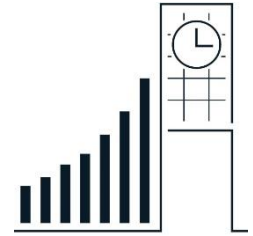# RELATIVE VALUATION & CAPITAL MARKETS

FALL 2023

AGENDA

- Overview of comparable companies analysis
  - How to find comparable companies
  - Key ratios and statistics
  - Benchmarking the comparable companies
- Overview of precedent transactions analysis
  - How to find precedent transactions
  - Key ratios and statistics
  - Benchmarking the precedent transactions
- How to display your data (video)
- Capital structure of the firm
- Leverage and coverage ratios
- What are capital markets?
- Debt capital markets
- Equity capital markets
- M&A Context

Have you accounted for the above valuation methods in your analysis?

COMPARABLE COMPANIES ANALYSIS
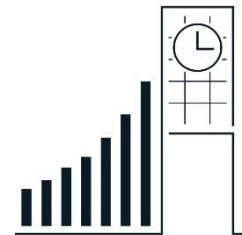
- Using similar companies to value a target company
  - Also known as "comps"
- **Essentially, you set up a proportion to value your target based on ratios of similar companies**
- Why is comparable companies analysis used?
  - Similar companies provide a relevant reference point
  - Designed to reflect valuation based on current market conditions
- This method acts as a check on other valuation methods
- Can be inaccurate when markets are irrational

WHAT MAKES A COMP GOOD?
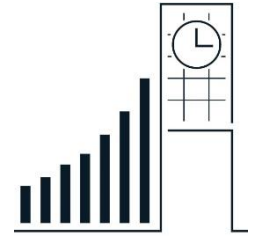
▶ **A good comp is as similar to the target as possible in both an operational and financial (scale) perspective**

▶ Similar business profiles
  ◦ Sector
  ◦ Products and services
  ◦ Customers and end markets
  ◦ Distribution channels and geography

▶ Similar financial profiles
  ◦ Size
  ◦ Profitability
  ◦ Growth profile
  ◦ Capital structure
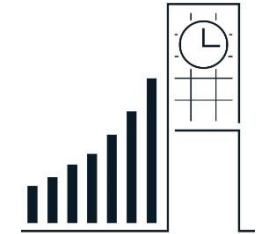
KEY RATIOS AND STATISTICS

▸ Enterprise value multiples

- $\dfrac{\text{Enterprise Value}}{\text{Revenue}}$

- $\dfrac{\text{Enterprise Value}}{\text{EBITDA}}$

- $\dfrac{\text{Enterprise Value}}{\text{EBIT}}$

- $\dfrac{\text{Enterprise Value}}{\text{Subscribers}}$

▸ Equity value multiples

- $\dfrac{\text{Price Per Share}}{\text{Earnings Per Share}}$

- $\dfrac{\text{Price to Earnings Ratio}}{\text{EPS Growth Rate}}$

▸ **Again, since comps analysis is just using proportions, multiply the targets data point (denominator), by your comparable's ratio to determine the valuation**

What valuation metrics should be used to compare companies?

BENCHMARKING KEY RATIOS
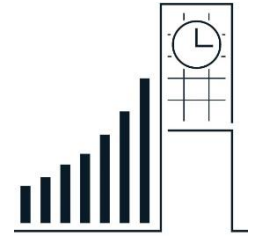
▶ The goal is to determine a valuation range for the target

▶ To accomplish this goal:
  ◦ Select the closest comps to the target
  ◦ Compare the multiples between these firms
  ◦ Calculate a valuation range for these firms
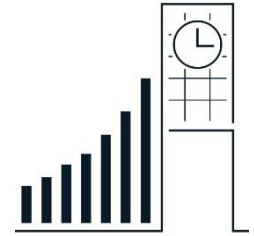
P / E = 24.1x   **P / E = 21.6x**   **P / E = 19.2x**

*Metrics calculated on a forward 12 month basis

What is the target's valuation in relation to its peers?

