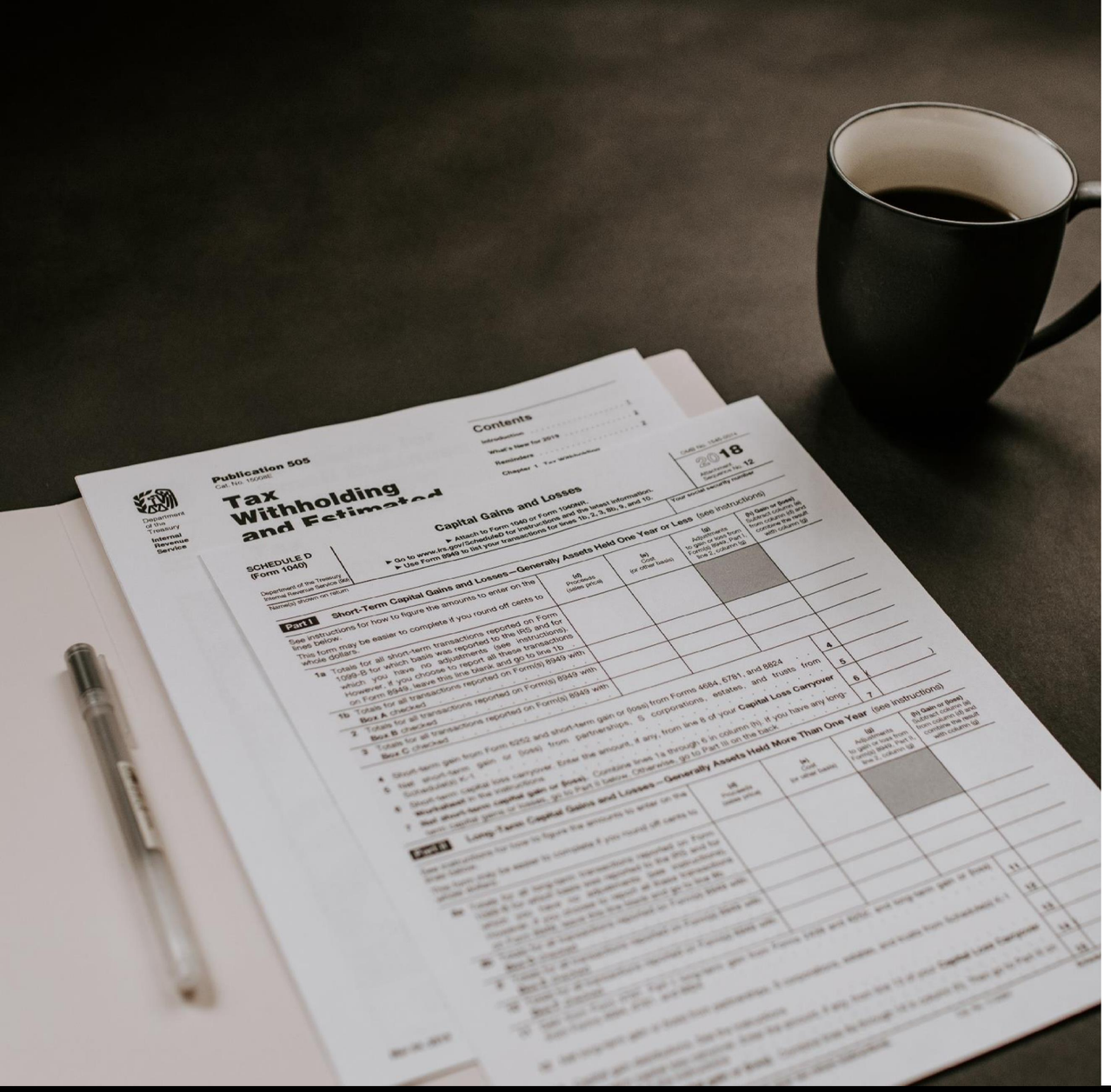
Funding & Impact Investing

PRACTICAL CLASS #4

SPRING 2025

Agenda

1. Funding
2. Valuation
3. Exercises



Introduction to Funding

- Retained Earnings
- Debt
- Equity

Retained Earnings

- Refer to the profits a company keeps instead of distributing them as dividends.
- This method allows businesses to reinvest profits into operations without taking on debt or selling equity.
- It avoids double taxation. If the company distributes dividends, shareholders pay dividend taxes

