DegreeLive

B.Com Honours

Semester V

Calicut University

Management Accounting

Course Code: COM5CJ302 • Module 3 Notes

Module III: Fund Flow and Cash Flow Analysis

Curricular Scope & Foundational Framework

While traditional financial statements—the Statement of Profit and Loss and the Balance Sheet—reveal operating profitability and static financial standing at a single point in time, they fail to disclose the underlying **movement of economic resources** across time. A corporation may report record accounting profits and yet slide into sudden bankruptcy due to acute liquidity exhaustion. **Fund Flow Analysis** and **Cash Flow Analysis** constitute the dynamic analytical pillars of management accounting that unravel this paradox. This module delivers an exhaustive examination of the concept of "Fund", the rules governing the flow of funds, preparation of the **Schedule of Changes in Working Capital**, determination of **Funds from Operations (FFO)**, compilation of the **Fund Flow Statement**, and full mastery of the **Cash Flow Statement under Accounting Standard-3 (AS-3 Revised) and Ind AS 7** across Operating, Investing, and Financing activities.

1. Meaning and Conceptual Foundations of Fund Flow Analysis (Unit 9)

The term **"Fund"** is used in multiple commercial senses:

- **Narrow Sense (Cash Basis):** Fund is defined strictly as cash and bank balances. This concept underlies Cash Flow Analysis.
- **Broad Sense (Total Financial Resources):** Fund encompasses all economic resources, tangible assets, and capital claims.
- **Working Capital Sense (Standard Accounting Sense):** In Fund Flow Analysis, "Fund" specifically and universally denotes **Net Working Capital**, which is the mathematical excess of Current Assets over Current Liabilities:

$$\textbf{Net Working Capital} = \textbf{Current Assets} - \textbf{Current Liabilities}$$

Meaning of "Flow of Funds" and The Golden Rule

"Flow of Funds" means a net change (increase or decrease) in the quantum of Net Working Capital resulting from a business transaction. Any transaction that causes an expansion or contraction in Net Working Capital constitutes a flow of funds.

To determine whether a transaction causes a flow of funds, all ledger accounts are bifurcated into two broad categories:

1. Current Accounts (Working Capital)

Accounts representing **Current Assets** (Cash, Bank, Debtors, Bills Receivable, Inventories, Marketable Investments, Prepaid Expenses) and **Current Liabilities** (Creditors, Bills Payable, Outstanding Expenses, Short-term Bank Overdraft).

2. Non-Current Accounts (Long-Term)

Accounts representing **Permanent Capital & Long-Term Liabilities** (Equity Capital, Preference Capital, Debentures, Long-Term Loans, Reserves & Surplus) and **Non-Current Assets** (Land, Buildings, Plant & Machinery, Furniture, Patents, Long-Term Investments).

THE MASTER RULE OF FUND FLOW DETERMINATION

Core Principle

A Flow of Funds takes place ONLY when a transaction involves ONE Current Account and ONE Non-Current Account!

The Three Analytical Scenarios:

- **Case 1: Current Account ↔ Current Account = NO FLOW OF FUNDS:** Cash collected from Debtors, payment made to Creditors, or cash deposited into Bank merely reshuffles current assets or liabilities; Net Working Capital remains completely unchanged.
- **Case 2: Non-Current Account ↔ Non-Current Account = NO FLOW OF FUNDS:** Issue of equity shares to purchase land, conversion of debentures into shares, or transfer of profits to general reserve involves only long-term accounts; working capital is unaffected.
- **Case 3: Non-Current Account ↔ Current Account = FLOW OF FUNDS OCCURS:**
    - If the transaction increases Working Capital → **SOURCE OF FUNDS (Inflow)** (e.g., issue of shares for cash, sale of machinery for cash, long-term bank loan raised).
    - If the transaction decreases Working Capital → **APPLICATION OF FUNDS (Outflow)** (e.g., purchase of machinery for cash, redemption of debentures, payment of dividend).

2. Need, Objectives, and Managerial Uses of Fund Flow Statement

The Fund Flow Statement serves as a critical strategic diagnostic tool for financial executives:

- **Explaining the "Profitable yet Illiquid" Paradox:** Solves the classic executive dilemma where a firm reports handsome book profits on its Income Statement but is unable to pay suppliers, declare dividends, or service bank loans due to funds being locked up in non-current fixed assets.
- **Appraising Financial Strategy:** Demonstrates whether long-term fixed assets (plant, buildings) were soundly financed from long-term capital (equity, debt) or dangerously financed using short-term working capital (a fatal financial mismatch).
- **Assessing Working Capital Management:** Tracks the efficiency of working capital utilization, identifying build-up in inventories or over-extended debtor balances.
- **Guiding Dividend & Debt Redemption Policies:** Informs the Board of Directors whether internal fund generation is sufficient to support cash dividends and scheduled debenture sinking fund commitments.

