BUSINESS, INVESTMENT, AND MANAGEMENT IMPLICATIONS

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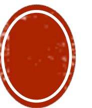
CORPORATE FINANCE 101



CORPORATE FINANCE: THE BIG PICTURE

Objective: Maximize the value of the business (firm)

The Investment Decision
Invest in assets that earn a return greater than the minimum acceptable hurdle rate

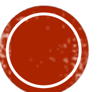
- The **hurdle rate** should reflect the riskiness of the investment and the mix of debt and equity used to fund it.
- The **return** should relfect the magnitude and the timing of the cashflows as welll as all side effects.

The Financing Decision
Find the right kind of debt for your firm and the right mix of debt and equity to fund your operations

- The **optimal mix** of debt and equity maximizes firm value.
- The **right kind** of debt matches the tenor of your assets.

The Dividend Decision
If you cannot find investments that make your minimum acceptable rate, return the cash to owners of your business

- **How much cash** you can return depends upon current & potential investment opportunities.
- **How you choose** to return cash to the owners will depend whether they prefer dividends or buybacks.



THE END GAME IN BUSINESS

Shareholders invest in equity & own company

Shareholders exercise control over management tyhrough board of directors & annual meetings

Banks & bondholders lend to the company

Debt covenants restrict corporate actions with veto power over some actions.

Competitors provide products & services that are similar

Compete for market share in a product market.

Corporate managers make decisions on what to invest in, how much debt to take & how much cash to return to shareholders.

Wages and benefits determined by market for labor.

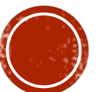
Employees help make the products & services that the company sells.

Determined by laws and societal norms on acceptable behavior.

Society receives side benefits and bears side costs of corporate actions.

Determined by product market competition & laws on customer protections

Customers pay for & receive benefits from company's products & services



SHAREHOLDER WEALTH MAXIMIZATION

- While the notion that a business should consider the interests of all of its different stakeholders is unexceptional, it fails, in our view, for two reasons:
  - It leaves businesses rudderless: While all stakeholders provide key ingredients for a business to succeed, they do have very different interests in the firm, and those interests will often collide.
  - It leaves managers unaccountable: If decision makers in a business are accountable to all stakeholders, we would argue that they are effectively accountable to none of them.
- The shareholder value maximization objective is not perfect, by any stretch of the imagination, but **the notion that it is inimical to the well-being of the other stakeholders is neither logical, nor backed by data**.

1. INVESTMENT PRINCIPLE

The hurdle rate for an investment
Should reflect the risk of the investment, not the entity taking the investment. Should use a debt ratio that is reflective of the investment's cash flows.

The return on an investment
Should reflect the cash flows that you will get from the investment Should be time weighted, reflecting when you will get those cash flows

THE HURDLE RATE - RISK

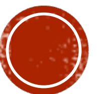
Type of Risk/Uncertainty	The Difference	Why we care in corporate finance
Estimation versus Economic	Economic uncertainty refers to the unexpected changes doled out by fate that no amount of research or information is going to give us insight into. Estimation uncertainty relates to judgments in investing and valuation that can be improved by collecting more information and using it better.	Businesses must make decisions in the face of uncertainty, and while more due diligence and research will reduce estimation uncertainty, they will have no effect on economic uncertainty.
Micro versus Macro	Micro uncertainty is at the company-level and comes from management decisions, legal entanglements and even from immediate competitors. Macro uncertainty can be traced back to larger forces, i.e., the swings in fortune caused by changes in inflation, interest rates and economic cycles.	The managers of a business can affect only the micro component, with better decisions translating into better payoffs. However, they cannot control the macro component, coming from overall economic or country risk.
Discrete versus Continuous	Continuous risk is risk that you are exposed to on a continuous basis, though the moment-to-moments will tend to be small. Discrete risk is risk that is uncommon but potentially catastrophic.	Risk management systems often are built to manage continuous risk, partly because you get constant reminders of its presence, and ignore or underplay discrete risks.