PRECEDENT TRANSACTIONS ANALYSIS

- ▸ Using past M&A transactions to help value the target
- ▸ Why is precedent transactions analysis used?
  - ◦ Similar transactions can have similar premiums
  - ◦ Similar transactions can have similar valuation metrics
- ▸ Acts as a check on the DCF with synergies
- ▸ Very challenging to find good precedent transactions
- ▸ **The research process is slightly different from comps, but the process of valuing your target based on ratios isn't**

WHAT MAKES A PRECEDENT TRANSACTION GOOD?
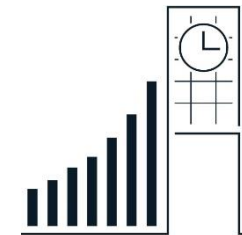
- ▶ Similar market conditions
    - ◦ Economic conditions
    - ◦ Market valuations
- ▶ Similar deal structure
    - ◦ Financial buyer or strategic buyer?
    - ◦ Hostile or friendly?
    - ◦ Private or public?
    - ◦ Size of the acquisition
    - ◦ Purchase consideration
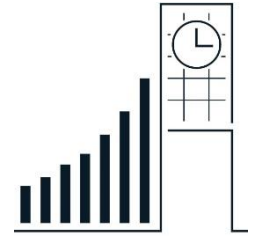
KEY RATIOS AND STATISTICS

▸ Same multiples as comps can be used

- $\dfrac{\text{Enterprise Value}}{\text{EBITDA}}$

▸ Multiples with synergies

- $\dfrac{\text{Enterprise Value}}{\text{Revenue + Synergies}}$
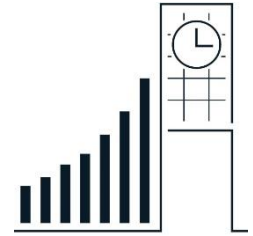
- $\dfrac{\text{Enterprise Value}}{\text{EBITDA + Synergies}}$

- $\dfrac{\text{Enterprise Value}}{\text{EBIT + Synergies}}$

▸ Premiums paid

- $\dfrac{\text{Offer Price}}{\text{Unaffected Share Price}} - 1$
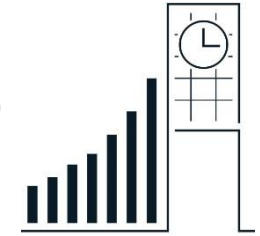
BENCHMARKING KEY RATIOS

▸ The goal is to determine a valuation range for the target

▸ To accomplish this goal:

　◦ Select the closest precedent transactions

　◦ Compare premiums paid and valuation ratios

　◦ Calculate a reasonable valuation range

facebook 👍

WhatsApp

groupme

Size : $19.0 billion
EV / Revenue = 950.0x
EV / User = 38.0x

Size : ?
EV / Revenue = ?
EV / User = ?
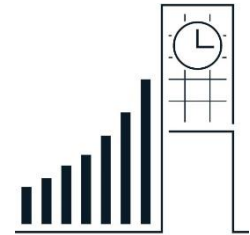
What premium should be paid for a target company?

WHAT IS CAPITAL STRUCTURE?

▶ **Capital Structure –** how a firm finances its overall operations and growth using different sources of funds
  ◦ Includes a mix of both debt and equity

