Workshop IV: Introduction to Valuation

Introduction to Valuation

- First, how much?
- Philosophy of Valuation
- Intrinsic Value
  - Net asset value & liquidation value
  - Present value of future earnings
- Relative Value
  - Book multiples
  - Earnings multiples
  - Sector specific multiples
- Momentum, and Investor Sentiment
- Catalysts
First: how much?

- The first thing an investor should know is:
- A stock is not a ticker, it is a piece of an underlying business
- How to calculate the market asking price of a business:
  - Price per share * Total shares outstanding = Price of the business
  - AKA market capitalization
- How to calculate the implied true market price of a business:
  - Price of the business + existing debt – existing cash = The “real” price
  - AKA enterprise value
- Second: is the market price justified?

Philosophy of Valuation

“[A cynic] is a man who knows the price of everything and the value of nothing”

- Oscar Wilde

“[A sentimentalist] is a man who sees an absurd value in everything and doesn’t know the market price of any single thing”

- Oscar Wilde

- Valuation is both an art and a science
- Valuation is more self-discipline than skill
Intrinsic Value

- Principle: what’s it really worth?
  - The science of quantifying asset value and future cash-flows

- A business is worth the money it takes to reproduce its operations
  - Net asset value, current equity value

- A business is worth the money it can make in its fire-sale
  - Liquidation value

- A business is worth the money it will generate in the future
  - Earnings value, future cash-flow value

Asset Value

- Focus on balance sheets
- Focus on TANGIBILITY
  - Assets: Cash, receivables, inventory, PP&E
  - Liabilities: Payables, accrued expenses, debt to creditors
  - Assets – Liabilities = Equity (Book Value of the Business)
- Focus on current & realizable value
  - Do the value of the assets on the balance sheet reflect current market value (marked-to-market)?
- Used often in valuing companies with a lot of hard inventory and property
  - Real estate, precious metals, rare/collectibles, marketable/desirable assets
  - Ex: Maui Land & Pineapple, Air-net Systems, Escala Group
Earnings Value

- Focus on income statement and cash-flow statement
- Focus on FUTURE ASSET VALUE
  - Recall:
    - Net income goes to "retained earnings" in balance sheet
    - CFO, CFI, CFF goes to "cash and cash equivalents" in balance sheet
    - Earnings value is the discounted future asset value
- Focus on existential purpose of the business and its potentials
  - Not just liquidation value, not just reproduction value
- Filling the gaps where asset value cannot apply
  - Service companies, intellectual property, growth value
  - Ex: Rural/Metro, Tri-vision International, Google
  - Cash-burn companies

Intrinsic Value Wrap-up

- Earnings value is the most common and accepted measure of business value
- Valuation tools:
  - Net Asset Value
  - Liquidation Value
  - Discounted Cash Flow (DCF) Model
  - Economic Value Added (EVA) Model

- Intrinsic value principle: what’s it really worth?
Relative Valuation

- Relative value principle: what is the market willing to pay?
  - The science of selling to--and buying from--a “bigger idiot”
- Assets with similar attributes and similar earnings potential should sell for similar prices.
  - Apples to apples, same houses on the same block, etc.
- Easier to implement and less time consuming than intrinsic value
- Steps to relative valuation:
  - Find comparable businesses
  - Find the means of comparison

Finding Comparables

- Comparable companies should have similar businesses in a similar industry with similar risks, size, growth, etc.
- No hard set of rules, but obviously:
  - Apples to apples, NOT apples to oranges
  - Exxon Mobile to Royal Dutch Shell, NOT Exxon Mobile to The Gap
- Premiums and discounts can be estimated for dissimilarities
  - Heavier, juicier apples trade at a 10% premium to regular apples
  - Coca-Cola trades at a 50% premium (Price to Sales) to PepsiCo
- Sometimes, there are no comparables, and premiums and discounts cannot be estimated:
  - Whole Foods trade at a 200% premium to Kroger
- Be creative, Look at private equity buy-out multiples, etc.
- Comparables can also serve as a proxy for estimates
Means of Comparison

- **BOOK VALUE MULTIPLES**
  - P/B, P/TBV, Q
  - Assumption: similar businesses with similar returns should be trading at similar relative asset value

- **OPERATING MULTIPLES**
  - P/E, P/S, EV/S, EV/EBITDA, MC/FCFE, EV/FCFF
  - Assumption: similar businesses should have similar earnings power

- **SECTOR SPECIFIC MULTIPLES**
  - EV/Subscriber, EV/Resource in reserve, EV/Throughput of product
  - Assumption: businesses in the same industry that make similar returns on a product should trade in tandem to a common denominator

- **ADVANCED VALUATION MULTIPLES**
  - EVIC / ROICWACC, EVGC / ROCGCIWACC
  - Assumption: the market premium/discount of a business, regardless of its size, should be directly proportional to its economic value added compared to similar firms in the industry

Examples

- If Southwest Ambulance, a bankrupt ambulance service provider, was bought out by a private equity group at 7X EV/EBITDA, what should Rural/Metro be trading at?
- If Chaparral Resources, a Kazakh oil exploration and production company, had an EV / Barrel in Reserve ratio of 0.12X, what should Big Sky Energy Corp, a similar Kazakh oil E&P be trading at?
- If the Typical American REIT trades at 10X FFO and 1.2X NAV, what should Morguard, a Canadian REIT with some accounting issues be trading at?
- If TXU, the electric utilities provider in America, trades at 197,100X P/GWh, how much should KEP the Korean electricity provider be?
- If Ford has a EVIC / ROICWACC ratio of 1.2, what EV should Toyota be trading at given IC, ROIC, and WACC?
Pros and Cons

Pros
• Simple to calculate and explain
• Captures the intangible in a “market discount/premium”
• Does not have as many explicit assumptions and projections
• Very useful as a “reality check”

Cons
• Definition of a comparable firm is subjective
• Does not hint at market over/under valuation
  - Tech bubble (market cap per eyeball), real estate bubble (house on the next block)
• Prone to manipulation and oversimplification

Momentum & Investor Sentiment

• After considering “how much is it selling for?” vs. “how much is it worth?”
• Contemplate the general market sentiment behind an investment
• Why is it cheap? Why is it out of favor?
  • If no good reason, then buy
• Why is it so rich? Why is it sexy and hot?
  • If no good reason, then sell

• Understanding the “macro” environment is very important
  • Ex: if interest rates rise/fall, what happens to financials and/or real estate?
• Understanding the “industry/sector specific” environment is very important
  • Ex: What happens if crude capacity keeps growing, and a recession is coming?
• Understanding yourself is very important
Catalysts

- What keeps an undervalued stock from being undervalued forever?
- Some common catalysts are:
  - Earnings announcements
  - Material news releases that effect expected earnings
  - Analyst coverage initiations
  - Institutional buying interests/selling interests
  - Mergers, acquisitions, spin-offs, restructuring announcements
  - Capital markets activities
- Important for shorter-term perspectives, unimportant for the likes of Warren Buffet.

Conclusion

- No set correct ways and no precise conclusions
  - Accuracy is subjective and prone to bias
- One valuation method is often not enough
- Use multiple approaches and methods, sum of parts, etc.

- Buy-side investing does not test your finance skills, it tests your business intuition.
  - Keep it as simple as possible, but no simpler

Thanks! Questions?