

Working Cap. Management: Operating Cycle

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Plan of Study

- Importance of Working Capital Management
- Operating Cycle
 - Concept
 - Significance
 - Estimation



Importance of Working Capital Management

- Generally, $\text{Inventory Value} + \text{Debtors} + \text{Cash \& Bank} > \text{Creditors}$
- To fill up the gap, a business unit utilises its cash profit generated and permanent fund that remained idle. If there is still any gap, the company can borrow as working capital loan so that,
- $\text{Inventory Value} + \text{Debtors} + \text{Cash \& Bank} - \text{Creditors} = \text{Cash profit} + \text{Own fund utilised in WC} + \text{Working Capital Loan}$



Importance of Working Capital Management

- Bureau of Public Enterprise
- Inadequate Working Capital: Hampering in Business Process
- Excessive Working Capital: Idle Investment

Conclusion: Optimum Level of Working capital

What is optimum level of Working Capital?

- No fixed or universal criteria
- Industry Average
- Government appointed committee

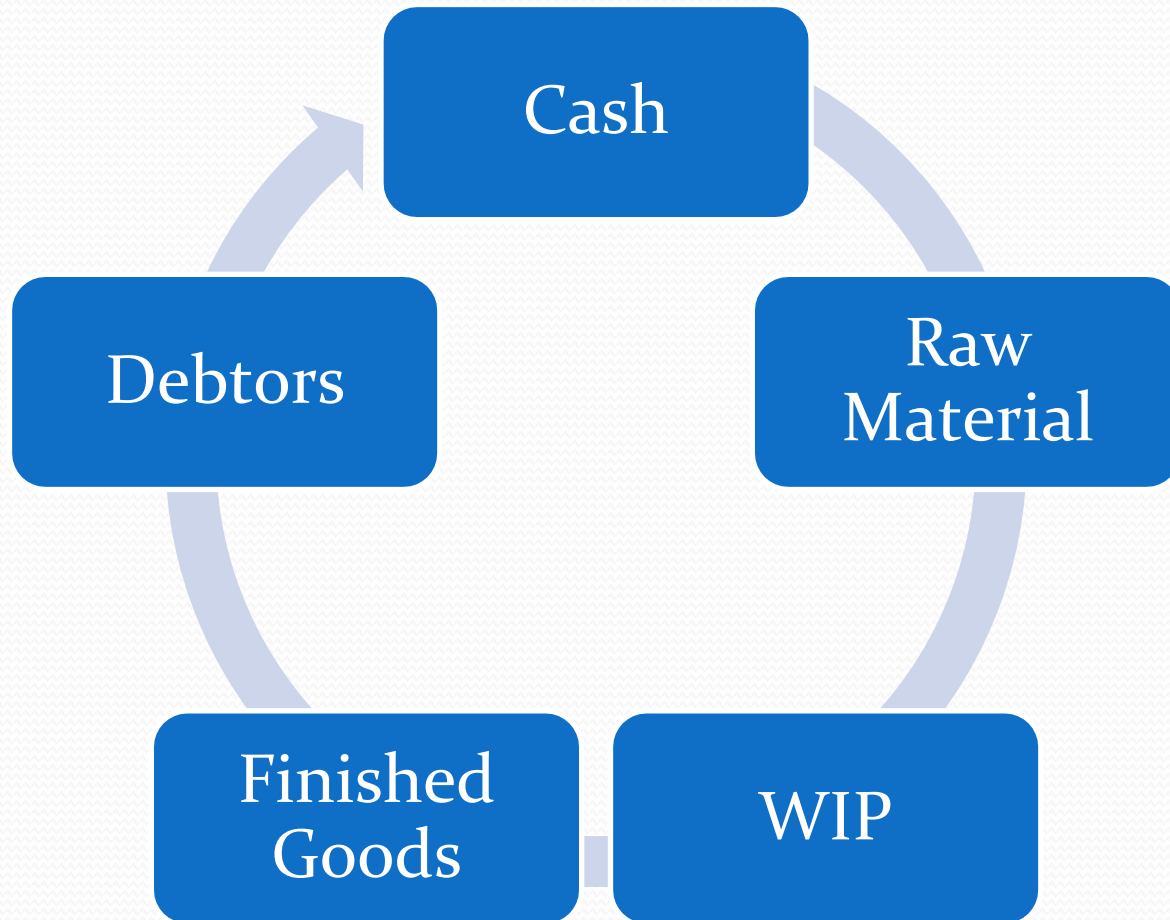


Operating Cycle

- Operating Cycle (OC) is also called Working Capital Cycle (WCC)
- OC or WCC refers to cyclical conversion of components of working capital



Operating Cycle



Operating Cycle (contd.)