Debt

- When a company raises capital by borrowing money, typically through loans with the promise to repay the principal plus interest over time.
- The company must repay the borrowed amount with interest, regardless of profitability.
- Debt funding does not dilute ownership or control.
- One key advantage of debt funding is tax reduction through a concept called the interest tax shield. Interest paid on debt is considered a business expense and can be deducted from taxable income

Debt

- When a company raises capital by borrowing money, typically through loans or bonds with the promise to repay the principal plus interest over time.
- The company must repay the borrowed amount with interest, regardless of profitability.
- Debt funding does not dilute ownership or control.
- One key advantage of debt funding is tax reduction through a concept called the interest tax shield. Interest paid on debt is considered a business expense and can be deducted from taxable income

$$\text{Tax Shield} = \text{Debt} \times \text{Interest Rate} \times \text{Tax Rate}$$

Interest Tax Shield Example

EBIT= $1 million
Tax corporate rate = 30%

Without Debt:
Interest = 0$
EBT = $1 million
Taxes = 300 000$
Net income = 700 000$

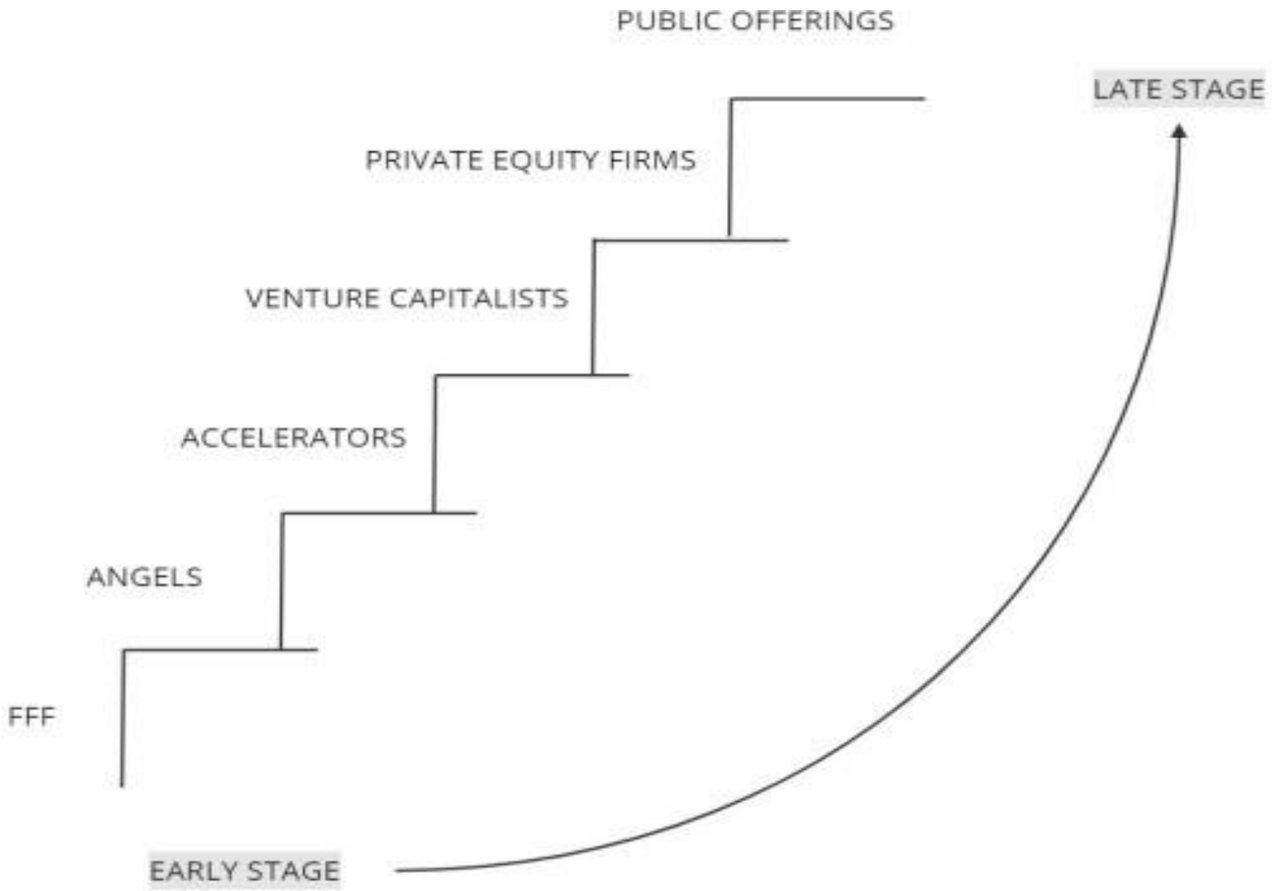
With Debt
Suppose the company pays 200 000$ in interest expenses
Interest = 200 000$
EBT = 800 000$
Taxes = 240 000$
Net Income = 560 000$

