



CHULALONGKORN
BUSINESS SCHOOL

FLAGSHIP FOR LIFE

Practical Corporate
Financial Modeling

Valuation

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Value: book versus market

Invested
Capital

Capital
Employed

Net Operating Working Capital	Debt - <i>Short-term</i> - <i>Long-term</i>
Net Long-Term Assets	Equity - <i>Long-term</i>

Enterprise Value	Debt - <i>Short-term</i> - <i>Long-term</i>
	Equity - <i>Market Cap</i>



Three approaches to valuation

This is generally true for all asset classes.

- How much does it cost to make it rather than buy it?
→ **Cost approach**
- How much are other people paying for it?
→ **Comparable approach**
- What benefits am I getting from owning it?
→ **Income approach** *most informative way*
↳ gives intrinsic value for owning it
- Why are we doing the valuation? Who is doing the valuation?

pricing



Comp = scaling problem.

→ pricing approach

What would you compare “value” to?

Typical EV multiples

~~EV / net income~~
mismatch
→ includes FX gain/loss
↳ only shdr have access on this

EV / invested capital

EV / sales

~~EV / market cap~~

EV / EBITDA ~ close to cash

EV / free cash flow

Enterprise Value

Debt

- **Short-term**
- **Long-term**

Equity

- **Market Cap**

Typical equity multiples

MV / net income
 $= (P \times N) / (EPS \times N) = P/E$
→ E/P = earnings yield

MV / book value of equity
 $= P/BV$
→ B/M (book to market ratio)

~~MV / sales~~

~~MV / EBITDA~~

MV / dividend
→ $DPS/P = \text{dividend yield}$

Income approach can be done with both profits and cash flows.

Enterprise value
= PV(FCF, WACC)

period-by-period basis

= **PV(EVA, WACC)** *same result*
+ invested capital

Enterprise Value	Debt - Short-term - Long-term
	Equity - Market Cap

Bond value
= PV(promised bond cash flow,
yield to maturity [promised yield])

= PV(expected bond cash flow,
“cost of debt”)

Market capitalization
= PV(dividend, cost of equity)

= PV(FCFE, cost of equity)

for equity part
= **PV(residual income, cost of equity)**
+ book value of equity

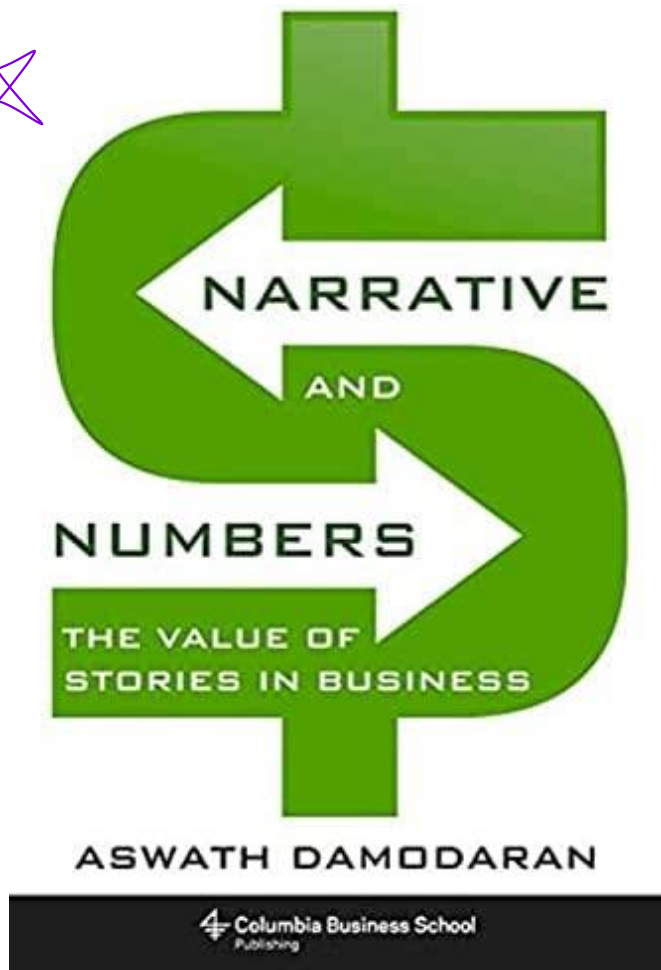


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“Every valuation tells a story.”

