CREDIT ANALYSIS

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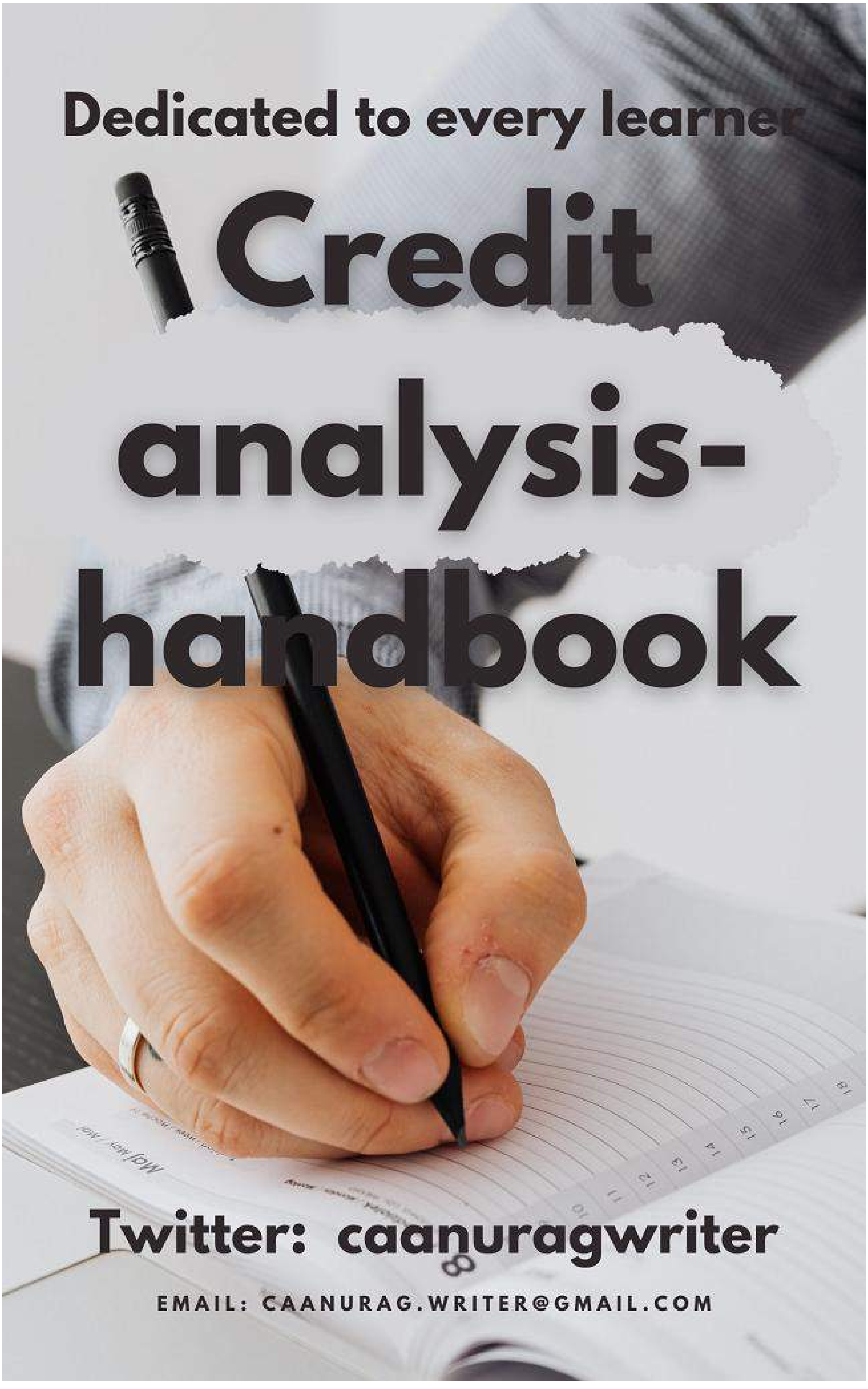
CA, DISA, FAFD, MBA(FINANCE)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Credit analysis-handbook
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Credit Analysis

⇒ Method of calculating credit worthiness of an entity
⇒ It's the evaluation of the ability of a company/entity to honor it's financial obligation.
⇒ It is basically undertaken by banks/financial institutions before granting loan or credit facility to an entity.
Various factors/ratios are looked into during credit analysis.

Ratios used in credit analysis

1. Current Ratio (CR) = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$

   Ideal CR = 2:1

2. Quick Ratio (QR) = $\frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}$

   Ideal QR = 1:1

3. Cash Ratio = $\frac{\text{Current Assets} - \text{Inventory} - \text{Receivables (Debtors)}}{\text{Current Liabilities}}$

   Ideal Cash Ratio = 0.5:1

** Imp.:-
Current assets basically include:
Bank/Cash + Inventory + Receivables + Marketable Securities.
These are basically assets which can be encashed in a very short period of time.

