Hence, it is concluded that payable days has significant effect on financial distress risk of listed manufacturing firms in Nigeria.

Considering the significant effect of inventory days on financial distress risk of listed manufacturing firms in Nigeria, the regression result in table 4 indicates that inventory days has a negative and insignificance influence on financial distress risk of listed manufacturing firms in Nigeria. This was proved by the beta coefficient value of 0.007 and a t-value of 0.144 and a significance value 0.886 which is insignificance at 5% significance level. This leads to the acceptance of the null hypothesis and rejection of alternative hypothesis. Hence, it is concluded that inventory days has no significant effect on financial distress risk of listed manufacturing firms in Nigeria.

4.1 Discussion of Findings

The results indicate that almost all the variables are significantly normally distributed at 5% level of significance. The correlation matrix indicates the variables have mixed relationships. The results also indicate the absence of multi-co linearity.

Cash conversion cycle and financial distress risk

The findings from the first hypothesis revealed that cash conversion cycle has significant effect on financial distress risk of listed manufacturing firms in Nigeria. This findings is in agreement with the findings of Abednegoet *al.* (2023) whose results demonstrated the significant effect of cash conversion cycle in managing working capital, as it affects the sustainability of manufacturing enterprises. This position is further strengthened by the study of Bolek (2023) whose study demonstrated a concurrent

increase in the current ratio and the cash conversion cycle within an accounting year, influenced by aggressive and moderate working capital strategies. It however, disagrees with the study of Ambe (2023) whose principal findings indicate a negative correlation between the cash conversion cycle and the financial performance of healthcare companies listed on the Nigerian Stock Exchange.

Current ratio and financial distress risk

The findings from the second hypothesis revealed that current ratio has significant effect on financial distress risk of listed manufacturing firms in Nigeria. This result agrees with the findings of Nyabwangaet *al.* (2022) whose study discovered that the cash conversion cycle, along with the current and quick ratios, exerts a positive and significant influence on performance. The study oppose the work of Adebayo and Olayiwola (2021) whose findings revealed a significant inverse relationship between the current ratio and financial distress risk, suggesting that higher liquidity reduces the likelihood of distress. It also negates the work of Uchenna and Ijeoma (2020) whose findings indicate that the current ratio exerts a statistically significant negative influence on the probability of distress. Sectoral disparities were observed, with companies in the industrial and consumer goods sectors exhibiting heightened sensitivity to liquidity challenges.

Payable days and financial distress risk

The findings from the third hypothesis revealed that payable days have significant effect on financial distress risk of listed manufacturing firms in Nigeria. This findings correlates with the findings of Abdeljawad and Dwaikat (2021) whose study revealed that the cash conversion cycle positively influenced profitability, while the accounts payable period adversely affected return on asset and return on equity. The study also oppose the findings of Ebireet *al.* (2024) whose result revealed that payable days exert a substantial negative influence on return on assets. Also, it disagree with the study of Oranefo and Egbunike (2023) whose study discovered that accounts payable turnover ratio has a non-significant positive

effect on ROA and a significant negative effect on Tobin's Q.

Inventory days and financial distress risk

The findings from the forth hypothesis revealed that inventory days have no significant effect on financial distress risk of listed manufacturing firms in Nigeria. This is further strengthened by the position of Nwokoye (2022) whose results indicated that days payable outstanding positively influences the performance of the sampled manufacturing firms, albeit insignificantly, while days sales outstanding exerts a significantly negative impact. The study also support the work of Obigwe and Iloh (2022) whose findings indicated that inventory days significantly increase the likelihood of financial distress, particularly within the manufacturing and trading sectors. It however negates the study of Yusuf and Salawu (2020) whose findings indicated a substantial negative correlation between long inventory days and financial distress, implying that ineffective inventory management contributes to liquidity limitations and insolvency risk.

5.0 Conclusion and Policy Recommendation

5.1 Conclusion

The need for working capital to run day-today business activities easily cannot be overemphasized. This is so because working capital is a life giving force for any productive economic activity and therefore, its management is categorized among the highly important functions of corporate management. If an organization is not effectual in handling its working capital, it will lower profitability and lead to financial crisis as well, therefore efficient working capital management is crucial for a firm's long run growth and survival.

Working capital management decision is core to financial management as it is essential to the survival of any organization; it impacts on the firm's profitability and liquidity risk, and consequently its value. Working capital management is a simple mechanism for ensuring the ability of the firm to fund the difference between short-term assets and short-term liabilities. Notwithstanding, the possible increase in profitability as a result of a generous trade credit

policy and/or reduction in risk of stock-out, it is not unthinkable that corporate profitability may decrease as the cash conversion cycle (CCC) elongates, particularly if the costs of higher investment in working capital rise faster than the benefits of holding more inventory and/or granting more trade credit to customers. In the net CCC criterion, the study considered the length and the time we receive the receivable accounts and payable accounts period, and also the length of storage and the amount of those are not be noted. Hitherto, the study concludes that cash conversion cycle, current ratio and payable days has significant effect while inventory days has no significant effect on financial distress risk of listed manufacturing firms in Nigeria.

5.2 Policy Recommendations

The following recommendations are hereby made:

- i. Optimal cash conversion cycle with respect to working capital, liquidity, and trade credits for firms based on sectorial analysis should be developed to enhance their performance of firms in Nigeria.
- ii. Appropriate investment and inventory planning strategic planning should be designed by firms' management to minimize the risk of losing sales which will enhance firm performance in Nigeria.
- iii. Payment periods should be designed to attract greater sales, firms patronage, and consequently, higher performance in Nigeria.
- iv. Firms should emphasize to increase sales to increase inventory turnover to achieve maintainable competitive advantage through managing inventory to optimal level so as to maximize profitability.

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