

Day 1 and 2

Objective of the course

The primary focus is to analyze business decisions using financial statements, emphasizing cash flows and their implications for financial analysis. This is essential for investors aiming to understand the financial health and performance of a firm.

Key concepts

Fundamentals of a Firm (assumption)

- o The price of a firm or the change in price is influenced by its fundamentals, observable through financial statements (FS) such as:
 - Balance Sheet (BS)
 - Income Statement (IS)
 - Cash Flow Statement (CFS)

2. Financial Statement Analysis (FSA)

- o A dual approach combining:
 - **Quantitative Analysis:** Numerical examination of FS.
 - **Qualitative Narratives:** Contextual insights from financial reports.

3. Financial Accounting

- o The process of translating business decisions into FS, adhering to **Generally Accepted Accounting Principles (GAAP)**.
- o **Caution:** GAAP allows flexibility, introducing potential gaps in measurement.



Business Decisions

1. **Financing Decisions (FD):**

- o How companies raise funds (e.g., equity, debt).

2. **Investment Decisions (ID):**

- o Allocation of resources to generate returns.

3. **Operating Decisions (OD):**

- o Day-to-day management of business operations.

Financial statements

1. **Balance Sheet (BS)**

- o Snapshot of assets, liabilities, and equity at a specific point.

- o **Formula:**

$$\text{Assets} = \text{Equity} + \text{Liabilities}$$

2. **Income Statement (IS)**

- o Captures profitability over a period.

- o **Formula:**

$$\text{Profit} = \text{Income} - \text{Expenses}$$

3. **Cash Flow Statement (CFS)**

- o Tracks cash inflows and outflows from three activities:

- Operating (CFO)
- Investing (CFI)
- Financing (CFF)

- o **Formula:**

$$\text{Closing Cash} = \text{Opening Cash} + \text{Receipts} - \text{Payments}$$

4. **Statement of Changes in Equity (SOCE)**

- o Summarizes changes in equity components during a period.

Focus of the session: Cash and cash Flows

1. **Cash from Operating Activities (CFO):**

- o Cash from core operations.

- o **Formula:**

$$\text{CFO} = \text{Operating Cash Receipts} - \text{Operating Cash Payments}$$
- 2. **Cash from Financing Activities (CFF):**
 - o Cash flows from equity and debt transactions.
- 3. **Cash from Investing Activities (CFI):**
 - o Cash from acquisition or disposal of assets.

Cash flow characteristics by business type

1. **Startups:**
 - o Negative CFO (cash-intensive operations).
 - o Negative CFI (asset creation and investments).
 - o Positive CFF (external funding sources).
2. **Fundamentally Strong Companies:**
 - o Consistently positive CFO (efficient operations).
 - o Negative CFI (investing in future growth).
 - o Positive or negative CFF

Let us see the cash flows of some well-known Indian companies

TCS							
	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24
Cash from Operating Activity +	25,067	28,593	32,369	38,802	39,949	41,965	44,338
Cash from Investing Activity +	3,104	1,645	8,968	-7,956	-738	548	6,091
Cash from Financing Activity +	-26,885	-27,897	-39,915	-32,634	-33,581	-47,878	-48,536
Net Cash Flow	1,286	2,341	1,422	-1,788	5,630	-5,365	1,893

All through the seven years the company has been generating positive cash from operating activities

- TCS shows strong operational performance with growing cash inflows from operating activities, which is the foundation of its cash flow.
- Investing activities have high variability but are typically negative in most years, indicating investment in growth, acquisitions, or asset purchases.

- Financing activities show consistent outflows, likely related to shareholder returns and debt management.
- Net cash flow fluctuates but remains positive overall, showing that the company has maintained its ability to generate cash despite periodic investments or financing requirements.

Overall, the company seems to be in a solid financial position, balancing between reinvestment, paying dividends, and managing capital effectively. The cash flow data suggests a healthy operational core, though there is some fluctuation in terms of external investments and financing activities.

CFO vs PAT

1. Differences:

- o CFO \neq PAT due to:
 - Non-cash items (e.g., Depreciation, Amortization).
 - Non-operating items (e.g., Interest, Profit/Loss on asset sales).
 - Changes in Working Capital (WC):
 $WC = \text{Operating Current Assets (OCA)} - \text{Operating Current Liabilities (OCL)}$

2. Adjusted PAT Formula:

$CFO = PAT + / -$

- o Non-cash Items
- o Non-operating Items
- o Changes in WC

Analytical focus: As a part of FSA we will do the following

1. Deriving Cash Flows:

- o Identify cash inflows and outflows from operating, investing, and financing activities.