Current Liabilities:
are short term liabilities that includes creditors, short-term payments, overdrafts etc.

4. Cost of Goods Sold (COGS) :-

Opening Stock + Purchases – Closing Stock

→ It includes all the costs directly related to the goods; i.e. cost of material, labor and manufacturing overhead.

5. Gross Profit :-

Net Sales – COGS

→ Net Sales = Total Sales – Returns – Discounts – Taxes on Sale.

6. Gross Profit Ratio (GP Ratio) :-

$$\frac{\text{Gross Profit}}{\text{Net Sales}} \times 100$$

→ It is calculated on percentage basis.

→ GP Ratio of 60-65% is considered good.

7. Net Profit = Gross Profit – Expenses

Expenses that are deducted from Gross Profit include :-

- Operating expenses
- Selling, general and administrative expenses
- Income tax
- Depreciation and interest on loans and debts.

8. Net Profit Ratio :-

$$\frac{\text{Net Profit}}{\text{Net Sales}} \times 100$$

Net Profit Ratio of 20% is considered good.

9. Interest Coverage Ratio =

$$\frac{\text{EBIT}}{\text{Interest Expense}}$$

→ EBIT = Earnings before Interest and Taxes.

→ Higher the better

→ It measures the ability of an entity to pay off its debts.

→ 1.5 is generally considered as a minimum acceptable Ratio.

10. Debt Service Coverage Ratio (DSCR) =

$$\frac{\text{Net Operating Income}}{\text{Total Debt Service}}$$

→ Total Debt Service =
(Interest (1 - Tax Rate)) + Principal amount.

→ Higher the better.

→ Ideal DSCR is 2 or higher.

** Imp.:-

Difference between Net Operating Income (NOI) and EBIT

→ EBIT includes depreciation and amortization expenses which are deducted while calculating NOI.

11. Return on Capital Employed (ROCE)
(also known as Primary Ratio) =

$$\frac{\text{Earnings before Interest and Tax (EBIT)}}{\text{Capital Employed}}$$

→ Capital Employed = Total assets − Current Liabilities
or Shareholders Equity + Long-term Liabilities.

→ 15% or more is considered very good.

12. Free Cash Flows =
Cash Flow from operations − Capital Expenditure

→ Cash Flow from operations :-
Net Income + Non cash items + Changes in working capital

→ Positive free cash flows is good for an entity. It shows that an entity is able to generate cash.

13. Debt to Equity Ratio (D/E)
Also known as risk ratio =

$$\frac{\text{Total debt}}{\text{Shareholders' Equity}}$$

→ Total debt includes short-term as well as long-term debt.

→ Higher the better, but shouldn't be too high.

→ Ideal Ratio is 1-1.5 : 1

14. Stock Turnover Ratio =

$$\frac{\text{Cost of goods sold}}{\text{Average Inventory}}$$

→ Shows how quickly an entity is selling it's goods.

→ Higher the better

→ Ideal Stock Turnover Ratio is 4-6.

15. Debtors Turnover Ratio (Receivable Turnover Ratio) =

$$\frac{\text{Net Credit Sales}}{\text{Average accounts Receivables}}$$

→ Account Receivables = Trade debtors + Bills Receivables.

→ Average account Receivables =

$$\frac{\text{Account Receivables at begining} + \text{Account Receivable at the end of the year}}{2}$$

→ While calculating debtors turnover ratio, we only take net credit Sales, and not total sales.

→ Higher the better.

16. Average Collection Period =

$$\frac{\text{Average account receivables}}{\text{Net Credit Sales}} \times 365$$

– Lower the better.

17. Creditors Turnover Ratio (Accounts Payable Turnover Ratio)

$$= \frac{\text{Net Credit Purchases}}{\text{Average accounts payable}}$$

→ It measures how quickly an entity makes payment to it's Suppliers and creditors.

→ Higher the better, but it shouldn't be too high.

18. Asset Turnover Ratio =

$$\frac{\text{Net Sales}}{\text{Average total assets}}$$

→ Average total assets =

$$\frac{\text{Assets at the beginning + Assets at the end of the year}}{2}$$

19. Net Working Capital =

Current Assets − Current Liabilities.

20. Working Capital turnover Ratio =

$$\frac{\text{Net Sales}}{\text{Average working capital}}$$

WORKING CAPITAL ASSESSMENT

(i) Nayak Committee method / Simplified Turnover Method :-

→ Working Capital Requirement is calculated at 25% of annual projected turnover

→ Out of 25%, 5% is required to be met by the borrower from own resources and 20% is to be financed by the lending bank / financial institution.

(ii) Tandon Committee Method :-

(a) First Method :-

25% of working capital (Current assets - Current liab (excluding bank borrowings

to be contributed by the entity (borrower) through long term funds (resources) and 75% can be financed by lending bank / financial institution.

(b) Second method :-

25% of current assets excluding export receivables to be contributed by the borrower through long-term funds (resources) and the remaining to be financed by the lending bank / financial institution.