- **Credit Evaluation by Institutional Lenders:** Commercial banks and term-lending institutions examine fund flow statements to evaluate borrowing capacity and repayment viability before sanctioning term loans.

3. Statement / Schedule of Changes in Working Capital (Unit 10)

The compilation of a Fund Flow Statement begins with the preparation of the **Schedule of Changes in Working Capital**. This statement compares the Current Assets and Current Liabilities of two consecutive balance sheet dates to determine the Net Increase or Net Decrease in Working Capital.

> The Four Cardinal Rules of Working Capital Shifts
> 1. **Increase in a Current Asset** → Causes an **Increase (+) in Working Capital**.
> 2. **Decrease in a Current Asset** → Causes a **Decrease (−) in Working Capital**.
> 3. **Increase in a Current Liability** → Causes a **Decrease (−) in Working Capital**.
> 4. **Decrease in a Current Liability** → Causes an **Increase (+) in Working Capital**.

Standard Tabular Format of Schedule of Changes in Working Capital

Particulars	Previous Year (₹)	Current Year (₹)	Increase in WC (+)	Decrease in WC (−)
A. Current Assets:				
• Cash in Hand and at Bank	25,000	40,000	15,000	—
• Trade Receivables (Debtors)	1,20,000	95,000	—	25,000
• Inventories (Stock)	80,000	1,10,000	30,000	—
• Prepaid Expenses	5,000	3,000	—	2,000
Total Current Assets (A)	**2,30,000**	**2,48,000**	**—**	**—**
B. Current Liabilities:				
• Trade Payables (Creditors)	60,000	75,000	—	15,000
• Outstanding Operating Expenses	10,000	6,000	4,000	—
Total Current Liabilities (B)	**70,000**	**81,000**	**—**	**—**
Working Capital (A − B)	**1,60,000**	**1,67,000**	**49,000**	**42,000**
Net Increase in Working Capital (Balancing Figure)	**7,000**	**—**	**—**	**7,000**
TOTAL EQUALIZED	**1,67,000**	**1,67,000**	**49,000**	**49,000**

4. Computation of Funds from Operations (FFO) [Unit 10]

The primary internal source of funds is trading operations. However, the **Net Profit** disclosed by the Profit and Loss Account does not represent Funds from Operations because it is arrived at after debiting non-fund and non-operating expenses and crediting non-operating revenues.

STATEMENT OF FUNDS FROM OPERATIONS (FFO) Add-Back Method

$$\text{Funds from Operations} = \text{Closing P\&L Balance} - \text{Opening P\&L Balance} + \text{Non-Fund/Non-Operating Debits} - \text{Non-Operating Credits}$$

Standard Computational Adjustments:

- **Add Back Non-Fund & Non-Operating Debits:**
  - Depreciation on Fixed Assets.
  - Amortization of Intangible / Fictitious Assets (Goodwill, Patents, Trademarks, Preliminary Expenses, Discount on Issue of Debentures).
  - Loss on Sale of Fixed Assets or Long-Term Investments.
  - Transfers to Reserves (General Reserve, Debenture Redemption Reserve).
  - Provision for Taxation and Proposed Dividend (if treated as non-current appropriations).
- **Deduct Non-Operating Credits:**
  - Profit on Sale of Fixed Assets or Long-Term Investments.
  - Dividend or Interest received on Non-Trade Investments.
  - Reversal of Excess Provisions / Tax Refunds.

5. Preparation of Fund Flow Statement (Unit 11)

The **Fund Flow Statement** synthesizes all long-term sources and applications of capital across the financial period. It can be prepared either in Report Form (vertical) or Account Form (T-shape).

Sources of Funds (Inflows)

- **Funds from Operations (FFO):** Positive internal operational cash generation.
- **Issue of Share Capital:** Issue of equity or preference shares for cash (including securities premium).
- **Issue of Debentures / Raising Loans:** Long-term debt capital raised.
- **Sale of Fixed Assets / Investments:** Gross cash realization from disposal of property, plant, equipment, or shares.
- **Non-Trading Receipts:** Dividends/interest received.
- **Net Decrease in Working Capital:** Balancing figure if applications exceed sources.