Tax Savings = 300 000 – 240 000 = 60 000$

Borrowing makes sense If the business generates a higher return on investment (ROI) than the cost of debt (interest rate),

Equity

- Refers to raising capital by selling ownership (equity) in a company, typically in the form of shares
- There is no need to repay investors, but they expect returns through dividends or stock appreciation
- Investors may take an active role in decision-making

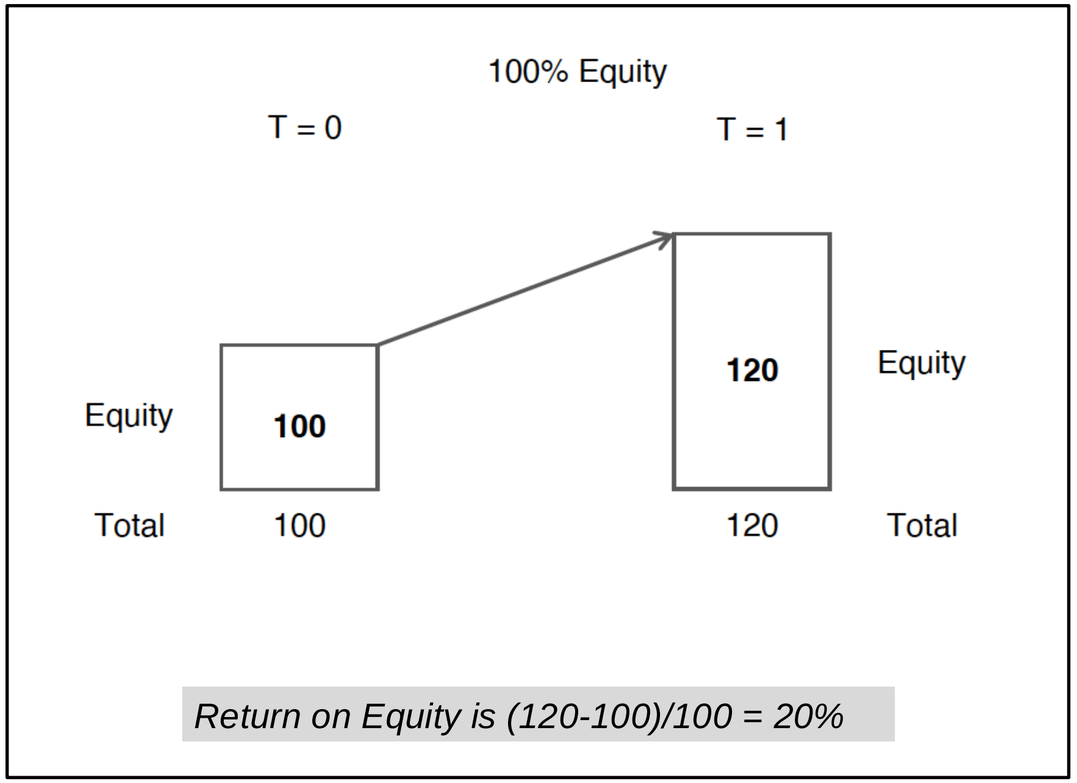


Difference between PE and VC

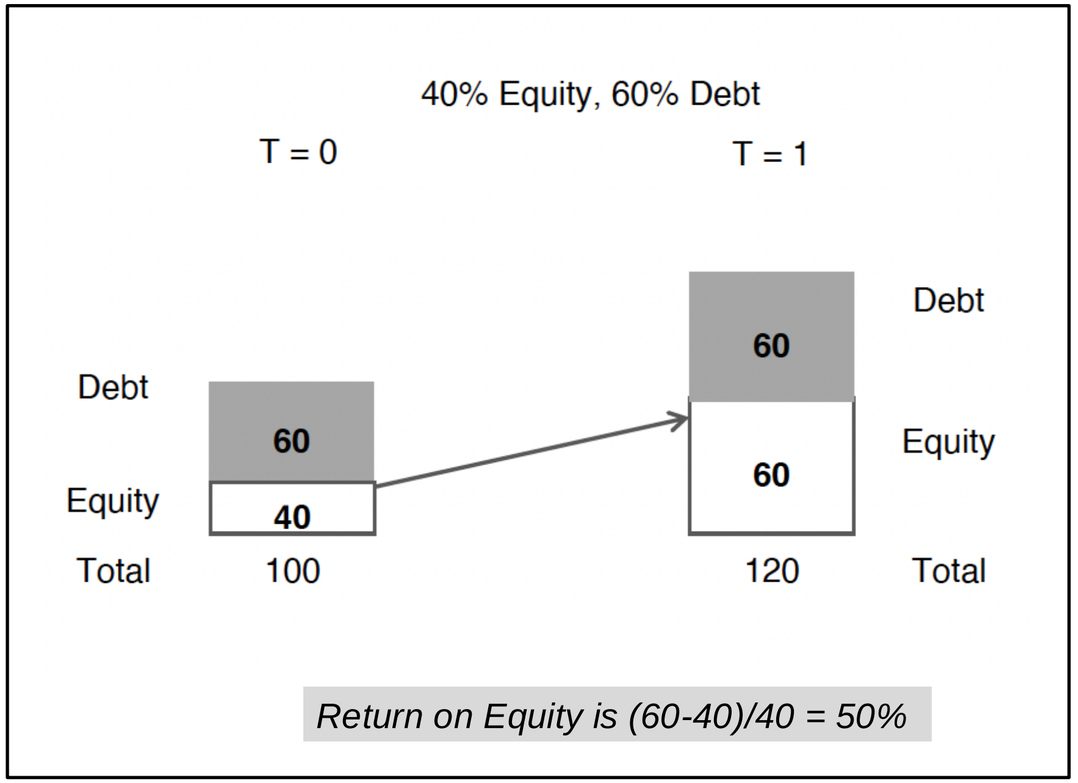
	Private Equity	Venture Capital
Type of Asset	Generally mature established companies	Early stage of development, startups
Risk	Low risk	High risk
Control	Control always present in true buyouts	Minority stakes are the norm
Valuation	Large Enterprise Value	Small enterprise value
Area of expertise	Can invest in any area	Areas of expertise are usually technology, software or life sciences
Investment Horizon	Short Run	Long Run

Would you rather use debt or equity?

Would you rather use debt or equity?



Return on Equity is (120-100)/100 = 20%



Return on Equity is (60-40)/40 = 50%

Would you rather use debt or equity?

Downsides of using debt:

- Increase financial risk: If investments do not perform as expected, the investor still needs to repay the debt with interest, which can lead to financial distress.
- Higher Interest Costs: Borrowing money comes with interest payments, which reduce overall profits.
- Cash Flow Pressure: Debt obligations require regular payments, regardless of whether the investment generates income. This can create liquidity issues.
- Psychological Stress: Managing debt, especially in uncertain markets, can create anxiety and stress, affecting decision-making and personal well-being.
- In some situation you will need the approval of banks to take some decision while running your business

Valuation

How to to perform a company's valuation?

- ✓**Market comparables**
- ✓**Discounted cash flow (DCF)**
- ✓**Multiples**

Balance Sheets for NetFlix.com, Inc.