UNCERTAINTY ACROSS THE LIFE CYCLE

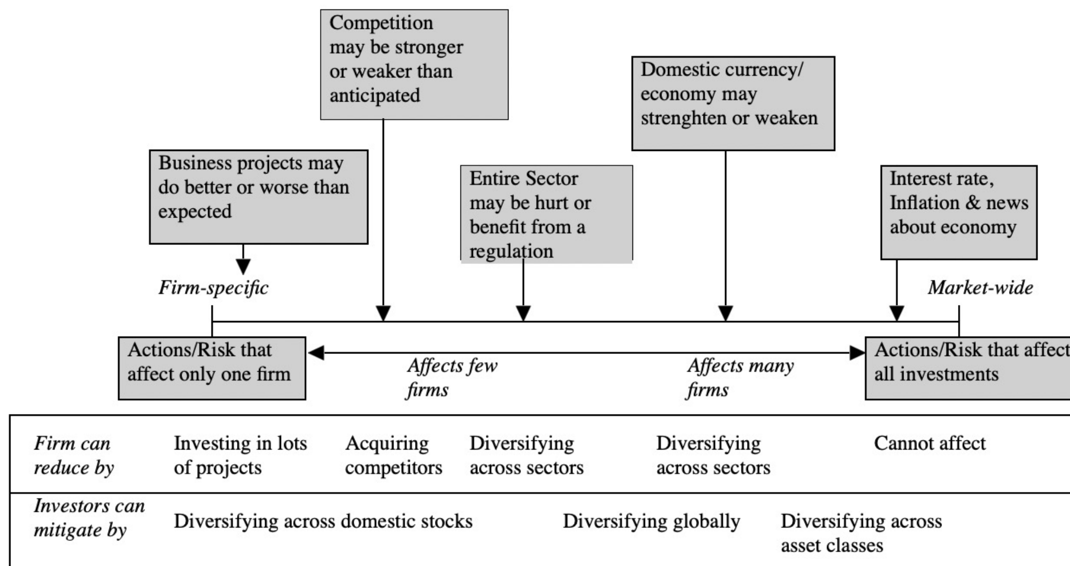
The Corporate Life Cycle: The Evolution of Uncertainty

The Lightbulb (Idea) Moment
The Product Test
The Bar Mitzvah
The Scaling up Test
The Midlife Crisis
The End Game
Revenues
Earnings
Time

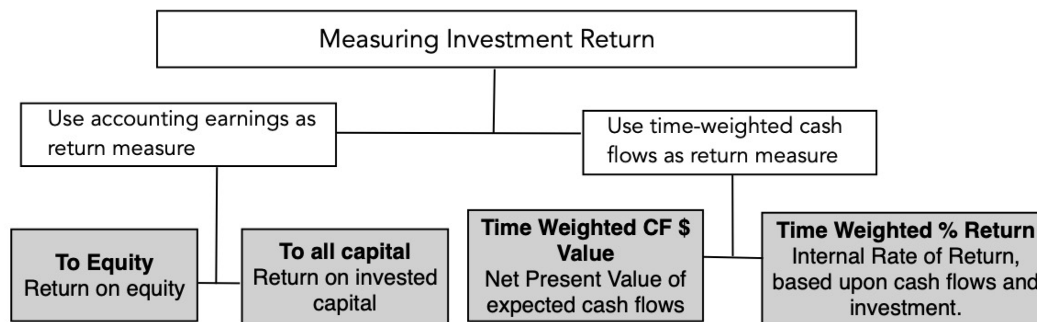
Lifecycle stage	Start-up	Young Growth	High Growth	Mature Growth	Mature Stable	Decline
Amount of Uncertainty	High → Low → High *Uncertainty is greatest at either end of the life cycle, and least for mature companies.*					
Estimation verus Economic Uncertainty	Mostly economic → More estimation *With young companies, most of the uncertainty is real, and neither data nor sophisticated models will reduce exposure to it.*					
Micro versus Macro Uncertainty	Mostly micro (company-specific) → Mostly macro *With young companies, uncertainty is centered on their business models and management. With older companies, uncertainty comes more from macro sources (economy, interest rates etc.)*					
Discrete versus Continuous Uncertainty	High discrete risk (failure) → Mostly continuous risk → High discrete risk (failure) *Two thirds of start ups don't make it to young growth, and declining companies, with debt loads, face risk of distress and failure.*					



