FINANCIAL MANAGEMENT I

WORKING CAPITAL MANAGEMENT, SHORT-TERM FINANCING, AND CASH FLOW OPTIMISATION

Practical Analytical Report (Financial Analysis Project)

Submitted by: Roshan

Student ID: PBM26037

Programme/Course: Bachelor of Business Administration and Management

Submission date: 22 October 2026

Table of Contents

Contents

Table of Contents 2

Executive Summary 3

1. Introduction 4

2. Theoretical Framework and Financial Concepts 4

2.1 Net working capital and liquidity 4

2.2 Cash conversion cycle 5

2.3 Inventory, receivables and trade credit 5

3. Financial Calculations and Scenario Analysis 6

3.1 Interpretation and sensitivity 7

3.2 Example of early-payment discount 8

4. Short-Term Financing Options 8

5. Discussion and Managerial Implications 9

6. Working Capital and Cash-Flow Roadmap 10

7. Conclusion and Recommendations 11

References 12

Appendix A: Calculation Schedule 13

Executive Summary

Working capital management is the management of a firm's current assets and current liabilities to ensure that a firm is able to pay its short-term obligations without having too much of low return current assets. The cash conversion cycle (CCC), inventory and collection, credit from suppliers, short term borrowing and cash-flow forecasting are assessed in this report. It takes a clear example of a hypothetical, but clear, distributor through whom the sales are passed and provides numerical inputs as examples of assumptions made, but not actual results from a real company. With the baseline operating assumptions, a CCC of 55 days will result. A practical improvement scenario involves reducing the inventory days from 50 to 42, the receivable days from 35 to 28 and increase the payable days from 30 to 35, thus reducing the CCC to 35 days. With 365 days assumed to be the cash operating costs, and a cash operating cost of £7.2 million per annum, a 20-day decrease represents about £394,521 of cash out of working-capital. This is an estimate of when cash will be realized - not when a profit will be made. The report suggests inventory control in segments, terms based on risk of credit, payments to suppliers based on a combination of discipline and good relationships, and rolling cash forecast along with a firm bank liquidity position. The commercial paper market is suitable for creditworthy issuers who have good access to the market, while a bank line is more flexible in the event of uncertain seasonal differences. These recommendations are based on the accepted working capital concepts and should be customized to each firm's industry or currency, as well as its covenants and actual data. (Brigham & Houston, 2022; OpenStax, 2022).

1. Introduction

The short-term financial ability to run the business is known as working capital. The central management issue is the balancing act: insufficient liquidity can disrupt the purchase, manufacturing, payment of employees, and/or debt service, and having too much liquidity, idle cash and too long a credit term can lead to lower returns. Working capital decisions are thus related to profitability and risk associated with the choices made in operations. The brief for the task is to assess the CCC, inventory and receivables and trade credit, compare the use of short-term funding, consider constraints in the demand and supply chain, and provide a blueprint on how to approach cash-flow forecasting.

This report is written from the point of view of a "mature" distributor who sells seasonally. In the interest of not creating the impression that data that is not observed in the companies is actual data, each assumption made in the scenario is labelled and formulas are shown that can be replaced by data from the ledger and sales. Analysis is not an audit, investment recommendation or forecast for a named business.

2. Theoretical Framework and Financial Concepts

2.1 Net working capital and liquidity

Net working capital is the difference between current assets and current liabilities. The current ratio (current assets/current liabilities) reflects general coverage and the quick ratio subtracts inventory and highlights assets that are more easily turned into cash. Both ratios must be considered together – a high ratio could mean old inventory or debt that has gone unpaid or a low ratio could simply indicate a business that is a high turnover retail operation. Managers need to examine the nature, timing and quality of existing assets, in conjunction with cash forecasts and loans to be paid off. (Brigham & Houston, 2022).