| *Value of firm*		*Simple capital structure*		*Complex capital structure*
Assets	=	Liabilities	=	Senior secured (Bank debt)
				Senior unsecured (Bonds)
				Subordinated (Mezzanine)
		Equity		Preferred Stock
				Common Stock
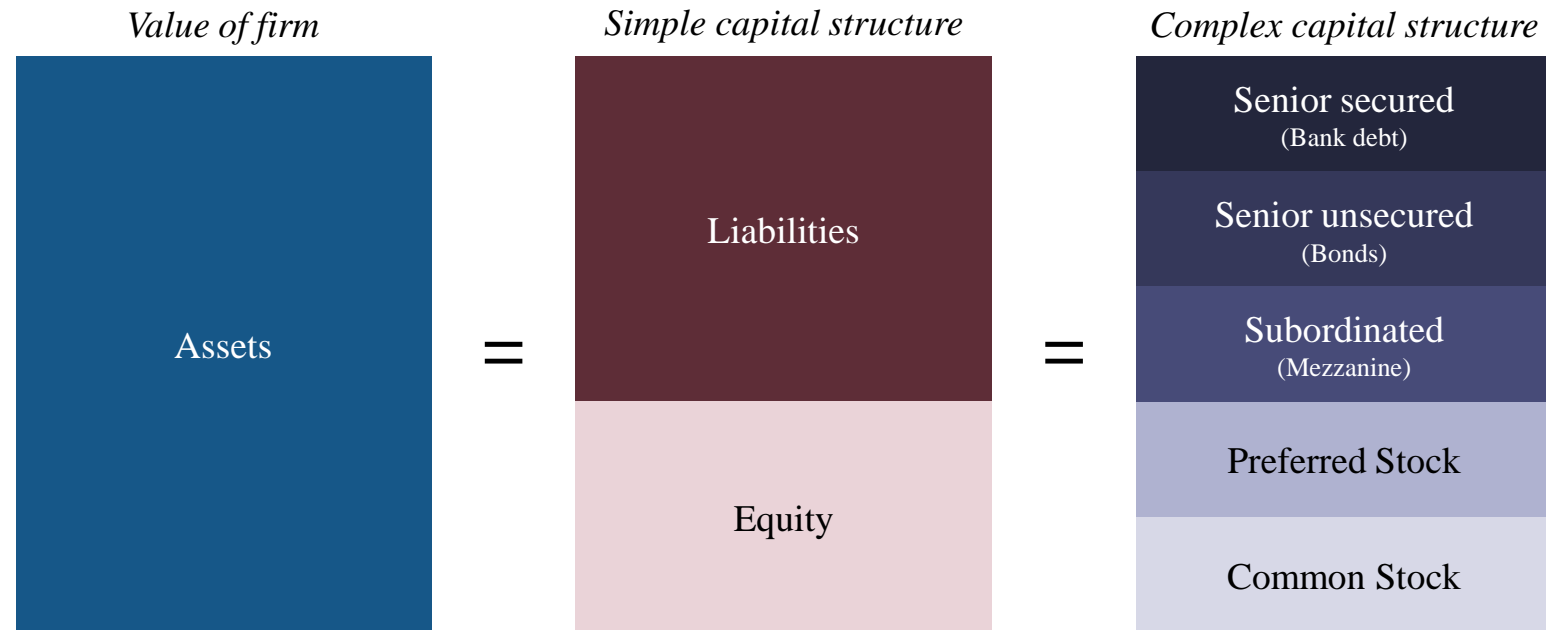
FINANCIAL RATIOS RELATED TO CAPITAL STRUCTURE

▸ **Leverage Ratio** – measures the magnitude of a firm's debt load in relation to cash flow
  ◦ Net debt / EBITDA
  ◦ Total debt / EBITDA

▸ **Coverage Ratio** – measures a firm's ability to service its debt by meeting near-term interest payments
  ◦ EBIT / Interest expense (interest coverage ratio)
  ◦ (EBITDA – Capex) / Interest expense

| Company	Ticker	Enterprise Value	Net Debt / EBITDA	Total Debt / EBITDA	EBIT / Interest Expense	(EBITDA-Capex) / Interest Expense
Union Pacific Corp	UNP	127,547.0	2.05x	2.22x	10.34x	9.64x
Canadian National Railway	CNR	69,326.9	1.81x	1.87x	12.25x	8.66x
CSX Corp	CSX	68,934.2	2.10x	2.31x	7.98x	5.39x
Norfolk Southern Corp	NSC	53,172.3	1.93x	2.02x	7.83x	5.13x
Canadian Pacific Railway	CP	34,597.2	2.35x	2.39x	5.88x	4.31x
Kansas City Southern	KSU	13,419.4	2.00x	2.08x	9.38x	6.11x
Average		**61,166.2**	**2.04x**	**2.15x**	**8.94x**	**6.54x**