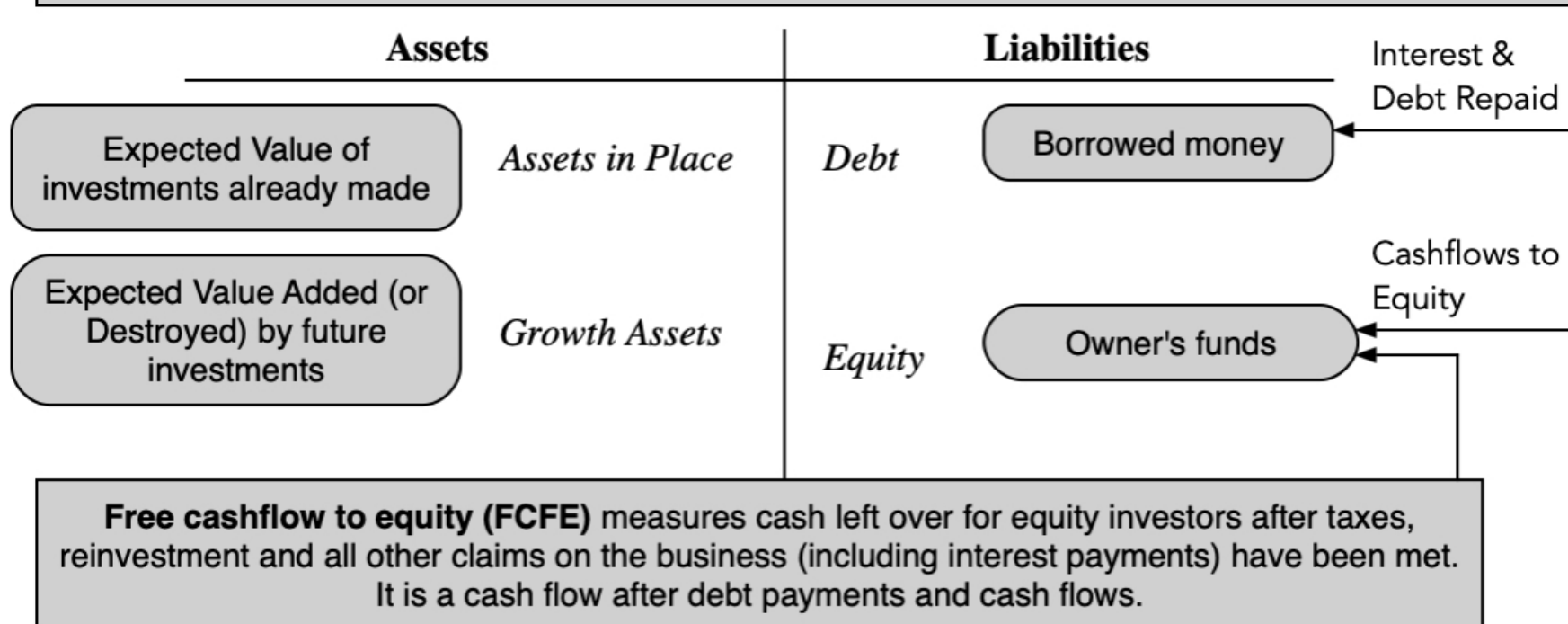
Prof. Aswath Damodaran, the “Dean of Valuation”





