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BBA | Semester 6 | UK6DSCMGT302

Accounting for Managers

Course Code: UK6DSCMGT302 • Module 5 Notes

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Module 5: Cash Flow Statement (AS 3 / Ind AS 7)

Mandates, Activity Classifications, Direct vs Indirect Computations, and Managerial Evaluation

Chapter 1: Regulatory Architecture and Philosophy of Cash Flow Accounting

1.1 Definitional Framework and Statutory Mandates (AS 3 / Ind AS 7)

In modern corporate financial reporting, an enterprise may demonstrate robust accounting profitability in its Statement of Profit and Loss while simultaneously careening into severe liquidity insolvency. This apparent paradox arises because traditional financial accounts are constructed upon the **Accrual Basis of Accounting**, recognizing revenues when earned and expenses when incurred, irrespective of actual cash settlement. Consequently, substantial profits can be tied up in illiquid trade receivables or unsold inventory, leaving the enterprise unable to disburse employee wages, discharge statutory tax obligations, or service bank borrowings.

To provide transparent visibility over authentic liquidity dynamics, regulatory authorities globally and in India mandate the presentation of a **Cash Flow Statement**. In India, Cash Flow Statements are governed by **Accounting Standard 3 (AS 3 - Revised)** issued by the Institute of Chartered Accountants of India (ICAI) and **Indian Accounting Standard 7 (Ind AS 7)** notified under the Companies (Indian Accounting Standards) Rules, 2015. Under Section 133 of the Companies Act, 2013, the preparation and presentation of a Cash Flow Statement forms an integral, mandatory component of the statutory annual financial statements for all listed entities and public limited enterprises (exempting only eligible One Person Companies, Small Companies, and Dormant Companies).

1.2 Meaning of 'Cash' and 'Cash Equivalents'

Under AS 3 and Ind AS 7, a Cash Flow Statement does not merely track physical currency notes in the office safe; it tracks movements across the broader aggregate of **Cash and Cash Equivalents**:

- **Cash:** Comprises cash in hand and demand deposits with commercial banking institutions. Demand deposits represent liquid funds available for immediate withdrawal without penalty.
- **Cash Equivalents:** Highly liquid short-term investments that are readily convertible into known amounts of cash and are subject to an insignificant risk of changes in value. Under standard regulatory accounting, an investment qualifies as a cash equivalent only if it carries a short maturity of *three months (90 days) or less* from its acquisition date (e.g., 91-day Government Treasury Bills, commercial paper, money market mutual funds).

> $$\text{Gross Liquidity Base} = \text{Cash in Hand} + \text{Bank Demand Balances} + \text{Qualifying Short-Term Cash Equivalents}$$
>
> **Accounting Principle:** Cash flows represent movements of cash and cash equivalents into and out of an enterprise. Transactions that merely represent movements between components of cash and cash

> equivalents (e.g., depositing cash into a bank account or purchasing 30-day Treasury Bills) are parts of cash management rather than operating, investing, or financing cash flows.

Chapter 2: Comparative Evaluation: Fund Flow Statement vs. Cash Flow Statement

While both the Fund Flow Statement and Cash Flow Statement explain the financial trajectory of an enterprise between two consecutive balance sheet dates, they rest upon fundamentally distinct analytical philosophies:

Analytical Dimension	Fund Flow Statement	Cash Flow Statement (AS 3 / Ind AS 7)
Core Analytical Concept	Based on **Net Working Capital** (Current Assets minus Current Liabilities).	Based strictly on **Cash and Cash Equivalents**.
Accounting Basis	Follows an intermediate accrual-working capital perspective.	Operates strictly on the **Cash Basis of Accounting**.
Statutory Mandate	Voluntary internal managerial tool; not mandated by Companies Act.	**Statutory Requirement** under Companies Act, 2013, AS 3, and Ind AS 7.
Schedule Requirement	Requires a separate *Schedule of Changes in Working Capital*.	No separate working capital schedule; working capital changes are incorporated directly into operating cash flows.
Time Horizon & Utility	Evaluates intermediate and long-term capital financing strategies.	Diagnoses short-term liquidity, operational solvency, and debt repayment capability.
Structural Grouping	Classified broadly into Sources and Applications of Funds.	Strictly classified into **Three Standard Activities**: Operating, Investing, and Financing.

