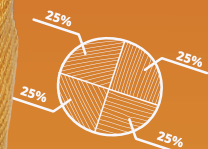


CA Final **AFM** **OUTNOTES**

Visualise Finance! Don't Just Read!



Adish Jain CA CFA

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Basic of AFM

*“Master the roots, strengthen
the core to rule finance!”*

A. Calculations and Ratios

1) Format of Income Statement (IS)

[illegible]

Equation of PAT:

2) Earnings Per Share

Earnings Per Share (EPS) is financial statement-based calculation of profit earned per equity share.

Income Statement extract:

Particulars	Amount

n = Number of equity shares

In the absence of preference dividend, $EAES = PAT$.

3) Book Value Per Share

Book-value per Share (BVPS) is the per share value of equity shareholders (**SH**) in the net assets of the company as per books or Financial Statement.

Equity Shareholders Funds (ESHF) or Net Worth is the value of equity SHs in the net assets of the company as per Balance Sheet or Financial Statements.

Liabilities	Assets
1. Equity Share Capital 2. Reserves & Surplus - Retained Earnings - General Reserves	A. Fictitious Assets - P/L Debit Balance - Unamortized Expenses B. Fixed Assets - Land & Building - Plant & Machinery C. Current Assets - Debtors - Inventory
3. Preference Share Capital 4. Outside Liabilities - LT & ST Debt - Creditors	

4) Return on Equity

ROE is financial statement-based ratio that tells the return (profit in IS) earned by the company on the capital of equity SHs (as per BS).

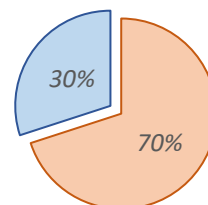
Totality	Per Share

5) Market Price per Share & Market Capitalization

Market Price per Share (MPS) is the price at which a share is quoted in the market. It tells you the value per share in the market. **Market Capitalisation (M-Cap)** means total **Market Value (MV)** of all equity shares of the company.

Example: Justdial Ltd has 1000 equity shares outstanding.
Current market price is ₹ 15 per share.

Shareholding Pattern	No. Of shares	Holding %
Promoters	700	70%
General Public	300	30%



Total or Full Market Cap	Free-float Market Cap
It is the total market value of all equity shares of the company.	It is that part of total market cap that is not held by promoters i.e., held by general public

Calculation of M-Cap

ESHF vs M-cap or BVPS vs MPS:

	Totality Value	Per Share Value
As per market		
As per books		

6) MPS & Price Earnings Ratio

Price Earnings Ratio (PE Ratio): tells you 'How many times the investors are ready to pay for every 1 rupee of income earned by the company'.

Which PE ratio is better?

Accordingly, **Market Price Per Share (MPS):**

7) Dividend: Absolute & Percentage

Dividend Per Share (DPS):

Dividend Rate = (as a % of FV)	Dividend Yield = (as a % of MPS)	Dividend Payout Ratio = (as a % of EPS)	Retention Ratio = (as a % of EPS)

Impact of dividend on MPS:



8) Other ratios used in practical questions:

B. Different Types of Rates of Return

1) Required Rate of Return

It is the minimum rate of return required to be earned from an investment based on the risk involved in it. Also called as **Opportunity Cost**, it is used as **Discounting Rate** to calculate PV of CFs.

