



Learning Session #1: Finance Basics

September 19, 2019

Agenda



Introduction to Finance



Capital Markets Primer



Basic Financial Concepts



Q&A

Introduction to Finance



What is finance?

- Finance is a broad term that describes activities associated with banking, leverage or debt, credit, capital markets, money, and investments.
- The finance field includes three main sub-categories: personal finance, **corporate finance**, and public (government) finance.

Personal Finance	Corporate Finance	Public Finance
<ul style="list-style-type: none">• Formulate strategies for future needs of a person within financial constraints• e.g. Purchasing of financial products such as credit cards, insurance, mortgages, and various types of investments	<ul style="list-style-type: none">• Financial activities related to running a corporation• Important to us because we invest in equities• Corporate Decisions: M&A, Raising Capital• Investment Decisions: Mutual Funds	<ul style="list-style-type: none">• Tax, spending, budgeting, and debt issuance policies• Prevent market failure by overseeing the allocation of resources, distribution of income, and economic stability

Why is corporate finance important?

Making Corporate Decisions	Making Investment Decisions
<p>Case: Suppose a telecom company is looking to acquire a regional company to boost its presence in that region. There are several potential targets that fit the bill. How does this company determine which of these, if any, companies would make a good acquisition candidate?</p> <p>Example Answers: Health of Cash Flow, Balance Sheet Composition, Regional Sales Performance</p>	<p>Case: A mutual fund is looking to invest in several diverse technology companies – Microsoft, Oracle, and Intel. How does this mutual fund determine in which of these, if any, companies it should make an investment?</p> <p>Example Answers: Key Ratios, Valuation (Extrinsic and Intrinsic), Growth Strategy</p>

Corporate finance, the standard by which such financial information is utilized to calculate returns, is fundamental to making these decisions.



Capital Markets Primer



Raising Capital

	Corporations	Investment Banks	Investors	Exchanges
Corporation issues debt and issues equity (via IPOs and secondary offerings)	Finances its activities via debt, equity, and cash flows from operations.	Give company cash immediately in exchange for securities issued by company.	Analysts rate securities as buy, sell, or hold.	Once investors have bought inventory, they can still trade it among one another in exchanges.
	Corporates decide whether and in what proportion debt and equity will need to be raised.	Use sales channels to market the debt/equity to investors who want it. The investment bank charges a fee for this service.	"buy-side" -the potential buyers of securities which the investment bank underwrites. Investors raise money from everywhere.	Brokerage firms also play a role by performing trades on behalf of investors.

Investing Capital

	Corporations	Investment Banks	Investors	Exchanges
Operations	<p>Sell/purchase commodities as part of operations.</p> <p>Manage companies' investments + excess cash.</p>	Facilitate the trades on behalf of producers and consumers	Purchasing contracts with the intent to make profit on buying/selling.	Commodities exchanges facilitate these activities.
M&A	<p>Companies engage in acquisitions, divestitures, and restructurings.</p> <p>Investment banks advise companies on these strategic activities.</p>	Finding/vetting ideal targets to performing valuation analysis + due diligence to determine how much acquirer should pay for the target.		



Investment Banks

- Investment banks perform a variety of capital raising and strategic advisory services.
- Investment banks earn profits by charging fees and commissions for providing these services and other kinds of financial and business advice.

Investment Banking

- Provide advice on how much a company is worth and how best to structure a deal if the investment banker's client is considering an acquisition, merger or sale.
- Help with the issuing of securities as a means of raising money for the client groups.

Sales & Trading

- Consists of salespeople, who call institutional investors with ideas and opportunities...
- And traders, who execute orders and advise clients on entering and exiting financial positions.
- Working closely with buy side.

Basic Financial Concepts



Time Value of Money

- The rate of exchange between present and future consumption (i.e. savings) is based on the concept that “time is money”.
- It should be fairly intuitive that if someone offered you the option of receiving \$1,000 in 6 months or in one year, you would choose 6 months.
- Receiving money earlier allows you to invest that money risk free in a U.S. government bond, and earn a return (interest) on it!

$$FV = PV * (1 + r)^t$$

and

$$PV = FV / (1 + r)^t$$

FV = Future Value

PV = Present Value

r = Rate of Return (Hurdle Rate)

t = Time Horizon



Cost of Capital

Case: Wal-Mart opens new stores. It spends money today, expecting to generate returns on the investment from these new stores in the future.

- Investments come with a certain level of risk.
- Higher risks must be compensated with higher returns.
- The cost of capital is the quantification of this risk (and expected return).

$$PV = FV / (1 + r)^t$$

“r” has many aliases:

- Discount rate
- Required Rate of Return
- Weighted Average Cost of Capital