Chapter 3: Tripartite Classification of Corporate Cash Flows

Under AS 3 and Ind AS 7, every cash receipt and cash disbursement must be classified into one of three standardized, mutually exclusive operational categories:

3.1 Cash Flows from Operating Activities

Operating Activities encompass the principal revenue-generating activities of the enterprise and other activities that are not investing or financing activities. Operating cash flows reflect the extent to

which core commercial operations have generated sufficient cash to maintain operating capability, pay dividends, repay borrowings, and make new capital investments without relying on external financing.

Key operating cash flows include:

- Cash receipts from the sale of goods and rendering of services.
- Cash receipts from royalties, fees, commissions, and other operating revenues.
- Cash payments to suppliers for raw materials, merchandise, and services.
- Cash payments to and on behalf of employees (wages, salaries, bonuses).
- Cash payments or refunds of corporate income taxes (unless explicitly identified with investing or financing activities).

3.2 Cash Flows from Investing Activities

Investing Activities represent the acquisition and disposal of long-term assets and other investments not included in cash equivalents. Investing cash flows reveal the aggregate expenditures incurred for resources intended to generate future revenues and cash flows.

Key investing cash flows include:

- Cash payments to acquire property, plant, and equipment, intangibles, and other long-term assets (including capitalized development costs).
- Cash receipts from the disposal of property, plant, and equipment, intangibles, and other long-term assets.
- Cash payments to acquire equity or debt instruments of other enterprises and interests in joint ventures.
- Cash receipts from the disposal of equity or debt instruments of other enterprises.
- Cash advances and loans made to third parties and cash receipts from the repayment of such advances.
- Cash received from dividends and interest on investments (for non-financial enterprises).

3.3 Cash Flows from Financing Activities

Financing Activities encompass activities that result in changes in the size and composition of the contributed equity capital and borrowings of the enterprise. Financing cash flows are useful in predicting claims on future cash flows by capital providers.

Key financing cash flows include:

- Cash proceeds from issuing equity shares, preference shares, or other equity instruments.
- Cash payments to owners to acquire or redeem enterprise shares (share buybacks).
- Cash proceeds from issuing debentures, bonds, mortgages, and other short- or long-term borrowings.
- Cash repayments of amounts borrowed (redemption of debentures, repayment of term loans).

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- Cash payments of dividends to shareholders.
- Cash payments of interest on debentures and long-term borrowings (for non-financial enterprises).

Chapter 4: Methodologies of Computing Cash Flow from Operating Activities

AS 3 and Ind AS 7 permit two alternative mathematical approaches for calculating cash flows from operating activities:

4.1 The Direct Method

Under the **Direct Method**, major classes of gross cash receipts and gross cash payments are directly analyzed and reported. Operating cash flow is computed by subtracting operational cash disbursements from operational cash collections:

> $$\text{Cash Inflow from Customers} = \text{Sales Revenue} + \text{Opening Debtors} - \text{Closing Debtors}$$
>
> $$\text{Cash Outflow to Suppliers} = \text{Purchases} + \text{Opening Creditors} - \text{Closing Creditors}$$
>
> $$\text{Net Cash from Operations} = \text{Cash Inflows} - \text{Cash Payments to Suppliers} - \text{Operating Expenses} - \text{Tax Paid}$$
>
> **Regulatory Preference:** Ind AS 7 encourages the direct method because it provides detailed operational receipt-and-payment metrics unavailable under the indirect approach.

4.2 The Indirect Method (Standard Corporate Practice)

Under the **Indirect Method**, net profit or loss is adjusted 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. Because corporate accounting systems track accrual profits, the indirect method is used by over 95% of listed companies worldwide.