2. Composition Analysis:

- o Analyze the proportion of CFO, CFI, and CFF to understand financial priorities.

3. Industry-Specific Observations:

- o Recognize patterns and deviations in cash flow trends for specific sectors.

FSA_CLASS DISCUSSION

By understanding the interplay between business decisions and financial statements, especially focusing on cash flows, investors gain crucial insights into a company's operational efficiency and financial health. This framework lays the groundwork for a deeper exploration of industry-specific cash flow characteristics.

CFO: Cash from operations

CFO = Operating cash receipts – operating Cash payments

Operating cash receipts

- Cash sales
- Collections from customers
- Advance from customers

Operating Cash payments

- Purchase of stock of goods
- Payment to the suppliers
- Expenses (rent, sala etc) paid
- Advance to suppliers
- Tax paid

CFO = Adjusted PAT

CFO = PAT +/-

- **Non cash items**
 - o Dep
 - o Amortisation
- **Non operating items**
 - o Interest
 - o Profit or loss on sale of assets
- **Changes in operating working capital (OCA -OCL)**
 - o Change in Debtors
 - o Change in creditors
 - o Change in Exp payable
 - o Change in Advanc

Cash from financing activity (CFF)

- Receipts
 - o Issue of shares

FSA_CLASS DISCUSSION

- o Issues of bonds
- o Raising of loans
- Payments
 - o Cash dividend
 - o Repayment of loan/bonds/debentures
 - o Buyback of share

Let us see the break up of cash from financing activities (CFF) of TCS

TCS							
Cash from Financing Activity -	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24
Proceeds from shares	0	0	0	0	0	18	425
Proceeds from borrowings	0	0	0	0	0	0	0
Repayment of borrowings	-19	-181	0	0	0	0	0
Interest paid fin	-40	-186	-924	-634	-698	-779	-699
Dividends paid	-10,760	-11,472	-37,702	-10,907	-13,375	-41,410	-25,218
Financial liabilities	-24	-13	-1,062	-1,336	-1,417	-1,515	-1,614
Other financing (buy back)	-16,042	-16,045	-227	-19,757	-18,091	-4,192	-21,430

We can see a big chunk of negative CFF is due to the dividend and buyback of shares. This was also mentioned in the latest annual report.

[From the annual report](#): 2024

The company also completed its fifth successful buyback returning ₹17,000 crore to shareholders, wherein the buyback process was completed in record time of 63 days. The total shareholder payout for the year was ₹47,445 crore.

Please note that one of large shareholders of TCS is Tata Sons (unlisted as of now).

Cash from Investment activity (CFI)

- Receipts
 - o Sale of PPE

FSA_CLASS DISCUSSION

- o Sale of Investments
- o Dividend received
- o Interest received
- Payments
 - o Purchase of PPE
 - o Purchase of investment

Let us see the CFI if Swiggy,

Swiggy				
	Mar-21	Mar-22	Mar-23	Mar-24
Cash from Operating Activity +	-1,175	-3,900	-4,060	-1,313
Cash from Investing Activity +	1,282	-9,160	3,968	1,472
Cash from Financing Activity +	14	13,634	-172	-123

Positive CFI is due to sales of investments

Cash from Investing Activity -	1,282	-9,160	3,968	1,472
Fixed assets purchased	0	-291	-168	-352
Fixed assets sold	260	64	11	8
Investments purchased	-3,704	-21,074	-9,768	-8,272
Investments sold	4,715	11,888	13,844	10,012
Interest received	44	20	73	76
Investment in group cos	0	-2	0	0
Redemp n Canc of Shares	0	84	0	0
Acquisition of companies	0	0	0	-2
Inter corporate deposits	0	0	0	-40
Other investing items	-33	150	-24	41

Example :Derive cash flow

FSA_CLASS DISCUSSION

Balance Sheet			Income Statement	
	opening	2024	Incomes	
Sources			Sales	405,000
Capital (5)	0	350,000		
Reserves	0	175,000		405,000
10% bonds	0	250,000		
Creditors	0	130,000	Expenses	
Salaries payable	0	40,000	COGS	20,000
		945,000		
Assets			int on Bonds	25,000
Cash		445,000	Depreciation	50,000
Plant		200,000		
Adepreciation		-50,000	Salaries	60,000
stock of goods		150,000		155,000
Receivables		150,000	PBT	250,000
Knowhow		50,000	Tax	75,000
		945,000	PAT	175,000

Cash from financing activities (CFF)