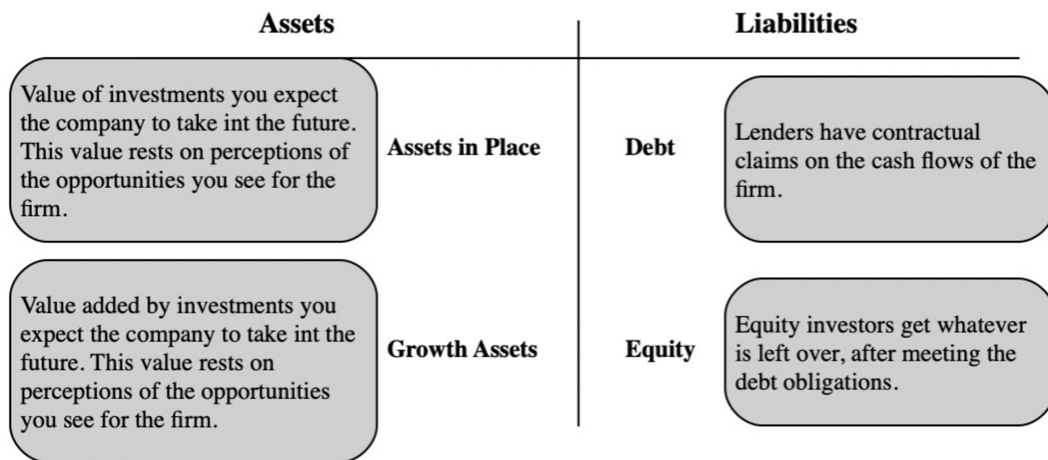
DIVERSIFIABLE VS UNDIVERSIFIABLE RISK



INVESTMENT RETURNS



2. THE FINANCING PRINCIPLE



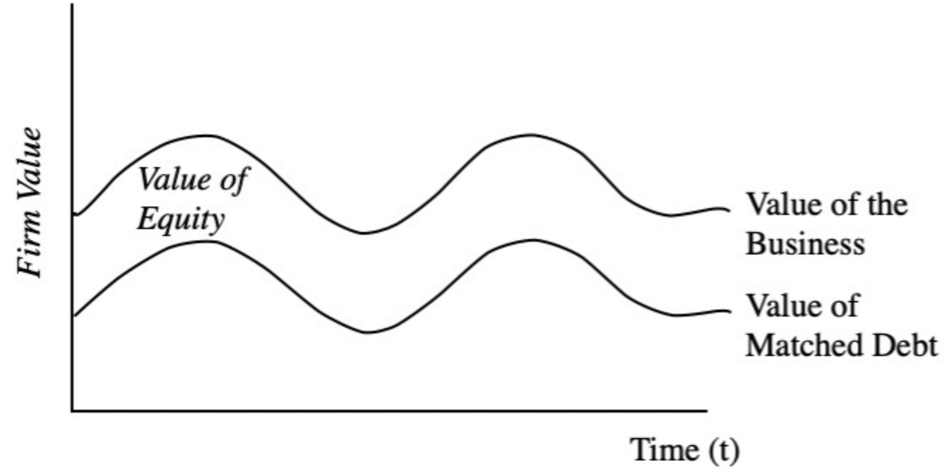
FINANCING MIX

The Biggest Plus	*The Biggest Minus*
Tax Benefit: Debt gives rise to interest payments, which are tax deductible, and thus lower taxes due. Equity receives cash from dividends or buybacks, and neither is tax deductible.	**Bankruptcy or Default risk:** Debt creates contractual obligations in the form on interst and principal payments, which if not met, can result in either bankruptcy or loss of control (to lenders) of the business.

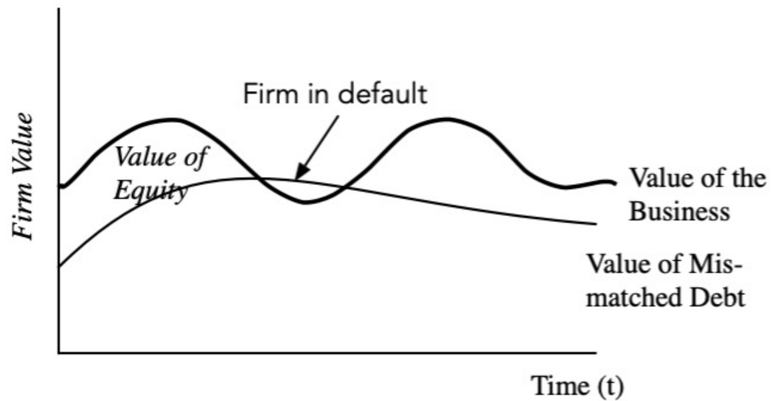
Financing Mix Follow up: Firms that receive large (small) tax benefits from debt, while facing little (lots of) risk of default, should choose to use more (less) debt, as opposed to equity.

FINANCING TYPE

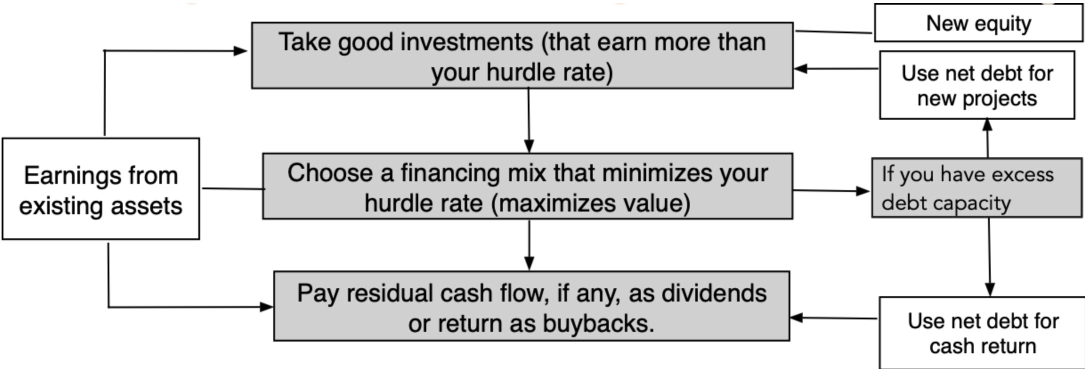
Matched debt



Unmatched debt



3. THE DIVIDEND PRINCIPLE



POTENTIAL DIVIDENDS?