Real Risk-free Rate

Compensation for allowing use of money to other

Inflation Premium

Compensation for loss of purchasing power of money invested

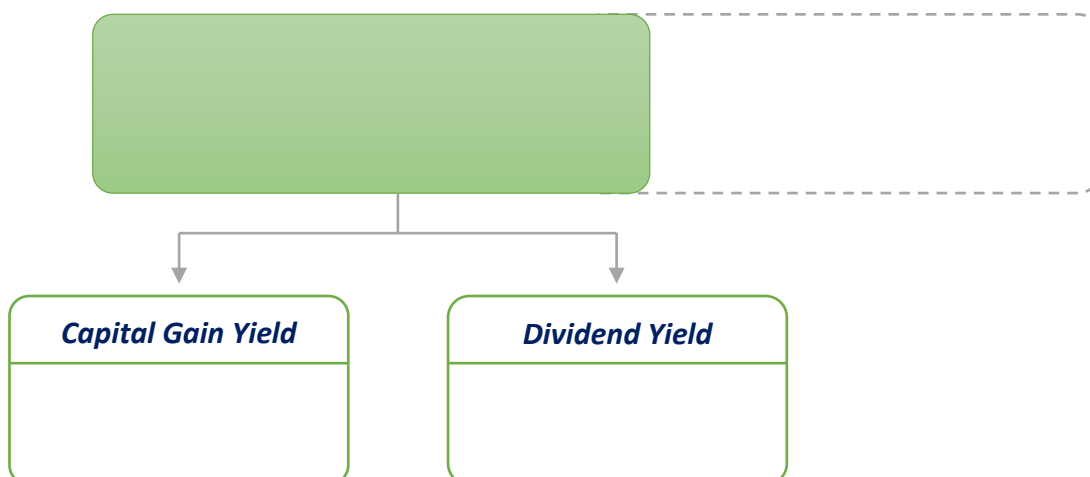
Risk Premium

Compensation for taking risk while making a risky investment

2) Expected Rate of Return

Denoted as $E(R)$, it is the rate of return that an investor estimates (expects) that he will earn on an investment in next 1 year. It depends on the estimated price and dividend of next year.

Example: A share is bought today @ ₹ 100 (P_0) & investor estimates that it can be sold @ ₹ 115 after a year (P_1). Then, expected rate of return:



3) Internal Rate of Return

It is the **annually compounded rate of return** actually earned (in case of past data of CFs) or to be earned (in case of future data of CFs) on any investment. It is calculated as the discounting rate at which PV of cash inflows from an investment is equals to initial cash outflow.

Example:

Years	CFs (₹)	
0	- 100	
1	60	
2	70	

First, we use **Trial & Error method** to find the PV of future cash inflows at different rates:

Thought Process:

If $r = 18\%$, then $PV = ₹ 101.12$
 & if $r = 19\%$, then $PV = ₹ 99.85$
 So, $r = ??$, if $PV = ₹ 100$

Then, we use **Interpolation** to find precise IRR:

Let's verify the return earned:

Year	Amount Invested	Return Accrued	Return received	Due Amount

C. Time Value of Money

1) Interest Rate & Compounding Frequency Interpretations:

Percentage & Decimal	
$r = 10\%$	
$r = 10\% \text{ p.a.}$	
Annually Compounded	
Semi-annually Compounded	
Continuously Compounded	
$r = 5\% \text{ per for 6 months}$	
One month rate is 10%	



2) Present Value & Future Value Calculations

Example: Interest Rate = 10%

Periods:	1	2	3	4
Cash Flows (₹)	200	200	200	200

Future Value	Present Value
Single Sum	
<i>FV of ₹ 200 of today at the end of 4th year:</i> 	<i>PV today of ₹ 200 of 4th year end:</i> 
<i>FV of ₹ 200 of today at the end of 4th semi-annual period:</i> 	<i>PV today of ₹ 200 of 4th semi-annual period end:</i> 

Annuity (A)

Regular Annuity: Assumes CF at the end of the period

FV of all CFs at the end of 4th year:



Calci steps:

- 1) 1 M+
- 2) 1.1 M+
- 3) $x = M+$
- 4) $= M+$
- 5) MRC

PV of all CFs today:



Calci steps:

- 1) 1.1
- 2) ÷
- 3) =, =, ... 4 times
- 4) GT

Annuity Due: Assumes CF at the start of the period

FV of all CFs at the end of 4th year:

PV of all CFs today:

Perpetuity: Assumes everlasting CFs

FV of infinite CFs of ₹ 200 at the end of period:

PV of infinite CFs of ₹ 200 today:

Meet Adish

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Ex-Morgan Staley & ICICI Securities with
2+ years work-ex in Equity Research

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- Conceptual Clarity
- Comprehensive Coverage
- Diversified Application

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