

1) Valuation of Bond and Security

* valuation is the financial process of determining the intrinsic or fair value of an asset or security. The core principle is that an asset's value is not what it cost in the past, but what it will be worth in the future. Specifically, an asset's value is the present value (PV) of all the future cash flows it is expected to generate over its lifetime.

The Valuation Process

The process generally involves three steps:

- i) Estimate Future cash flows: You must forecast all the money the asset will pay you,

* For a Bond: This is relatively simple. The cash flows are the predictable, fixed coupon (interest) payments and the face value (the principal amount) you get back when the bond matures.

* For a Security (like a stock): This is more difficult as the cash flows are not guaranteed. They are estimated as either future dividends or the company's total free cash flow (FCF).

ii) Determine a Discount Rate

* you must choose an appropriate interest rate to discount those future cash flows. This rate, often called the required rate of return, accounts for two key things:

* The Time value of money: A dollar today is worth more than a dollar you'll receive in five years (due to inflation and opportunity cost)

* Risk: The more uncertain the cash flow, the higher the discount rate. A risky tech startup has a much higher discount rate than a stable government bond.

2) Wealth Maximization vs. Profit Maximization

The statement "wealth maximization is a superior objective to profit maximization" is a central concept in modern finance.

Profit maximization is a traditional goal focused on making the accounting profit (or Earnings Per share EPS) as high as possible in the current period.

Wealth Maximization is a modern goal focused on maximizing the market value of the company's stock. This is considered superior for three key reasons.

1) It's long-Term: A stock's price reflects the market's expectation of all future cash flows, not just the current year's profit. It prevents managers from making short-sighted decisions that boost short-term profit but damage the company's future.

2) It considers the Time value of Money.
Wealth maximization uses discounted cashflows, correctly valuing near-term cash as more valuable than distant cash. Profit maximization treats all profits equally, whether they're earned today or in five years.