Key Financial Metrics and Ratios

• **Problem:** How do you *evaluate* different companies?

• Why is one company *more highly valued* by the market than others?

• Could be many factors, but one approach is to *look at* the numbers

• **Key Tool:** Financial Metrics and Ratios
Key Financial Metrics and Ratios

• **Purpose:** These numbers answer questions like…

• How much **equity** is required to generate a certain amount of **after-tax profit** (Net Income)?

• How much in **assets** is required to generate a certain amount of **after-tax profit** (Net Income)?

• How much **total capital** is required to do this?
Key Financial Metrics and Ratios

• And...

• How dependent is a company on its assets?

• How liquid is the company? Can it meet its obligations?

• How quickly does it sell all its Inventory, pay its outstanding invoices, and collect its receivables?
Key Financial Metrics and Ratios

• **Return on Equity (ROE)** = Net Income / Average Shareholders’ Equity

• **Return on Assets (ROA)** = Net Income / Average Assets

• **Return on Invested Capital (ROIC)** = NOPAT / (Total Debt + Equity + Other Long-Term Funding Sources)
Key Financial Metrics and Ratios

• **Return on Equity (ROE):** How efficiently is a company using its equity to generate after-tax profits?

• **Return on Assets (ROA):** How well is a company using its assets / how dependent is it on them?

• **Return on Invested Capital (ROIC):** How well is a company using ALL its capital, or how much capital is required to grow its business?
Key Financial Metrics and Ratios

- **Asset Turnover Ratio** = Revenue / Average Assets
- **Current Ratio** = Current Assets / Current Liabilities
- **Inventory Turnover** = COGS / Average Inventory
- **Receivables Turnover** = Revenue / Average AR
- **Payables Turnover** = COGS / Average AP (*)
Key Financial Metrics and Ratios

• Let’s look at the *interpretation* of these metrics and ratios in Excel…

• **My Question to You:** Think about which company *you* think should be most highly valued based on the #s

• **At the End:** I’ll reveal the “punch line”
The Punch Line:

• At the time of the analysis, here were the actual valuation multiples:

• **Wal-Mart**: P / E multiple of 16x

• **Amazon**: P / E multiple of 456x! (Not a typo)

• **Salesforce**: Not meaningful – *negative* Net Income
Why?

• Because the market was valuing all these companies based on different criteria…

• **Wal-Mart**: Established, mature, slower-growth company – use of capital, margins, inventory management

• **Amazon and Salesforce**: Higher-growth companies, all about reinvestment and expansion at the expense of poor margins and financial metrics
Moral of the Story:

• **Key Metrics and Ratios:** Only useful in certain contexts

• **Best When:** Comparing companies of *similar* sizes, growth rates, margins, and industries

• **Less Useful:** For high-growth companies that don’t care as much about capital management