2.2 Cash conversion cycle

The operating cycle measures the length of time it takes to turn your inventory into sales and to get paid for your sales. The CCC deductions for the duration of supplier financing. It is normally expressed as: CCC = Inventory days + Receivables days - Payables days. Days of inventory held are usually calculated as the average inventory divided by the cost of goods sold times 365; days of trade receivables as the average trade receivables divided by the credit sales times 365; and days of trade payables as the average trade payables divided by the cost of goods sold or purchases times 365. Denominator should be selected in line with available accounting information. A shorter CCC will mean that less money will be locked up in the operating cycle, but too short can lead to stock-outs and lost sales or damaged supplier relations. (OpenStax, 2022).

2.3 Inventory, receivables and trade credit

The inventory policy should not only look at the risk of not having the inventory available, but ordering costs as well as inventory carrying costs. ABC analysis focuses on the items with the highest value; demand forecasting, reorder points, safety stocks and supplier lead times are used to determine replenishment. For perishable, seasonal and slow moving stock, it is necessary to review each separately. Receivables policy includes customer screening, credit limits, definite invoice conditions, fast invoicing, reminders and dispute resolution. The quicker the collection, the quicker the cash is released, but extremely tough terms might also mean fewer sales, or customers going to competitors. Trade credit is a source of finance used in running the business and early payment discounts should be evaluated on the basis of their annualized cost; the due date specified in the invoice is usually the best time to pay them – do not pay too early. (Brigham & Houston, 2022).

3. Financial Calculations and Scenario Analysis

The examples that follow are of an existing distributor and hypothetical annual figures. It is meant to display the calculations & managerial interpretation; it is NOT company published information.

Input / metric	Baseline assumption	Improvement scenario	Basis
Inventory days (DIO)	50 days	42 days	Inventory planning and replenishment
Receivables days (DSO)	35 days	28 days	Credit control and collections
Payables days (DPO)	30 days	35 days	Negotiated supplier terms
Cash conversion cycle	55 days	35 days	DIO + DSO − DPO
Annual cash operating costs	£7,200,000	£7,200,000	Illustrative assumption

Baseline CCC = 50 + 35 − 30 = 55 days. Improved CCC = 42 + 28 − 35 = 35 days. This reduction is 20 days. If it is just an estimate to work out when cash is likely to be required, the difference would be calculated as a percentage of the annual cash operating cost, which is then divided by 365 and multiplied by the difference, so £7,200,000 × 20% ÷ 365 = approximately £394,521. This is a speculative cash available to operate and is likely to be released if the assumptions are met and the cost base is a reasonable approximation of daily cash outflows. The exact amount will depend on the balance of cost of goods sold, purchases, payroll and other operating payments that change in the CCC, so the change should be reconciled to the actual accounts on the balance sheet before budgeting.