	As of December 31, 1998	1999
Assets		
Current assets		
Cash and cash equivalents	1,061	14,198
Short-term investments	-	6,322
Prepaids and other current assets	635	720
Total current assets	1,696	21,240
Rental library, net	2,011	8,695
Property and equipment, net	1,062	4,499
Deposits and other assets	80	339
Total assets	4,849	34,773
Liabilities and Shareholders' Equity		
Current liabilities		
Notes payable	1,000	625
Current portion of capital lease obligations	579	571
Accounts payable	3,063	5,334
Accrued liabilities	1,640	3,211
Deferred revenue	118	471
Total current liabilities	6,400	10,212
Capital lease obligations	172	811
Note payable	-	3,959
Total liabilities	6,572	14,982
Mandatorily redeemable conv. pref stock	6,321	51,819
Shareholders equity (deficit):		
Convertible preferred stock	4	4
Common stock	3	7
Additional paid-in capital	8,100	16,087
Deferred stock-based compensation	(4,711)	(6,841)
Accumulated deficit	(11,440)	(41,285)
Total shareholders' equity (deficit)	(8,044)	(32,028)
Total liabilities and shareholders' equity (deficit)	4,849	34,773

Multiples

It is a method used to estimate the value of a company by applying a financial ratio (or multiple) to a specific financial metric, such as revenue, EBITDA, or net income. The multiple comes from **general industry benchmarks**, not specific companies, and can be found in data bases like Bloomberg.

1. Step

Select an appropriate multiple, example:

$$EV/EBITDA = \frac{\text{Enterprise Value (EV)}}{\text{EBITDA}}$$

$$EV/Revenue = \frac{\text{Enterprise Value (EV)}}{\text{Revenue}}$$

2. Step

Determine the company's financial metric and industry multiple

3. Step

Apply the industry multiple by Multiplying the company's financial metric by the industry standard multiple.

Multiples Calculation Example

Information from Company X:

EBITDA: $100 million
Net Income: $50 million

Industry EV/EBITDA = 8

Enterprise Value (EV) = EBITDA × EV/EBITDA= $100M × 8 = $800M

Market Comparable

This method values a company by comparing it to publicly traded peers using financial ratios (multiples). It uses average of real-world companies' multiples instead of fixed industry standards multiples

1. Step

Identify similar companies

2. Step

Collect the multiples of the similar companies and you may take the average of these multiples

3. Step

Apply this multiples to the target company to determine the valuation

Market Comparable

Company	Market Cap ($M)	Revenue ($M)	EBITDA ($M)	Net Income ($M)	P/E	EV/EBITDA
A	1,200	600	120	60	20	10
B	1,500	750	150	75	18	9
C	1,100	550	110	55	22	11
Avg.	-	-	-	-	20	10

Compare **Company X** to three similar companies (A, B, and C) and take their average multiples:

Estimated Enterprise Value = EBITDA × EV/EBITDA= $100M × 10 = $1,000M

Now, applying the average multiples to **Company X**:

Discounted Cash Flow (DCF)

It is a method used to estimate the value of a company based on its expected future cash flows. It calculates the present value of those future cash flows using a discount rate
The free cash flow is the cash a company generates after considering the cash outflows to support its operations and maintain its capital assets
This method is based on the idea that money today is worth more than money in the future due to inflation and risk

1. Step

Determine Free Cash Flow for the next years
Chose the discount rate for the money

2. Step

Calculate the terminal value. This is the value of a business beyond the period the cash flows can be estimated

3. Step

Discount the future cash flow and terminal value to present value having in consideration the discounted rate of money and sum this values.

This slide will not be evaluated in the exam or in the midterm

Discounted Cash Flow (DCF)

Example:
Company X's Free Cash Flow (FCF):
•Year 1: $50M
•Year 2: $55M
•Year 3: $60M
Discount Rate (WACC): 10%
Terminal Value: 600

Year	Free Cash Flow (FCF)	Discount Formula	Present Value (PV)
1	**$50M**	50/(1.1)	**$45.5M**
2	**$55M**	55/(1.1^2)	**$45.5M**
3	**$60M**	55/(1.1^3)	**$45.1M**
Terminal Value			**$600M**
Total			**$736,1M**

This slide will not be evaluated in the exam or in the midterm