Applications of Funds (Outflows)

- **Funds Lost in Operations:** Negative operating result (cash drain).
- **Purchase of Fixed Assets:** Capital expenditure on land, buildings, plant, machinery, furniture.
- **Purchase of Long-Term Investments:** Acquisition of government securities or corporate shares.
- **Redemption of Preference Shares / Debentures:** Capital repayments (including premium on redemption).
- **Repayment of Long-Term Loans:** Settlement of bank mortgages or institutional loans.
- **Payment of Dividend & Tax:** Cash outflow for proposed/interim dividends and income tax.
- **Net Increase in Working Capital:** Balancing figure.

6. Concept and Framework of Cash Flow Statement (AS-3 & Ind AS 7) [Unit 12]

Under modern corporate reporting standards governed by **Section 133 of the Companies Act, 2013**, **Accounting Standard-3 (AS-3 Revised)**, and **Indian Accounting Standard 7 (Ind AS 7)**, every commercial corporation (except specified One Person Companies and small private companies) must mandatorily present a **Cash Flow Statement** as an integral part of its annual audited financial statements.

Meaning of Cash and Cash Equivalents

Under AS-3, **"Cash"** comprises cash in hand and demand deposits with banks. **"Cash Equivalents"** are short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value (typically debt instruments having a maturity period of **three months or less** from the date of acquisition, such as Treasury Bills, Commercial Paper, and Short-term Government Securities).

Tripartite Classification of Cash Flow Activities

AS-3 mandates that cash flows must be classified into three mutually exclusive operational categories:

1. Operating Activities

The principal revenue-producing activities of the enterprise and other activities that are not investing or financing. Key indicator of whether operations generate sufficient cash to maintain operating capability without external financing.

2. Investing Activities

The acquisition and disposal of long-term assets, property, plant, equipment, and other investments not included in cash equivalents. Reflects expenditures made for resources intended to generate future income and cash flows.

3. Financing Activities

Activities that result in changes in the size and composition of the owner's capital (equity and preference shares) and borrowings of the enterprise. Useful in predicting claims on future cash flows by providers of capital.

7. Computation of Cash Flow from Operating Activities (Indirect Method)

The Indirect Method starts with the net profit or loss reported in the Statement of Profit and Loss and adjusts it for the effects of transactions of a non-cash nature, any deferrals or accruals of past or future operating cash receipts or payments, and items of income or expense associated with investing or financing cash flows:

INDIRECT METHOD ALGORITHM (AS-3 FORMAT)

Operating Activities

Net Profit Before Tax and Extraordinary Items
+ Non-Cash / Non-Operating Expenses − Non-Operating Incomes
= Operating Profit Before Working Capital Changes
+ Decrease in Current Assets − Increase in Current Assets
+ Increase in Current Liabilities − Decrease in Current Liabilities
− Income Taxes Paid = Net Cash Flow from Operating Activities

Working Capital Rules under Cash Flow Statement:

- **Current Assets (excluding Cash & Cash Equivalents):** An increase represents a cash outflow (−); a decrease represents a cash inflow (+).
- **Current Liabilities (excluding Short-Term Bank Borrowings/Overdrafts):** An increase represents cash retained (+); a decrease represents cash paid out (−).
- **Bank Overdraft & Cash Credit:** Classified under **Financing Activities** as short-term borrowings under AS-3.

Direct Method of Reporting Operating Cash Flows

Under the **Direct Method**, major classes of gross cash receipts and gross cash payments are directly extracted from accounting ledgers:

DIRECT METHOD GROSS CASH CALCULATION

AS-3 Paragraph 18(a)

Cash Receipts from Customers − Cash Paid to Suppliers − Cash Paid to Employees − Operating Overheads Paid = Cash Generated from Operations

Derivation Formulas:

- **Cash Collected from Debtors:** Net Sales + Opening Debtors & B/R − Closing Debtors & B/R.
- **Cash Paid to Suppliers:** Net Purchases + Opening Creditors & B/P − Closing Creditors & B/P (where Purchases = COGS + Closing Stock − Opening Stock).
- **Cash Operating Expenses:** Operating Expenses + Prepaid Expenses at end + Outstanding Expenses at beginning − Prepaid at beginning − Outstanding at end.

8. Treatment of Special Items in Cash Flow Reporting (AS-3 & Ind AS 7)

Certain complex financial items require specific regulatory presentation under AS-3 and Ind AS 7:

1. Interest & Dividends Classification

- **For Financial Enterprises (Banks, NBFCs):** Interest paid, interest received, and dividends received are classified as **Operating Activities**. Dividend paid is always a **Financing Activity**.
- **For Non-Financial (Manufacturing/Commercial) Enterprises:**
  - Interest paid & Dividends paid → **Financing Activities** (cost of capital).
  - Interest received & Dividends received → **Investing Activities** (return on investments).