FCFF versus FCFE

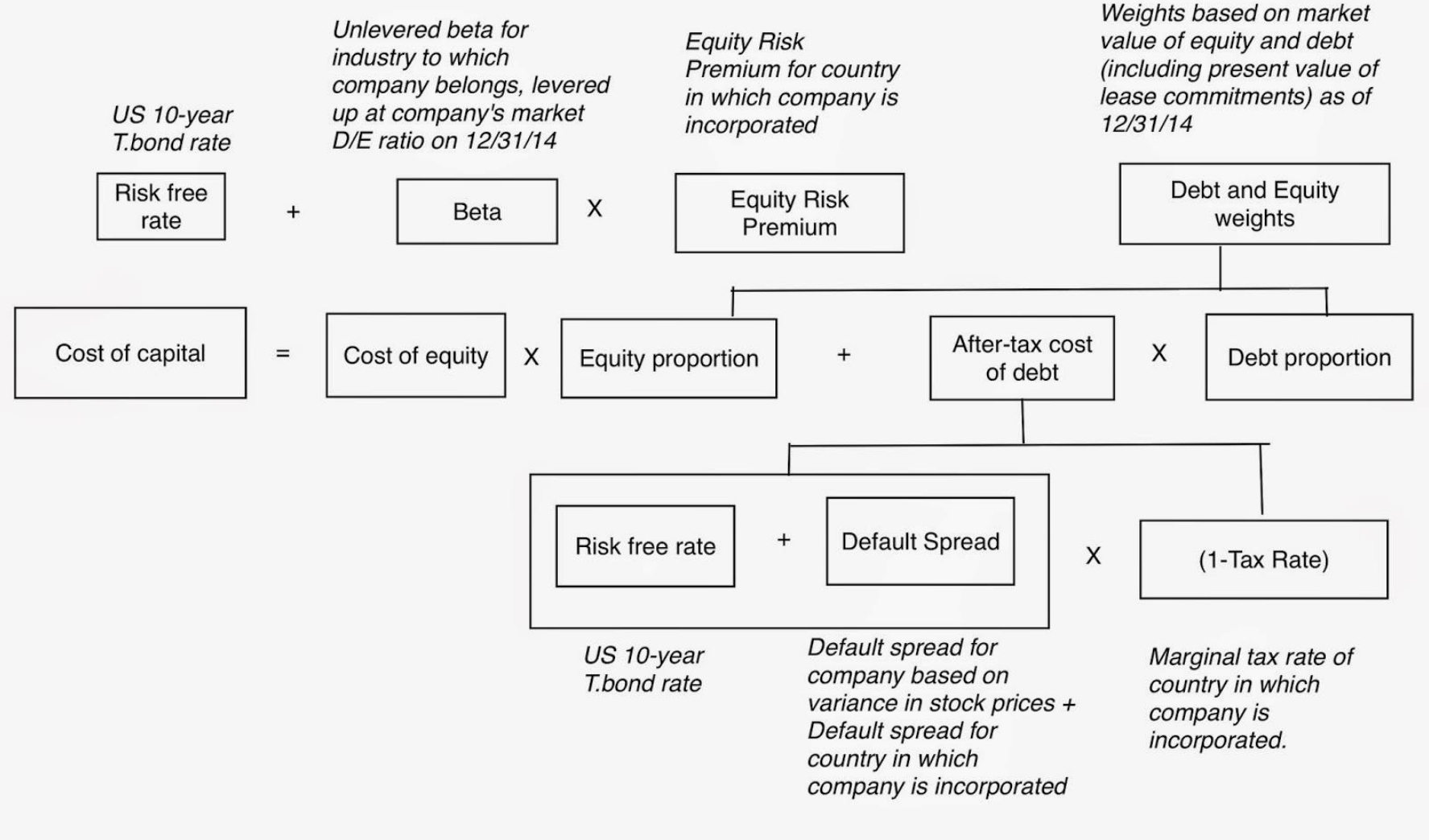
Free cashflow to the firm (FCFF) measures cash left over for all claim holders in the firm (debt and equity) after taxes and reinvestment. It is a pre-debt cash flow.