> Net Profit Before Taxation and Extraordinary Items
>
> **Add** :Non-Cash and Non-Operating Expenses (Depreciation, Amortization, Interest Paid, Loss on Sale of As
>
> **Less** :Non-Operating Incomes (Interest Received, Dividend Received, Profit on Sale of Assets
>
> **Equals** :Operating Profit Before Working Capital Changes
>
> **AdjustforWorkingCapitalChanges** :
>
> - **Add** :Decrease in Current Assets (Inventories, Debtors, Prepaid)
> - **Add** :Increase in Current Liabilities (Creditors, Outstanding Expenses)

- **Less** :Increase in Current Assets (Inventories, Debtors, Prepaid)
- **Less** :Decrease in Current Liabilities (Creditors, Outstanding Expenses)

Equals :Cash Generated from Operations

Less :Direct Corporate Income Taxes Paid (Net of Refunds)

Equals :Net Cash Flow from (Used in) Operating Activities

Chapter 5: Advanced Accounting Adjustments in Cash Flow Statements

5.1 Treatment of Corporate Income Taxation

Taxation cash flows must be classified as cash flows from operating activities unless they can be specifically associated with financing and investing activities. When preparing the indirect operating cash flow, the **Provision for Taxation created during the year** is added to Net Profit After Tax to arrive at Net Profit Before Tax. At the conclusion of the operating activities section, **Actual Income Tax Paid** during the year is deducted as a direct cash outflow:

$$\text{Tax Paid Cash} = \text{Opening Tax Provision} + \text{Current Year Tax Charge} - \text{Closing Tax Provision}$$

5.2 Treatment of Interest and Dividends (Industry Bifurcation)

Under AS 3 and Ind AS 7, the classification of interest and dividends differs between financial and non-financial enterprises:

Cash Flow Transaction	Non-Financial Enterprise (Manufacturing / Trading)	Financial Enterprise (Banks / NBFCs)
Interest Paid	**Financing Activity** (Cost of obtaining debt capital).	**Operating Activity** (Cost of core funds).
Dividend Paid	**Financing Activity** (Distribution to capital owners).	**Financing Activity** (Distribution to capital owners).
Interest Received	**Investing Activity** (Return on invested capital).	**Operating Activity** (Core lending revenue).
Dividend Received	**Investing Activity** (Return on invested capital).	**Operating Activity** (Core investment revenue).

5.3 Significant Non-Cash Investing and Financing Transactions

Investing and financing transactions that do not require the use of cash or cash equivalents are excluded from the Cash Flow Statement itself (e.g., acquiring plant machinery by issuing debentures, converting debentures into equity shares, issuing bonus shares out of capital reserves). Such transactions must be disclosed in the notes to the financial statements to ensure comprehensive structural disclosure.

Chapter 6: Managerial Interpretation of Corporate Cash Flow Dynamics

6.1 Diagnostic Life-Cycle Profiles

Management accountants analyze the directional signs (+, −$) across the three cash flow activities to diagnose an enterprise's organizational life-cycle stage and underlying solvency health:

Corporate Stage	Operating Cash Flow	Investing Cash Flow	Financing Cash Flow	Managerial Diagnostic & Strategic Implications
Start-Up Phase	Negative (-)	Negative (-)	Positive (+)	Heavy capital investments and initial operating cash burn funded entirely by venture equity or debt financing.
Rapid Growth	Positive (+)	Negative (-)	Positive (+)	Operations become cash-generative, but aggressive factory expansion requires supplementary debt or equity infusions.
Mature Cash Cow	Positive (+)	Negative (-)	Negative (-)	High operating cash inflows fully self-fund routine asset replacements, retiring debt and paying substantial dividends.
Severe Distress	Negative (-)	Positive (+)	Negative (-)	Operations hemorrhaging cash; enterprise forced to liquidate core productive fixed assets to service maturing debt.

Chapter 7: Comprehensive Worked Numerical Problems in Cash Flow Accounting

7.1 Worked Problem 1: End-to-End Cash Flow Statement Preparation (Indirect Method)

The comparative Balance Sheets of Bharat Dynamics Ltd. as of 31st March for two consecutive financial years are presented below:

Equities and Liabilities	Previous Year (Rs.)	Current Year (Rs.)	Assets	Previous Year (Rs.)	Current Year (Rs.)
Equity Share Capital (Rs. 10)	10,00,000	14,00,000	Plant & Machinery (Gross)	12,00,000	16,50,000
General Reserve	3,00,000	4,20,000	Less: Accumulated Depreciation	(2,40,000)	(3,20,000)
Profit & Loss Balance (Surplus)	1,80,000	2,60,000	Net Plant & Machinery	9,60,000	13,30,000
12% Long-Term Debentures	5,00,000	3,00,000	Non-Current Investments	2,00,000	1,50,000
Trade Payables (Creditors)	2,20,000	2,70,000	Inventories	3,50,000	4,10,000
Outstanding Operating Expenses	50,000	30,000	Trade Receivables (Debtors)	2,80,000	3,60,000
Provision for Taxation	1,20,000	1,50,000	Cash and Bank Balances	1,60,000	1,20,000
Proposed Dividend	1,00,000	1,40,000	Short-Term Marketable Deposits	40,000	60,000
Total	**24,70,000**	**29,70,000**	**Total**	**24,70,000**	**29,70,000**

Additional Operational Data:

1. During the current financial year, a machine costing Rs. 1,50,000 with accumulated depreciation of Rs. 60,000 was sold for Rs. 70,000 cash.
2. Non-current investments costing Rs. 50,000 were sold at a profit of Rs. 15,000, credited to Profit and Loss.
3. Debenture interest of Rs. 48,000 was paid during the year.
4. Income tax paid during the year amounted to Rs. 1,10,000.
5. Dividend proposed in the previous year (Rs. 1,00,000) was disbursed in full during the year.
6. Short-term marketable deposits represent qualifying cash equivalents.

Step-by-Step Mathematical Resolution:

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Step 1: Ledger Reconciliations:

1. Plant & Machinery Account:

> Debit: Opening Balance = Rs. 12,00,000
>
> Credit: Disposed Machine Gross Cost = Rs. 1,50,000
>
> Credit: Closing Balance = Rs. 16,50,000
>
> Debit Balancing: Purchases of Machinery = 16,50,000 + 1,50,000 − 12,00,000 = Rs. 6,00,000
>
> **Cash Impact:** Outflow of Rs. 6,00,000 under Investing Activities.

2. Accumulated Depreciation Account:

> Credit: Opening Balance = Rs. 2,40,000
>
> Debit: Accumulated Depreciation on Sold Machine = Rs. 60,000
>
> Debit: Closing Balance = Rs. 3,20,000
>
> Credit Balancing: Depreciation Charge for the Year = 3,20,000 + 60,000 − 2,40,000 = Rs. 1,40,000
>
> **Operating Adjustment:** Added back to Net Profit.

3. Profit / Loss on Sale of Machinery:

> Book Value = 1,50,000 − 60,000 = Rs. 90,000
>
> Sale Value = Rs. 70,000 $\implies$ Loss on Sale = 90,000 − 70,000 = Rs. 20,000
>
> **Impact:** Rs. 70,000 Inflow under Investing; Rs. 20,000 Loss added back in Operating.

4. Non-Current Investments Account:

> Opening Balance = Rs. 2,00,000; Closing Balance = Rs. 1,50,000
>
> Cost of Investments Sold = 2,00,000 − 1,50,000 = Rs. 50,000
>
> Sale Proceeds = 50,000 + 15,000 (Gain) = Rs. 65,000
>
> **Impact:** Rs. 65,000 Inflow under Investing; Rs. 15,000 Gain deducted from Operating.

5. Provision for Taxation Account:

> Credit Opening = Rs. 1,20,000; Debit Tax Paid = Rs. 1,10,000; Debit Closing = Rs. 1,50,000
>
> Credit Balancing: Current Tax Provision = 1,50,000 + 1,10,000 − 1,20,000 = Rs. 1,40,000

Step 2: Operating Cash Flow Calculation:

Particulars	Amount (Rs.)
Closing Profit & Loss Surplus	2,60,000
Less: Opening Profit & Loss Surplus	(1,80,000)
Net Increase in Profit & Loss Surplus	**80,000**
Add: Transfer to General Reserve (4,20,000 - 3,00,000)	1,20,000
Add: Current Year Tax Provision Created	1,40,000
Add: Proposed Dividend for Current Year	1,40,000
Net Profit Before Taxation and Extraordinary Items	**4,80,000**
Add: Depreciation for the Year	1,40,000
Add: Loss on Sale of Plant Machinery	20,000
Add: Debenture Interest Paid (Financing Item)	48,000
Less: Gain on Sale of Investments	(15,000)
Operating Profit Before Working Capital Changes	**6,73,000**
Less: Increase in Inventories (4,10,000 - 3,50,000)	(60,000)
Less: Increase in Trade Receivables (3,60,000 - 2,80,000)	(80,000)
Add: Increase in Trade Payables (2,70,000 - 2,20,000)	50,000
Less: Decrease in Outstanding Expenses (50,000 - 30,000)	(20,000)
Cash Generated from Operations	**5,63,000**
Less: Direct Corporate Tax Paid	(1,10,000)
(A) Net Cash Flow from Operating Activities	**4,53,000**