2. Income Taxes on Cash Flows

Cash flows arising from taxes on income should be separately disclosed and classified as cash flows from **Operating Activities**, unless they can be specifically identified with financing or investing activities (e.g., capital gains tax paid on sale of land is classified under Investing Activities).

3. Proposed Dividend (AS-4 Revised Standard)

Under AS-4 (revised), dividend proposed by the Board of Directors after the balance sheet date is a **non-adjusting event**; no liability is recognized on the balance sheet date. It is disclosed only in the Notes to Accounts. Therefore, the proposed dividend of the previous year (approved by shareholders in AGM) is paid during the current year and recorded as an outflow under **Financing Activities**.

4. Non-Cash Investing & Financing Activities

Investing and financing transactions that do not require the use of cash or cash equivalents (e.g., the acquisition of assets by assuming directly related liabilities or by means of a finance lease, or the acquisition of an enterprise by means of an issue of equity shares) are **excluded from the Cash Flow Statement** and disclosed in the financial statement notes.

9. Comparative Analysis: Funds from Operations (FFO) vs. Cash from Operations (CFO)

Feature	Funds from Operations (FFO)	Cash from Operations (CFO)
Core Concept	Represents net increase in **Net Working Capital** from trading operations.	Represents net increase in **Cash and Bank Balances** from trading operations.
Working Capital Changes	**Excludes** working capital changes (inventories, debtors, creditors are handled in a separate schedule).	**Includes** working capital adjustments directly to reconcile accrual profit with actual cash realization.
Relationship	FFO reflects operational fund capacity on an accrual basis.	**CFO = FFO ± Changes in Working Capital Components − Tax Paid**.
Analytical Role	Evaluates long-term fund-generating vitality of core operations.	Evaluates real-time cash liquidity to meet payroll, supplier bills, and debt maturities.

10. Comprehensive Comparison: Fund Flow Statement vs. Cash Flow Statement

Point of Distinction	Fund Flow Statement	Cash Flow Statement
1. Meaning of Fund	Concept of fund is broad, based on **Net Working Capital** (Current Assets − Current Liabilities).	Concept of fund is narrow, restricted strictly to **Cash and Cash Equivalents**.
2. Accounting Basis	Constructed on **Accrual Basis**; incorporates credit transactions affecting working capital.	Constructed strictly on **Cash Basis**; records only actual cash receipts and payments.
3. Statutory Status	No statutory compulsion under Indian law. Purely an internal management tool.	**Mandatory** for corporate entities under Companies Act, 2013 and AS-3 / Ind AS 7.
4. Structural Layout	Two-part structure: Schedule of Changes in Working Capital and Sources & Applications Statement.	Single statement categorized into **Operating, Investing, and Financing** activities.
5. Analytical Horizon	Suited for **intermediate and long-term financial planning** and capital allocation.	Suited for **short-term liquidity management**, daily solvency, and cash budgeting.
6. Working Capital Shifts	Detailed itemized analysis of individual working capital component changes.	Working capital changes are consolidated purely as adjustments to operating cash profit.

11. Master Practical Problem: Comprehensive Fund Flow Statement

Master Case Study: Pinnacle Industries Ltd.

The comparative Balance Sheets of Pinnacle Industries Ltd. as on 31st March 2023 and 31st March 2024 are given below:

Equities & Liabilities	2023 (₹)	2024 (₹)	Assets	2023 (₹)	2024 (₹)
Equity Share Capital	3,00,000	4,00,000	Plant & Machinery	2,00,000	2,80,000
General Reserve	60,000	80,000	Land & Buildings	1,50,000	1,30,000
Profit & Loss Balance	40,000	65,000	Inventories	1,10,000	1,25,000
10% Debentures	1,00,000	60,000	Trade Debtors	90,000	1,15,000
Trade Payables	55,000	72,000	Cash & Bank	35,000	62,000
Provision for Tax	30,000	35,000			
Total	**5,85,000**	**7,12,000**	**Total**	**5,85,000**	**7,12,000**

Additional Information: 1. Depreciation written off on Plant & Machinery during the year was ₹30,000; on Land & Buildings ₹20,000.
2. Interim dividend paid during the year was ₹25,000.
3. Income tax paid during the year amounted to ₹28,000.