Balance Sheet			Income Statement		CFF	
	opening	2024	Incomes			
Sources			Sales	405,000		
Capital (5)	0	350,000			Receipts	
Reserves	0	175,000		405,000	Capital (5)	350,000
10% bonds	0	250,000			10% bonds	250,000
Creditors	0	130,000	Expenses			600,000
Salaries payable	0	40,000	COGS	20,000		
		945,000			Payments	
Assets			int on Bonds	25,000	int on Bonds	25,000
Cash		445,000	Depreciation	50,000	Dividend	0
Plant		200,000				25,000
Adepreciation		-50,000	Salaries	60,000		
stock of goods		150,000		155,000	CFF	575,000
Receivables		150,000	PBT	250,000		
Knowhow		50,000	Tax	75,000		
		945,000	PAT	175,000		

- Issue of shares

FSA_CLASS DISCUSSION

- Closing Capital = Opening Capital + issue of shares for cash + Issue of Stock dividend – Buyback of shares
- Issue of share for cash = Closing Capital + Buyback of shares – Issue of stock dividend – opening capital
- In this case no buyback or stock dividend.
- **Issue of Bonds**
 - Closing Bonds = Opening Bonds + issue of Bonds for cash – Redemption of bonds – Conversion of Bonds
- **Interest paid**
 - Closing interest payable = Opening Interest payable + Interest – Interest paid
 - Interest paid = Opening interest payable + Interest – Closing interest payable
- **Dividend paid**
 - Closing Reserve = Opening Reserve + PAT – Cash Dividend – Stock Dividend
 - Cash dividend = Opening Reserve + PAT - Stock Dividend – Opening Reserve

Cash from investment activities (CFI)

Balance Sheet			Income Statement		CFI	
	opening	2024	Incomes		Receipts	
Sources			Sales	405,000		0
Capital (5)	0	350,000				
Reserves	0	175,000		405,000		
10% bonds	0	250,000				
Creditors	0	130,000	Expenses		Payments	
Salaries payable	0	40,000	COGS	20,000	Plant	200,000
		945,000			Knowhow	50,000
Assets			Int on Bonds	25,000		250,000
Cash		445,000	Depreciation	50,000		-250,000
Plant		200,000				
Depreciation		-50,000	Salaries	60,000		
stock of goods		150,000		155,000		
Receivables		150,000	PBT	250,000		
Knowhow		50,000	Tax	75,000		
		945,000	PAT	175,000		

Purchase of plant

- Closing Plant (Cost) = Opening Plant (Cost) + Purchase of plant - Sale of Plant
- Purchase = Closing Plant – Opening Plant (Since there is no plant

FSA_CLASS DISCUSSION

Cash from operating activities (CFO): Indirect method

Balance Sheet			Income Statement	
	opening	2024	Incomes	
Sources			Sales	405,000
Capital (5)	0	350,000		
Reserves	0	175,000		405,000
10% bonds	0	250,000		
Creditors	0	130,000	Expenses	
Salaries payable	0	40,000	COGS	20,000
		945,000		
Assets				
Cash		445,000	Int on Bonds	25,000
Plant		200,000	Depreciation	50,000
Adepreciation		-50,000		
stock of goods		150,000	Salaries	60,000
Receivables		150,000	PBT	250,000
Knowhow		50,000	Tax	75,000
		945,000	PAT	175,000

CFO Indirect method	
Pat	175,000
Non cash item	
Depreciation non operating	50,000
Int on Bonds	25,000
Changes in OWC	
increase in creditors	130,000
increase in sal	40,000
increase in receivable	-150,000
increase in stock	-150,000
CFO	120,000

Let us derive CFO using the direct method

FSA_CLASS DISCUSSION

Balance Sheet		
	opening	2024
Sources		
Capital (5)	0	350,000
Reserves	0	175,000
10% bonds	0	250,000
Creditors	0	130,000
Salaries payable	0	40,000
		945,000
Assets		
Cash		445,000
Plant		200,000
Depreciation		-50,000
stock of goods		150,000
Receivables		150,000
Knowhow		50,000
		945,000

Income Statement		
Incomes		
Sales	405,000	
		405,000
Expenses		
COGS	28,000	
		28,000
Int on Bonds		25,000
Depreciation		50,000
Salaries	60,000	
		155,000
PBT		250,000
Tax		75,000
PAT		175,000

CFO	
Receipts	
cash sales	255,000
Payment	
Salary	20,000
Tax	75,000
payment for stock	40,000
	135,000
CFO	120,000

Payment to the supplier can be derived by observing CREDITORS/STOCK/COGS			
Creditor		Stock	
opening	0	opening	0
add		add	
purchase	170,000	purchase	170,000
less		less	
Payments	40,000	COGS	20,000
Discounts			
closing	130,000	closing	150,000

d