*Note: EBITDA is only used as a proxy for cash flow*

WHAT ARE CAPITAL MARKETS?
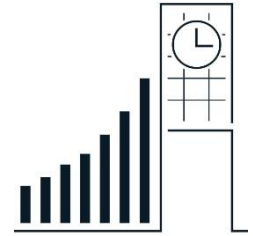
▸ **Debt markets –** market where a company can raise capital through traditional bank loans, high-yield bonds, leveraged loans, and other forms of debt securities

  ◦ The company borrows money and then pays interest on the amount borrowed before repaying the principal

▸ **Equity markets –** market where a company can raise capital through various forms of equity offerings

  ◦ The company sells a percentage of the ownership in itself with the intention of returning residual income to shareholders

BANK DEBT
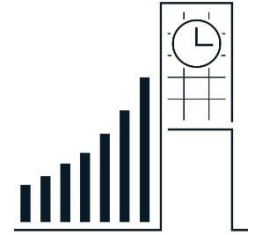
- ▸ Bank debt is a general term that describes an issuance of debt that is borrowed from an investment bank
  - ◦ Usually collateralized with lower, floating interest rates
- ▸ **Term Loan** – standard loan with repayment schedule
- ▸ **Revolver** – line of credit that may be drawn from and repaid at any given time during the borrowing period

BONDS
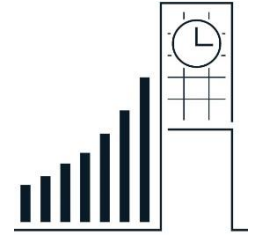
- Bonds represent debt that is purchased by asset managers and investment funds and pays a semiannual coupon
  - Usually unsecured with higher, fixed interest rates
- **High-Yield Bond** – a bond issued by a non-investment grade entity, claiming a much higher yield
- **Bridge loan** – committed financing from an investment bank that is only funded if bonds cannot be issued

EQUITY OFFERINGS
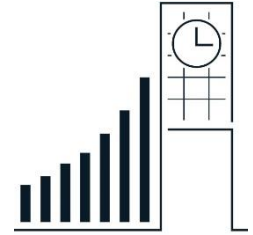
- **Initial public offering (IPO)** – the first time a private company lists shares on a public exchange (e.g. NYSE)
  - Ex. Dropbox (DBX) listed at $21/share on March 23rd, 2018
- **Seasoned equity offering (SEO)** – occurs when a firm that is already public offers additional shares; also known as a follow-on offering
  - **Rights offering** – type of SEO that gives current shareholders the right to purchase a pro rata allocation of additional shares at a specified price, usually discounted to the current market price

*These methods typically do not apply to M&A deals*
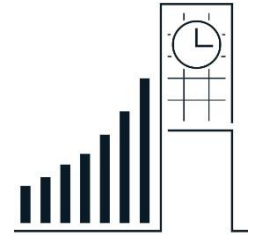
M&A CONTEXT

▸ Use an accretion/dilution analysis to determine the optimal blend between cash, debt, and stock
  ◦ Choose mix that is most accretive to the deal

▸ If debt is used in the transaction, benchmark to pro forma leverage ratios for similar deals in the industry
  ◦ I.e. Leverage should not drastically exceed that of precedents

▸ To determine how much debt should be bank debt vs. other sources, look at similar deal structures
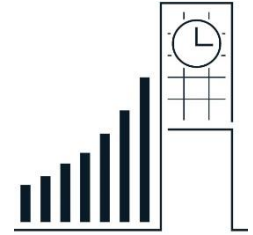
DELIVERABLE 5

- Please create a comparable companies valuation and precedent transactions valuation for PayPal
- Due on Sunday, October 22rd at 11:59 PM
  - This deliverable is mandatory
- Email to bingfinancesociety@gmail.com with the subject line "Team X – Deliverable 5"

QUESTIONS?
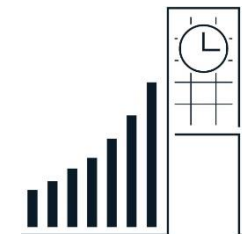
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