

# BASIC PRINCIPLES OF FINANCIAL VALUATION DISCOUNTING

Discounted Cash Flow as  
the Basis for All Valuation

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# DISCOUNTED CASH FLOWS (DCF)

- ▶ Method of valuing an investment
- ▶ Uses all anticipated future cash flows
- ▶ Discounts all cash flows back to present value

# VALUATION BY DCF

Why do investors buy different assets?

Real Estate

Stocks

Bonds

Because they want to earn a return and use the money later.

Cash is King!

# WHAT GIVES AN INVESTMENT VALUE?

How much cash is coming in?

When is the cash coming in?

With these two answers we can put a value on anything!!!

# BOND

- ▶ Contract between an issuer and a bondholder
- ▶ Buyer of bond lends money (principal) to issuer
- ▶ Issuer pays interest on loan and repays principal at maturity

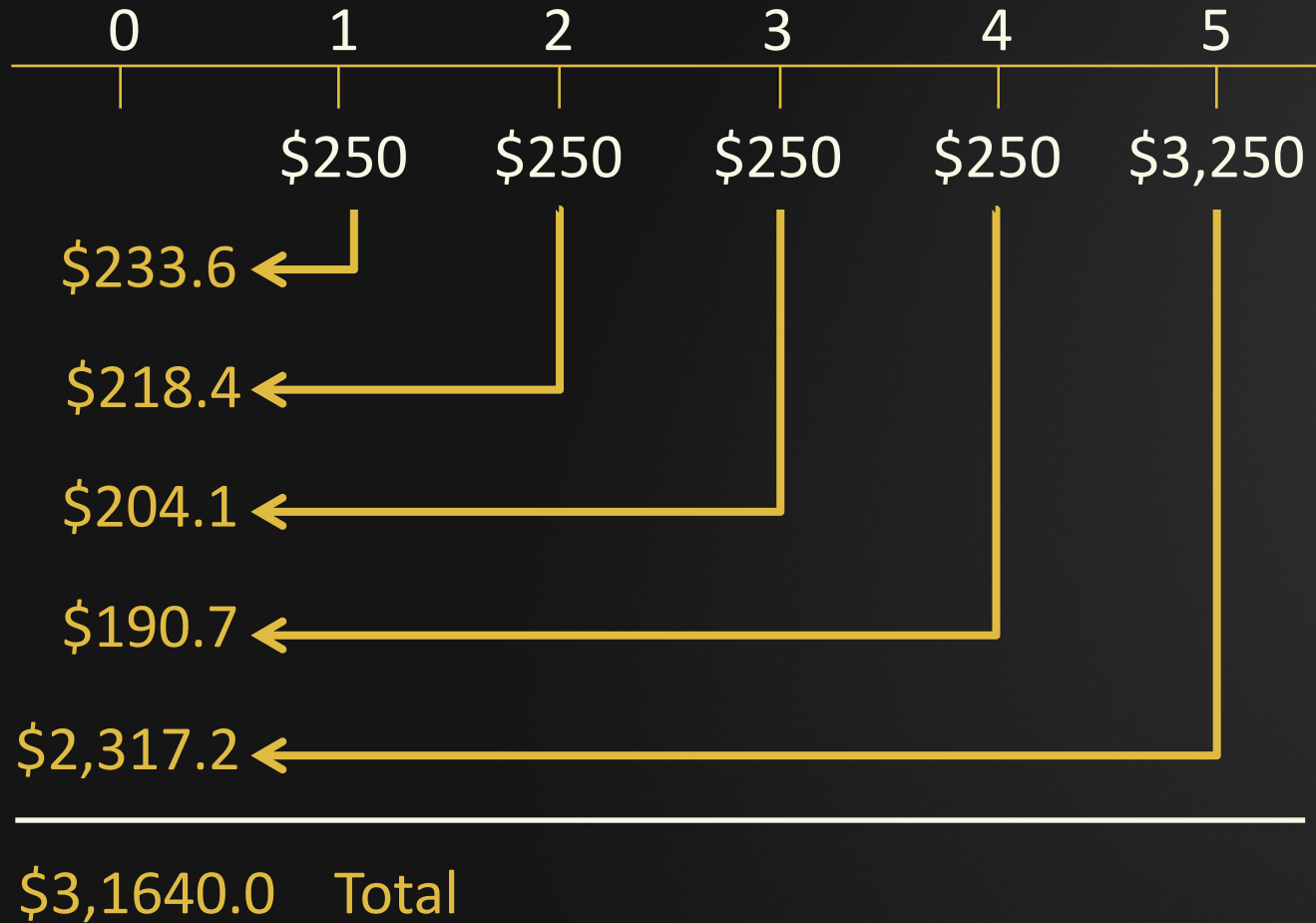
# DCF: SIMPLE BOND

Consider a simple bond of \$3,000 that makes annual payments of \$250 for 5 years if the discount rate is 7%?

What is it worth?

- ▶ Step 1: What are the cash flows
- ▶ Step 2: What are they worth today?
- ▶ Step 3: Add up the present values

# DCF: SIMPLE BOND



## DCF: SIMPLE BOND

In our example the bond is worth \$3,164.  
That is how much money the bond would  
raise if sold today.

Why would anyone pay more or less?



# DCF: STOCK VALUATION

Share of General Electric

Cash to Shareholders? When?

Model both of these and DCF!

This is (partly) what stock analysts do

# DCF: OTHER ASSETS

Apply the principle to any asset:

- ▶ Real Estate
- ▶ Mergers and Acquisitions
- ▶ Derivatives

Cash and timing drive all valuation