Potential Dividends (The Logic)

Start with the income available for equity investors

Net out

Cash invested in long term assets to generate future growth

Net Out

Cash invested in short term assets to generate future growth

Add back or net out

Add back cash inflows from new borrowing and net out cash outflows from paying off debt

Yields

Free Cash Flow to Equity

Potential Dividends (Calculation)

Net Income

minus

Cap Ex - Depreciation & Amortization

minus

Change in non-cash Working Capital

plus

(New borrowings - Debt repaid)

equals

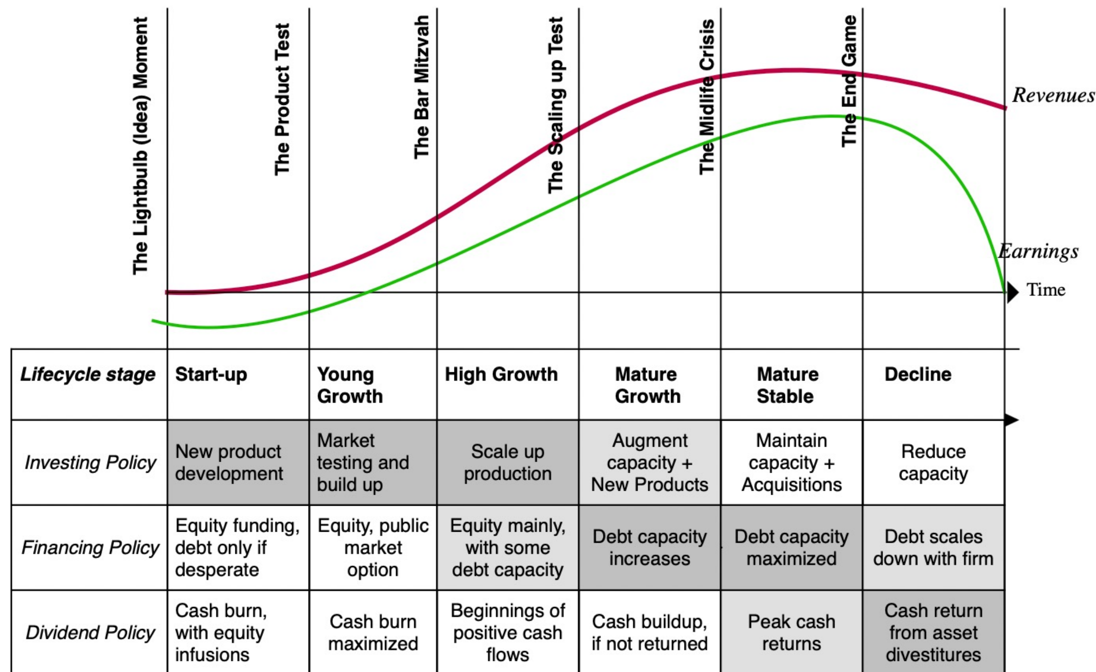
Free Cash Flow to Equity

CASH RETURN: DIVIDENDS VS BUYBACKS!

Dividends	*Stock Buybacks*
Sticky: Dividends, once set, are slow to change, more likely to increase than decrease.	**Flexible:** Buybacks are flexible, and even if announced, can be reversed with little or no consequence.
Timed: Dividends are paid out at regular intervals of time (quarters, annual).	**Opportunistic:** Buybacks do not follow a time pattern, and can be done at any time (of the company's choosing).
General: Dividends are paid to all shareholders in the firm, whether they need or want the cash.	**Selective:** Cash is returned to shareholders, but only to those who choose to sell their shares back.

Dividends vs Buybacks: Firms that have large (small) and stable (volatile) earnings and shareholders who like (don't need) regular, predictable cash flows will return cash as dividends (in stock buybacks)

CORPORATE FINANCE EMPHASIS ACROSS LIFE CYCLE



Lifecycle stage	Start-up	Young Growth	High Growth	Mature Growth	Mature Stable	Decline
Investing Policy	New product development	Market testing and build up	Scale up production	Augment capacity + New Products	Maintain capacity + Acquisitions	Reduce capacity
Financing Policy	Equity funding, debt only if desperate	Equity, public market option	Equity mainly, with some debt capacity	Debt capacity increases	Debt capacity maximized	Debt scales down with firm
Dividend Policy	Cash burn, with equity infusions	Cash burn maximized	Beginnings of positive cash flows	Cash buildup, if not returned	Peak cash returns	Cash return from asset divestitures