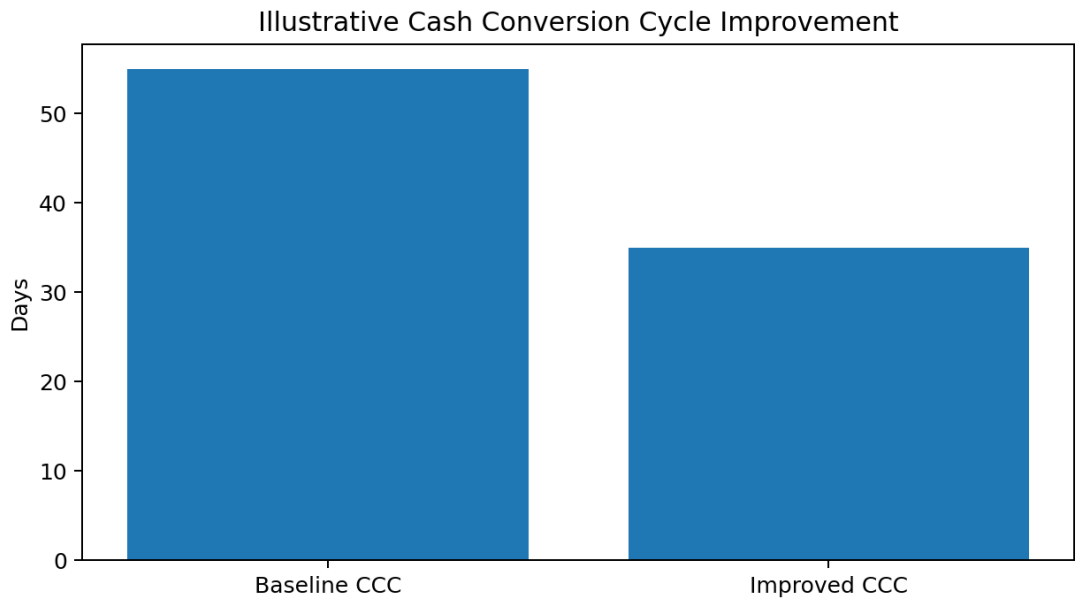


Figure 1. Illustrative reduction in the cash conversion cycle from 55 to 35 days. Source: author's calculations using hypothetical assumptions.

3.1 Interpretation and sensitivity

The scenario shortens the customer collection time by seven days, shortens the stock holding time by eight days and lengthens the time in which the suppliers pay by five days. The first two changes involve process improvement and the third is a negotiation. The 20 day reduction is not a standard that can be guaranteed, as if the customer does not agree to a shorter term, demand is very volatile, or if the suppliers shorten their credit terms, the benefit will be less. Collects in a stress scenario should be tested to be slower, a temporary inventory build and a loss of supplier credit. Service level, gross margin control, overdue balances, stock-outs and supplier complaints also should be monitored by management to ensure that a deteriorating business is not masked by a good CCC.

3.2 Example of early-payment discount

If a supplier extends the terms 2/10, net 30, the supplier will be willing to provide a 2% discount for payment on day 10 instead of day 30. The customer forfeits 20 days of credit for a 2% discount. The approximate annualized cost of not taking the discount is [discount/(1 − discount)] × [365/(net days − discount days)] = 0.02/0.98 × 365/20 = 37.24%. This is a harsh approximation and applying the discount might be a worthwhile deal for the firm if they have cash or financing available that costs less and if the supplier's terms are sincere. The choice should be made based on the comparison of the discount benefit and borrowing cost and liquidity requirements.

4. Short-Term Financing Options

Instrument	Strengths	Limitations / best fit
Bank overdraft or revolving line of credit	Flexible drawdown and repayment; useful for uneven or seasonal deficits	Interest, fees, covenants and renewal risk; commit to a facility sized to plan for the downside
Short-term bank loan	Known principal and repayment schedule; useful for a defined temporary need	Less flexible if cash receipts arrive late; maturity must match the cash cycle
Commercial paper	Can be a cost-effective market instrument for large, creditworthy issuers	Requires investor access, strong credit standing and refinancing discipline; not realistic for many smaller firms
Supplier trade credit	Convenient and linked directly to purchases; may not require separate collateral	Late payment can damage supply and reputation; discounts forgone can be expensive
Receivables finance / factoring	Can accelerate cash from eligible invoices and transfer some collection work	Fees, customer notification or recourse terms may apply; compare total cost and customer impact

Commercial paper refers to short-term promissory notes issued mostly by corporations; the Fed reports on rates by rating and by maturity, and shows some variation in rates by both credit quality and tenor (Board of Governors of the Federal Reserve System, n.d.). The rates are also time sensitive and a CFO should rely on the current rates and not take for granted that commercial paper always costs less than bank borrowing. For any seasonal distributor with intermittent cash flow requirements, the revolving bank facility is likely to be the first line of

defense and commercial paper may only be appropriate if scale, rating and market access are favorable.

5. Discussion and Managerial Implications

The working-capital policy must be consistent with the risk appetite and business characteristics of the company. Conservative policy means that the liquid reserves would be larger and it would depend more on committed funding because the risk of disruption being reduced would be at the cost of the potential return. An aggressive policy involves trading off present assets and short-term financing against greater rollover risk and liquidity risk and can lead to lower financing cost in ordinary times. A matching approach involves funding of permanent working capital requirements through long-term capital and the seasonal peaks through short-term facilities. It depends on the variability of cash flow, the terms of the lender, the quality of assets, and the price of a lack of liquidity.