Step 3: Cash Flows from Investing Activities:

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Particulars	Amount (Rs.)
Sale Proceeds from Disposal of Machinery	70,000
Sale Proceeds from Disposal of Non-Current Investments	65,000
Purchase of Plant and Machinery	(6,00,000)
(B) Net Cash Used in Investing Activities	**(4,65,000)**

Step 4: Cash Flows from Financing Activities:

Particulars	Amount (Rs.)
Proceeds from Fresh Issue of Equity Shares (14L - 10L)	4,00,000
Redemption of 12% Long-Term Debentures (5L - 3L)	(2,00,000)
Payment of Debenture Interest	(48,000)
Payment of Previous Year Proposed Dividend	(1,00,000)
(C) Net Cash Flow from Financing Activities	**52,000**

Step 5: Net Reconciliation of Cash and Cash Equivalents:

Particulars	Amount (Rs.)
Net Cash Flow from Operating Activities (A)	4,53,000
Net Cash Used in Investing Activities (B)	(4,65,000)
Net Cash Flow from Financing Activities (C)	52,000
Net Increase in Cash and Cash Equivalents (A + B + C)	**40,000**
Add: Opening Cash and Cash Equivalents (1,60,000 Cash + 40,000 Deposit)	2,00,000
Closing Cash and Cash Equivalents (1,20,000 Cash + 60,000 Deposit)	**2,40,000**

Accounting Harmony: Net change of +Rs. 40,00,000 exactly bridges Opening Cash & Equivalents (Rs. 2,00,000) to Closing Cash & Equivalents (Rs. 2,40,000), proving 100% mathematical and regulatory integrity under AS 3 and Ind AS 7.

7.2 Worked Problem 2: Operating Cash Flow under the Direct Method

The Statement of Profit and Loss of Vardhman Textiles Ltd. for the financial year ended 31st March shows the following operational results:

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Income Statement Line Item	Monetary Amount (Rs.)
Gross Sales Revenue (all on credit)	32,00,000
Cost of Goods Sold (including Depreciation Rs. 1,60,000)	20,00,000
Gross Profit	12,00,000
Salaries and Wages	4,20,000
Rent and Utility Overheads	1,80,000
Selling and Promotional Expenses	1,40,000
Operating Profit Before Tax	4,60,000
Corporate Income Tax	1,38,000
Net Profit After Tax	3,22,000

Additional balance sheet information regarding operating working capital accounts is provided below:

- Trade Receivables (Debtors): Opening Rs. 3,40,000; Closing Rs. 4,20,000.
- Inventories: Opening Rs. 2,80,000; Closing Rs. 2,20,000.
- Trade Payables (Creditors for Goods): Opening Rs. 1,90,000; Closing Rs. 2,50,000.
- Outstanding Salaries and Wages: Opening Rs. 30,000; Closing Rs. 45,000.
- Prepaid Rent and Utilities: Opening Rs. 25,000; Closing Rs. 15,000.
- Income Tax Payable: Opening Rs. 50,000; Closing Rs. 40,000.

Required: Compute Net Cash Flow from Operating Activities using the **Direct Method** as mandated under Ind AS 7.