CLASSIFICATION OF Ratios

(1) Liquidity Ratios :-

- Determine an entity's obligation to pay short-term debt obligation.

Includes:-

(a) Current Ratio
(b) Quick Ratio
(c) Cash Ratio

(2) Profitability Ratios :-

- Determine an entity's ability to earn profits.

Includes :-

(a) Gross Profit Ratio
(b) Net Profit Ratio
(c) Return on capital employed.

(3) Solvency Ratios :-

- Determine Long-term solvency of an entity.

Includes:-

(a) Interest coverage Ratio
(b) Debt Service Coverage Ratio.
(c) Debt to equity Ratio

(4) Efficiency Ratios :-

- Determines the efficiency of an entity in using it's assets and liabilities to generate revenue and profits.

Includes :-

(a) Asset turnover Ratio
(b) Working Capital Ratio
(c) Debtors turnover Ratio
(d) Stock turnover Ratio

Difference between :-

	Cash Flow Statement	Fund Flow Statement
1.	Uses the cash basis of accounting.	Uses the accrual basis of accounting.
2.	Shows the inflow and outflow of cash.	Shows the Sources and application of funds.
3.	Useful for short-term financial analysis	Useful for long-term financial analysis.
4.	It is basically used for cash budgeting.	It is basically used for capital budgeting.
5.	Shows the opening and closing cash balance.	Shows from where the funds are generated and then utilised.

Important ***

Cash is something that an entity has or can be generated in a very short spam of time.

Funds refers to all types of financial resources.

Ind AS 7:- Statement of cash flows

⇒ 1. Cash flow can be divided into 3 parts:-

i. Operating activities.
ii. Investing activities
iii. Financing activities.

⇒ 2. Operating activities:-

→ There are two methods of calculating cash flow from operations:-

Direct Method

1. Major classes of gross cash receipts and payments are classified.

Cash receipts from customers	xxx
Cash paid to suppliers and workers	(xx)
Tax Paid	(xx)
Net cash from operating activities.	

Indirect Method

Profit or Loss is adjusted for the effect of non-cash transactions

Net Profit before tax	xxx
Adjustments for:-	
Depreciation	
Int. and dividend	
Gain or loss on sale of fixed assets	
Operating profit before working capital changes	
Add:- Increase in current liab. and decrease in current asset.	
Less:- Decrease in current liab. and increase in current asset	
Net cash from operations	

⇒ 3. Investing Activities :-
- Acquisition and disposal of fixed assets.
- Other investments not included in cash equivalents

⇒ 4. Financing Activities :-
- Activities resulting in change in the size and composition of owner's capital i.e. issue of share capital, dividend paid.
- Borrowings of the organization.

⇒ 5. Other important points :-
- Interest paid and dividend received are classified as operating cash flows for a financial institution.
- In case of other entities, interest and dividend received should be classified as cash flow from investing activities.
- Dividend paid should be classified as cash flows for financing activities for both financial and other institutions.

⇒ 6. Disclosures :-
- Significant cash and cash equivalents held by the entity that are restricted for specific purpose i.e. that is being pooled to be utilized for some purpose.
- Shall disclose the components of cash and cash equivalents.

Difference between :-

Ind AS 7	AS 3
1. Bank overdraft will be treated as cash and cash equivalent.	There is no specific classification of Bank overdraft, but it is normally treated as financing activity.
2. The concept of extraordinary items doesn't exist in Ind AS.	Extra-ordinary items/cash flows are disclosed separately under operating, investing or financing activities.
3. Change in ownership interest without loss of control (50%) is classified as financing activity and change in ownership interest with loss of control is classified as investing activity.	There is no specific guidance relating to change in ownership as per AS-3.

CMA → Credit Monitoring Arrangement

- Compiled Report of past and projected financial position of an entity

Contents of CMA Report :-

→ Past year audited financial statement

→ Current year provisional financial statement

→ Future year projected financials

→ Repayment of loan schedule.

Statements covered in CMA

→ Operating statement – Covering past and projected calculation of operating profits taking into consideration current and projected sales, purchase, expenses (direct and indirect)

→ Analysis of Balance Sheet – Covering past and projected assets and liabilities, net worth, working capital.

→ Comparative Statement of Current Assets and current liabilities' Covering analysis of various current assets and current Liabilities under seperate heads.

→ Fund Flow Statement :- Past and projected flow of funds

→ Analysis of financial position through calculation of various ratios.

Ratios calculated in CMA

→ Gross Profit Ratio
→ Net Profit Ratio
→ Interest coverage Ratio
→ Debt Service coverage Ratio
→ Current Ratio
→ Quick Ratio
→ Debt - Equity Ratio
→ Fixed asset coverage Ratio
→ Inventory turnover Ratio
→ Debtors turnover Ratio
→ Creditors turnover Ratio
→ Return on Capital Employed Ratio (%)

Along with above ratios we also calculated net working capital.