Where seasonal demand exists, buying should be tied to a rolling sales forecast, and the supplier's lead times, not an annual average. The business could have to construct stock during peak season and draw the facility, after the peak season, the collections should repay the draw. Critical item buffers and alternate suppliers and scenario-based lead times are required because of supply-chain disruption. Additional safety stock costs should be weighed against the contribution margin lost and damage to customer service due to shortages.

The CFO should not take the CCC as a stand-alone goal. The reduction due to reduced inventory can only be good if fill rates and sales are still good. If bad-debt risk and customer retention are not kept under control, a lower DSO will only help to some degree. Reliable suppliers and contract terms that allow a higher DPO are the only circumstances that allow a higher DPO to be maintained. Days based measures should be coupled with operating indicators and cash balances to be reported on management dashboards.

6. Working Capital and Cash-Flow Roadmap

Timing	Action	Owner / monitoring measure
Weeks 1–2	Reconcile 12 months of sales, purchases, inventory, receivables, payables and bank movements; define consistent denominators	Finance controller; data completeness and reconciliation differences
Weeks 2–4	Segment inventory by value, demand variability and criticality; review slow-moving items and reorder points	Operations / procurement; stock-outs, inventory days, write-offs
Weeks 2–4	Create receivables ageing dashboard; invoice promptly, resolve disputes and assign collection ownership	Credit manager; DSO, overdue percentage, bad-debt rate
Monthly	Negotiate supplier terms and evaluate early-payment discounts using the implied-cost formula	Procurement and treasury; DPO, discount capture, supplier service
Weekly	Maintain a rolling 13-week cash forecast with receipts, payroll, tax, capex, debt service and facility headroom	Treasury; forecast error, minimum cash, unused committed credit
Quarterly	Run base, downside and severe-but-plausible scenarios; test delayed customers, inventory build and supplier disruption	CFO; liquidity runway and covenant headroom

A 13-week forecast should start with available cash and then arrange cash receipts and cash payments by expected date (not accounting recognition date). Should differentiate between committed and uncertain receipts, indicate tax and payroll dates, indicate facility availability, and include a downside case. The accuracy of forecasts can be determined as actual cash flow minus the forecasted cash flow for each week and any repeated bias should be examined. The model should be refreshed every week, and have named owners for key changes and thresholds for drawing facilities, discretionary expenditure reductions or collection accelerators.

7. Conclusion and Recommendations

Working capital management is not just a liquidity management issue; it's a coordinated liquidity and operating management discipline. The illustrative calculation demonstrates the possibility of reducing the CCC from 55 to 35 days based on a reduction of inventory holding periods and negotiations of sustainable supplier terms, and the approximate £394,521 of cash timing benefit under the following assumptions. This estimate should be checked with the actual accounting balances and cash payment trends. The suggested priorities include improving inventory segmentation and demand planning, enhancing credit and dispute management, negotiating terms with suppliers, not making unilateral cost-cutting decisions, having a well-defined agreement for seasonal shortfalls to draw from a revolving facility, and have a rolling 13-week forecast with downside scenarios. Liquidity, profitability and service and supplier indicators should be used to assess success together.

References

Board of Governors of the Federal Reserve System. (n.d.). Commercial paper rates and outstanding summary. Retrieved October 22, 2026, from https://www.federalreserve.gov/releases/CP/rates.htm

Brigham, E. F., & Houston, J. F. (2022). Fundamentals of financial management (16th ed.). Cengage Learning.

OpenStax. (2022). Principles of finance 2e: 19.1 What is working capital? https://openstax.org/books/principles-finance-2e/pages/19-1-what-is-working-capital

Appendix A: Calculation Schedule

Calculation	Formula	Result
Baseline CCC	50 + 35 − 30	55 days
Improved CCC	42 + 28 − 35	35 days
CCC reduction	55 − 35	20 days
Indicative cash release	£7,200,000 ÷ 365 × 20	£394,520.55 (≈ £394,521)
Cost of foregoing 2% discount	(0.02 ÷ 0.98) × (365 ÷ 20) × 100	37.24% approximate annualised cost