# Fundamental Analysis Cheat Sheet

## Discounted Cash Flow (DCF) Analysis

### 1. Free Cash Flow (FCF)

* Cash generated by a company after accounting for operating and capital expenses.
* Represents the cash available for distribution to investors.
* **Usage in Code**: Forms the basis for calculating future cash flows in DCF analysis.

### 2. Free Cash Flow Growth Rate

* Rate at which FCF is expected to grow annually.
* Calculated using historical FCF values.
* **Usage in Code**: Used in DCF analysis to project future cash flows.

### 3. Cost of Equity (CAPM Model)

* Rate of return required by shareholders, accounting for risk.
* Calculated using the Capital Asset Pricing Model (CAPM).
* **Usage in Code**: Part of WACC calculation, helps estimate the discount rate.

### 4. Cost of Debt

* Represents the effective rate that a company pays on its borrowed funds.
* Calculated using the interest expense and the total debt from financial statements.
* **Usage in Code**: Part of WACC calculation, helps determine the overall cost of capital.

### 5. Weighted Average Cost of Capital (WACC)

* Average rate that a company is expected to pay to all its security holders to finance assets.
* Combines cost of equity and cost of debt, adjusted for tax benefits.
* **Usage in Code**: Used as the discount rate for DCF analysis.

### 6. Discount Rate (Cost of Capital)

* Represents the rate of return required for an investment, adjusted for risk.
* In this context, it is often equivalent to WACC when used in DCF analysis.
* **Usage in Code**: Applied in DCF analysis to discount projected future cash flows.

### 7. Terminal Value

* Estimates the value of a business beyond the forecast period of a DCF.
* Assumes stable growth indefinitely.
* **Usage in Code**: Used at the end of DCF analysis to value future cash flows after forecasted years.

### 8. Total Enterprise Value (TEV)

* Valuation metric used to assess a company's overall value, including debt, preferred stock, and cash.
* **Usage in Code**: Used in DCF analysis to derive a company's overall economic value and potential acquisition price.

## Comparable Company Analysis (CCA)

* Valuation approach that compares the metrics of similar companies to assess a company's relative valuation.
* Common metrics: **P/E Ratio, P/B Ratio, EV/EBITDA**.
* **Usage in Code**: Provides a comparative valuation based on industry peers.

### 1. (P/E Ratio) Price-to-Earnings Ratio

* Measures how much investors are willing to pay per dollar of earnings.
* Used to assess a company's relative value compared to its earnings.
* **Usage in Code**: Used in Comparable Company Analysis (CCA) to evaluate relative valuation versus industry peers.

### 2. (P/B Ratio) Price-to-Book Ratio

* Compares a company's market value to its book value, indicating how much investors are willing to pay for net assets.
* A lower P/B ratio may indicate that a stock is undervalued.
* **Usage in Code**: Used in CCA to determine valuation compared to a company’s assets.

### 3. (EBITDA) Earnings Before Interest, Taxes, Depreciation, and Amortization

* Measures profitability excluding financing, accounting, and tax effects.
* Useful for assessing operational performance.
* **Usage in Code**: Used in CCA to calculate EV/EBITDA for comparative valuation.

### 4. Dividend Yield

* Measures how much a company pays out in dividends each year relative to its share price.
* Indicates income-generating potential of the stock.
* **Usage in Code**: Used in CCA to assess income potential.