- The working Cycle indicates the length of time between payment for material and overhead to realisation of cash by cash sales or from debtors
- Operating Cycle = $R+W+F+D-C$
- If raw material inventory period is 15 days, WIP holding period is 10 days, Finished goods holding period is 12 days, Debtors collection period is 14 days and credit period allowed by suppliers is 7 days then Operating Cycle = $(15+10+12+14-7)$ days = 44days



Significance of Operating Cycle

- Each components of Working Capital has two dimensions:
 - (a) Amount
 - (b) Time
- A particular amount is invested in each component where as time refers to duration between creation of a component and conversion into other form of current assets. Both the dimensions together determines the amount of working capital.



Significance of Operating Cycle

- Even if amount remains the same, lowering the time dimension of working capital component would reduce the requirement of working capital. Thus the related cost.
- Thus the knowledge and determination of operating cycle would help in forecasting, controlling and managing working capital



Estimation of Length of Operating Cycle

- We know: $OC=R+W+F+D-C$
- Raw material storage period (R) =
$$\frac{\text{Avg. Stock of raw materials}}{\text{Average Cost of raw Material Per Day}}$$
- Average Stock of raw materials= $(\text{Op. Stock} + \text{Cl. Stock})/2$
- Average Purchase of raw material per day = $\text{Annual Purchase}/365$



Estimation of Length of Operating Cycle

- W-I-P holding period (W) =
$$\frac{\text{Avg. W-I-P of raw materials}}{\text{Average Cost of Production Per Day}}$$
- Finished Goods Storage Period (F)=
$$\frac{\text{Avg. Stock of Finished Goods}}{\text{Average Cost of goods sold Per Day}}$$
- Average Collection Period (D)=
$$\frac{\text{Avg. Debtors and Receivables}}{\text{Average Credit Sales per day}}$$
- Credit Period (C) =
$$\frac{\text{Avg. creditors and payables}}{\text{Credit Purchase Per Day}}$$



Find out the Length of Operating Cycle from the following information:

Illustration 1:

- Annual Sales (40% cash sales): 14 cr.
- Annual Purchase (70% cash purchase): 10.5 cr.
- Annual Cost of Production Rs. 12.25 cr.
- Consider 1 year=350
- Components of Working Capital [See next slide]



Components of Working Capital

| Components | 2018-19 (Rs. Lakh) | 2019-20 (Rs. Lakh) |
|------------------|--------------------|--------------------|
| Cash | 0.4 | 0.6 |
| Inventory: | | |
| - Raw material | 7.0 | 7.4 |
| - Finished Goods | 8.5 | 9.5 |
| Debtors | 6.6 | 6.0 |
| Creditors | 3.5 | 4.0 |



Estimation of Working Capital

- Working Capital Requirement= Requirement of Inventory + Requirement of Investment for Debtors (Receivables) + Requirement of Cash – Credit Allowed by creditors (Payables)
- Working Capital Requirement= Inventory Storage Period (days) * estimated cost of raw material per day + Collection period from debtors* estimated daily credit sale + Requirement of no of days cash* cash requirement per day – Credit Period by creditors* daily credit purchase

Estimation of Working Capital

- Investment in Inventory
= Estimated Daily Production* Estimated Cost per unit* Average Inventory Storage Period
- Investment in Debtors
= Estimated Daily Credit Sales* Estimated Cost Per Unit* Average Collection Period
- Credit from Creditors
= Estimated Daily Credit Purchase* Estimated Cost Per unit of raw materials* Average Credit Period allowed by creditors

Estimation of Working Capital

From previous illustration [No.1] determine the requirement of working capital

Questions for self-evaluation

- What is the importance of working capital management?
- Discuss the concept of working capital with help of diagram.
- What is importance of Operating Cycle?
- How to determine the length of a working capital?
- How to estimate the working capital requirement with help of operating cycle?



References & Recommendation:

- Financial Management, M.Y. Khan & P.K. Jain, McGraw Hill India
- Financial Management, Prasanna Chanda, Mc Graw Hill India
- Financial Management, I.M.Pandey, Vikas
- Study material of ICAI
- Study Material of ICMA

[All available latest editions of the above books are recommended]



Thank You