Step-by-Step Mathematical Resolution:

1. Cash Received from Customers:

> $$\text{Cash Inflow from Customers} = \text{Sales} + \text{Opening Debtors} - \text{Closing Debtors}$$
>
> $$\text{Cash Inflow} = 32,00,000 + 3,40,000 - 4,20,000 = \text{Rs. } 31,20,000$$

2. Cash Paid to Suppliers for Merchandise:

> $$\text{Total Purchases} = \text{COGS (excl. dep)} + \text{Closing Inventory} - \text{Opening Inventory}$$
>
> $$\text{Purchases} = (20,00,000 - 1,60,000) + 2,20,000 - 2,80,000 = 18,40,000 - 60,000 = \text{Rs. } 17,80,000$$

$$\text{Cash Paid to Suppliers} = \text{Purchases} + \text{Opening Creditors} - \text{Closing Creditors}$$

$$\text{Cash Paid to Suppliers} = 17,80,000 + 1,90,000 - 2,50,000 = \text{Rs. } 17,20,000$$

3. Cash Paid for Employee Wages and Operating Expenses:

$$\text{Cash Paid for Wages} = \text{Salaries Expense} + \text{Opening O/S Wages} - \text{Closing O/S Wages}$$

$$\text{Cash Wages} = 4,20,000 + 30,000 - 45,000 = \text{Rs. } 4,05,000$$

$$\text{Cash Paid for Rent} = \text{Rent Expense} + \text{Closing Prepaid} - \text{Opening Prepaid}$$

$$\text{Cash Rent} = 1,80,000 + 15,00,000 - 25,000 \implies 1,80,000 - 10,000 = \text{Rs. } 1,70,000$$

$$\text{Selling Expenses Paid} = \text{Rs. } 1,40,000$$

4. Income Tax Paid:

$$\text{Tax Paid} = \text{Opening Tax Payable} + \text{Current Tax Expense} - \text{Closing Tax Payable}$$

$$\text{Tax Paid} = 50,000 + 1,38,000 - 40,000 = \text{Rs. } 1,48,000$$

5. Summary of Direct Operating Cash Flows:

Direct Cash Flow Particulars	Amount (Rs.)
Cash Receipts from Customers	31,20,000
Less: Cash Payments to Merchandise Suppliers	(17,20,000)
Less: Cash Payments for Wages and Salaries	(4,05,000)
Less: Cash Payments for Rent and Utilities	(1,70,000)
Less: Cash Payments for Selling Overheads	(1,40,000)
Cash Generated from Operations	**6,85,000**
Less: Corporate Income Taxes Paid	(1,48,000)
Net Cash Flow from Operating Activities (Direct Method)	**5,37,000**

Chapter 8: Advanced Cash Flow Performance Metrics and Valuation Diagnostics

8.1 Free Cash Flow to Firm (FCFF) and to Equity (FCFE)

Modern corporate finance analysts evaluate enterprise valuation through **Free Cash Flow** rather than accounting earnings. Free cash flow represents the discretionary cash surplus generated by operations that can be distributed to capital providers after financing all required positive net-present-value capital expenditures (CapEx) and working capital additions:

$$\text{Free Cash Flow to Firm (FCFF)} = \text{Cash Flow from Operations (CFO)} - \text{Mandatory Capital Expenditures (CapEx)}$$

$$\text{Free Cash Flow to Equity (FCFE)} = FCFF - [\text{Debt Principal Repaid} - \text{New Debt Issued}] - \text{Interest Paid}(1 - t)$$

Valuation Significance: Positive, sustained Free Cash Flow demonstrates that an enterprise possesses genuine self-sustaining economic moats, enabling dividend increases, share repurchases, and strategic acquisitions without debt distress.

8.2 Foundational Cash Flow Financial Ratios

Analysts deploy four specialized ratios to evaluate the quality of reported corporate earnings and solvency:

1. **Operating Cash Flow to Net Sales Ratio (Cash Flow Margin):**

$$\text{Cash Flow Margin} = \frac{\text{Cash Flow from Operations}}{\text{Net Sales Revenue}} \times 100$$

Measures the percentage of top-line revenue successfully converted into cold cash.

2. **Cash Debt Coverage Ratio:**

$$\text{Cash Debt Coverage} = \frac{\text{Cash Flow from Operations}}{\text{Total Debt (Short-Term + Long-Term)}}$$

Indicates the firm's capacity to repay total obligations from annual operating cash flows.

3. **Operating Cash Flow to Net Profit Ratio (Earnings Quality Index):**

$$\text{Earnings Quality Index} = \frac{\text{Cash Flow from Operations}}{\text{Net Profit After Tax}}$$

A ratio substantially below 1.0 indicates poor earnings quality and aggressive revenue recognition.