Step 1: Schedule of Changes in Working Capital

- Current Assets: 2023 = Stock (₹1,10,000) + Debtors (₹90,000) + Cash (₹35,000) = ₹2,35,000.
- Current Assets: 2024 = Stock (₹1,25,000) + Debtors (₹1,15,000) + Cash (₹62,000) = ₹3,02,000.
- Current Liabilities (Trade Payables only): 2023 = ₹55,000; 2024 = ₹72,000.
- Working Capital 2023 = ₹2,35,000 − ₹55,000 = ₹1,80,000.
- Working Capital 2024 = ₹3,02,000 − ₹72,000 = ₹2,30,000.
- **Net Increase in Working Capital = ₹2,30,000 − ₹1,80,000 = ₹50,000.**

Step 2: Hidden Plant & Machinery Purchases (Ledger Analysis)

- Plant Account: Opening (₹2,00,000) − Depreciation (₹30,000) = ₹1,70,000. Closing is ₹2,80,000.
- Purchases of Plant & Machinery = ₹2,80,000 − ₹1,70,000 = **₹1,10,000 (Application of Funds).**

Step 3: Funds from Operations (FFO)

- Closing P&L Balance = ₹65,000
- Add: Transfer to General Reserve (₹80,000 − ₹60,000) = ₹20,000

- Add: Interim Dividend Paid = ₹25,000
- Add: Provision for Tax created in P&L (Tax A/c: Closing ₹35,000 + Paid ₹28,000 − Opening ₹30,000) = ₹33,000
- Add: Depreciation on Plant (₹30,000) + Depreciation on Buildings (₹20,000) = ₹50,000
- Subtotal = ₹1,93,000
- Less: Opening P&L Balance = ₹40,000
- **Funds from Operations (FFO) = ₹1,53,000 (Source of Funds).**

Step 4: Final Fund Flow Statement
Sources of Funds:
- **Funds from Operations (FFO): ₹1,53,000**
- **Issue of Equity Share Capital: ₹1,00,000**
- ***Total Sources = ₹2,53,000***

Applications of Funds:
- **Purchase of Plant & Machinery: ₹1,10,000**
- **Redemption of Debentures (₹1,00,000 − ₹60,000): ₹40,000**
- **Payment of Interim Dividend: ₹25,000**
- **Payment of Income Tax: ₹28,000**
- **Net Increase in Working Capital: ₹50,000**
- ***Total Applications = ₹2,53,000 [Fully Reconciled & Balanced!]***

12. Master Practical Problem: Cash Flow Statement under AS-3 (Indirect Method)

Cash Flow Statement Solution (Pinnacle Industries Ltd. for year ended 31-03-2024)

A. Cash Flow from Operating Activities:

• Net Profit Before Tax and Extraordinary Items (P&L Diff ₹25,000 + Transfer to Reserve ₹20,000 + Interim Dividend ₹25,000 + Provision for Tax ₹33,000) = ₹1,03,000

• Add: Non-Cash Charges (Depreciation ₹50,000) = ₹1,53,000 (Operating Profit Before WC Changes)

• Adjustments for Working Capital Changes:

  • Increase in Inventories (₹1,25,000 − ₹1,10,000) = (−₹15,000)

  • Increase in Debtors (₹1,15,000 − ₹90,000) = (−₹25,000)

  • Increase in Trade Payables (₹72,000 − ₹55,000) = +₹17,000

• Cash Generated from Operations = ₹1,53,000 − ₹15,000 − ₹25,000 + ₹17,000 = ₹1,30,000

• Less: Income Tax Actually Paid = ₹28,000

• Net Cash Flow from Operating Activities (A) = ₹1,02,000

B. Cash Flow from Investing Activities:

• Purchase of Plant & Machinery = (−₹1,10,000)

• Net Cash Used in Investing Activities (B) = (−₹1,10,000)

C. Cash Flow from Financing Activities:

• Proceeds from Issue of Share Capital = +₹1,00,000

• Redemption of 10% Debentures = (−₹40,000)

• Interim Dividend Paid = (−₹25,000)

• Net Cash Flow from Financing Activities (C) = +₹35,000

D. Net Increase in Cash and Cash Equivalents (A + B + C):
• Operating (₹1,02,000) − Investing (₹1,10,000) + Financing (₹35,000) = + ₹27,000
• Add: Cash & Cash Equivalents at Beginning of Year (2023) = ₹35,000
• Cash & Cash Equivalents at End of Year (2024) = ₹27,000 + ₹35,000 = ₹62,000 [Exact Match with Balance Sheet!]