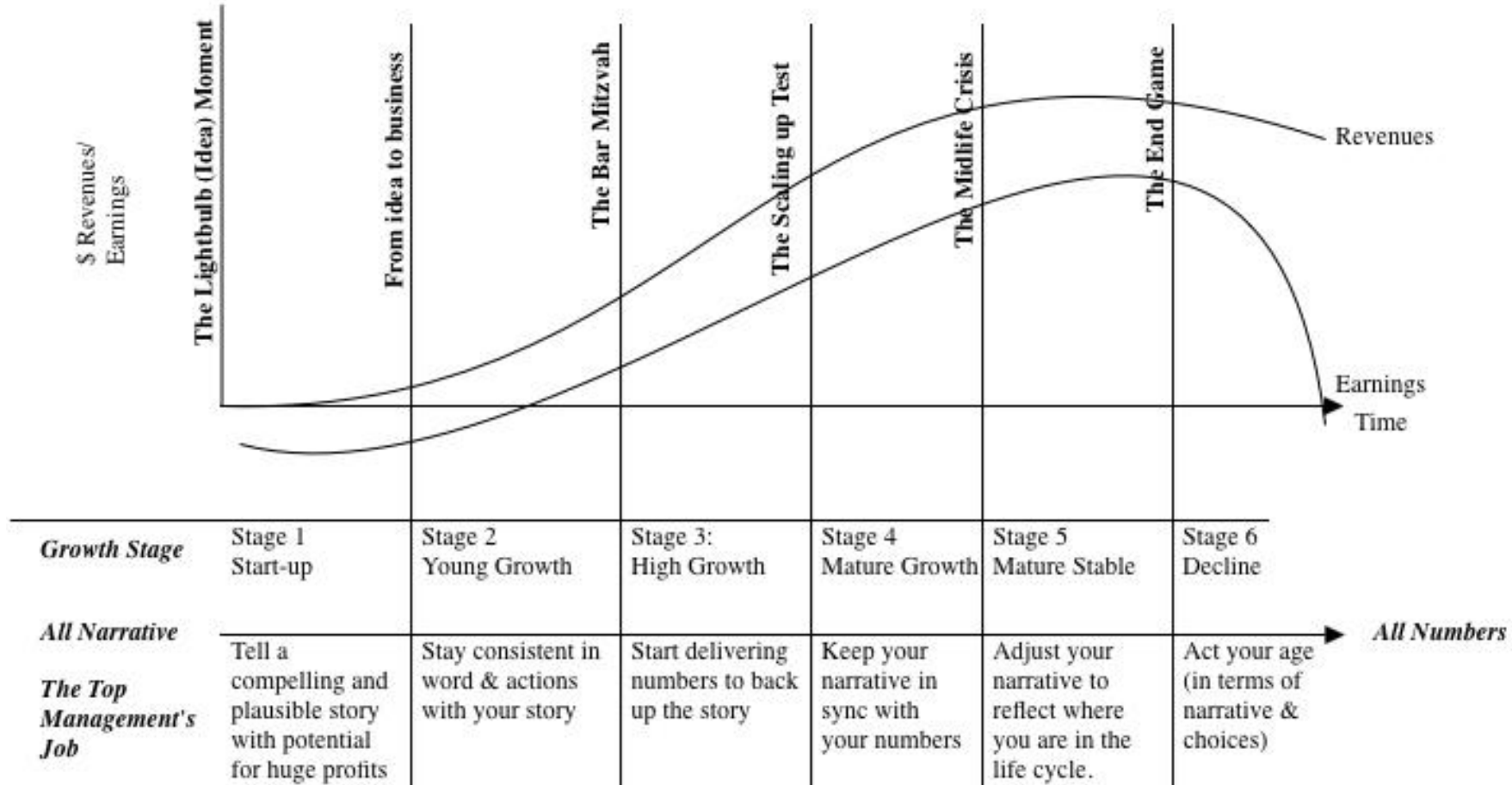
Source: <https://aswathdamodaran.blogspot.com/2022/11/meta-lesson-1-corporate-governance.html>



Computational Assumptions: Individual Company Cost of Capital



Source: <https://aswathdamodaran.blogspot.com/2015/01/putting-d-in-dcf-cost-of-capital.html?m=1>



Source: <https://aswathdamodaran.blogspot.com/2022/10/earnings-and-cash-flows-primer-on-free.html>

Challenges associated with financial decision making.

How private equity construct financial model
target return based model → next week

- What are the implicit assumptions in the valuation method?
 - Capital structure?
 - Frictions that may affect firm value?
- How do we evaluate “success” when we make decision?
 - Merger and acquisition
 - Private equity and venture capital
- Valuation versus pricing
 - Different parties may not agree on the valuation.
 - Value is unobservable.
 - Negotiation will determine the price, which is the only outcome you’ll see.



Valuation ingredients

- How many assumptions do we want to make?
 - **FCF = NOPAT – reinvestment**
 - Revenue / cost drivers
 - Investment decisions
- How long should we forecast cash flows for?
 - Growth rate
 - Operating / financial metrics
 - Cost of capital
 - Each year and then “steady state”
- Equity value = enterprise value
 - + other adjustments (e.g., investment in subsidiaries)
 - debt + excess cash (net debt)
 - + equity raised (only in new equity issuance)