Finance Theory

# Balance Sheets

**Current:** short-term means became cash in a time under than 12 months.

**Non-current**, long-term over 12 months

* Assets

Assets/Liabilities are organized vertically through liquidity (easier to sell)

Marketable securities: values easy to convert in cash (government/treasury bonds)

**Company "true cash"** = SUM (Cash & cash equivalents, Marketable securities (current and non-current))

Account receivable: money expected to be received (usually in 30-60 days).

Inventory: Raw material, WIP and finished products.

Property, plant, and equipment PP&E: goods such as physical materials (cars, buildings, ...) with useful life bigger than current time.

Prepaid expenses: payments made in advance (rent, supplies, …)

Intangible assets: goodwill …

Deferred taxes: amount of taxes to be recovered in a future time

* Liabilities

Accounts payable: money a company owes to pay, for things they bought but haven´t paid yet

Deferred revenue: services owed to client contracts.

Commercial debt (pay roll, suppliers, ...)

Accrued liabilities: expenses a company owes but haven´t paid yet (salaries, rent, …)

Convertible notes: a form of debt easily converted into equity that warrants discounted cap price for early investors. It’s debt so is tax efficient for loans and foreigner investors.

**Company "true debt"** = SUM (Commercial paper, Term debt (current and non-current))

**Net Debt (cash)** = SUB ("true cash", "true debt) if Net debt < 0 => debt<cash

To see if a company is safe with the amount of Net debt, we calculate the ratio of Net debt and EBITDA.

**EBITDA:** Operating cost - D&A (Depreciation and Amortization)

**ROE (Return on equity)** = Net income/Shareholder's equity. The higher the better, measure the efficiency of a company to turn capital into profit.

Deferred taxes: amount of taxes needs to be paid in a future date

# Income Statements

**Revenue:** money generated from selling goods

**Expenses:** personnel salary, ...

Profits = sales - expenses

Define company sales (products, services,)

**Cost of goods sold (COGS):** price of product production.

**Gross profit** = sales - cost of goods sold

**Gross margin** = gross profit/revenue. the higher the better (percentage). Should be increasing.

**Research and development:** money used for investigation.

**Selling, General and Administrative (SG&A):** money spent on staff and other services. It should be decreasing, meaning a company is more efficient over time.

**Operating Expenses:** cost for running the business.

**Operating profit** = sales cost of goods sold - operating expenses

**Operating margin** = operating profit/revenue. This shows how much revenue is turned into profit. The higher the better (percentage)

# Cash Flow Statements

**Operating Activities:** money generated from products or services.

**Depreciation and amortization:** loss of value over time through expenses such as taxes every year. Depreciation is expense related to tangible assets (PP&E) any expense that has a useful life over 1 year, not included in the income statement. And Amortization is about intangibles.

**Stock base compensation:** salary paid in stocks instead of money (important to analyze in tech companies)

**Net change in operations and liabilities (company working capital):** money needed to run short-term operations (paying suppliers or money owed by customers)

**Net cash provided by operating assets and liabilities:** money a company brings from its core business activities. Also used to calculate a company’s free cash flow.

**Free Cash Flow** = Cash Flow from Operations - Net CAPEX. (It is an important value cause is the money used to buy new stock, pay out debt and dividends - to pay shareholders).

**Capital Expenditures (CAPEX):** money used to acquire, maintain, repair, and upgrade physical assets.

**Net CAPEX** = (purchases of PP&E - Disposals PP&E)

**Free Cash Flow Yield** = free cash flow/Market Cap at year end. The higher the better

**CAPEX as % of sales** = Net income/total revenue. This value varies due to assets intensity (road making company values are higher than a tech company)

**Investing activities:** investments of the company

**Purchases of investments and proceeds of investment:** short-term government bonds) used when a company has money left to invest.

**Acquisitions:** buying businesses, equity, ...

**Proceeds from disposals:** selling (up mentioned) businesses that no longer fit the requirements of the company.

**Finance activities:** payments and bonds

**Purchases of stock for treasury:** money a company spent on sharing purchases. (Analyze earnings per share)

**Issuances of stock:** the opposite of the above referred to purchases stock.

Repurchases shares = stock shares - share issuances. If its negative means that the number of shares increase compared to the previous year

**Dividends:** if the number stays steady or decreasing can mean that a company is struggling.

Total as a % of FCF = SUM (TS repurchases, dividends)/free cash flow. If the number exceeds 100% it’s not sustainable in long term run. Meaning that a company is paying more to is shareholders that the actual free cash flow generated.

# General Considerations

A company is worth the discounted sum of its cash flows from today until eternity.

FCF = Net Income in the long run

**Discount Rate:** Should sometimes be considered in calculations. Though process (sorting countries by risk): Low/Medium/High risk 2-3/4-5/6-8% more or less, respectively. % is composed of the country’s inflation and default risk of payment. Poorer countries tend to be riskier, so the Risk-Free Rate RFR is higher.

The Above is related to WACC (weighted Average Cost of Capital) = Cost of Equity \* %Equity + Cost of Debt \* (1- Tax Rate) \* %Debt + Cost of Preferred Stock \* %Preferred Stock

A company with a lot of money tend to have lower EV (Enterprise Value). Good indicator to search for debt and actual wealth of the company.

Stockholders’ equity: Assets (Tangibles) - Liabilities

Check for inventory (growth): if growths significantly --> “can mean” more difficulty selling products.

\*\*Fundamental research: “\*\*type of research and investigation to forecast future cash flows” - Martin Shkreli

**Technical analyst:** investment strategy based on past market prices and technical indicators

(a) that an asset derives it’s value from its capacity to generate cash flows in the future

(b) that risk affects value

(c) that growth must be earned (not endowed) that the laws of demand and supply cannot be repealed.

Companies when they go public their shares jump (IPO)

Shares are divided into classes; the outstanding amount is equal to de sum of those.

* Dictionary

**8k:** Any disclosed event material

**10Q:** Quarterly report

**10k:** Annual report

**SCI3G/D:** (Ownership statements) Statement from someone who owns more than 5% if that company.

**GAAP:** generally accepted accounted principles, is a way to standardize the financial reports.

**Non-GAAP:** is the sheet adjustments made after, can include transactions, acquisitions, etc…

**Internal Controls** get companies to comply with the laws and regulations.

**ESG’s:** Environmental, Social, Governance - form proving guide criteria. Safeguard of the environment, including corporate policies for climate change. Social matters such as suppliers, employees or customers. Governance deals with company leadership, executive pay, audit, internal controls and shareholders rights.

**IRA:** individual retirement account (401k - USA).

**Bond:** borrow money to someone, for a period in exchange for the loan payment plus periodic interest yields.

**Index:** indicator of market security volatility.

**Commodities:** raw materials to be traded.

**EBITDA** = Net Income + Interest Expenses + Taxes + Depreciation + Amortization

**ROE:** return on Equity **Venture Capital:** money invested in companies not listed inside stock exchange

**Private Company:** A firm whose shares do not trade on public exchanges and are not issued from an initial public offering.

**Private equity:** investment of equity capital in private companies

**Equity:** Assets minus Liabilities.

**Fungibility:** the ability to bind together good assets interchanged with other goods or assets from the same kind, fungibility implies same value between the assets.

**Bid and Ask:** is related to the price that someone wills to pay and others to buy. The difference between them is referred to as spread. Higher spread means greater volatility.

**Market Cap** = (Total number of outstanding shares \* Market price per share) it’s the estimated value of a company.

**Mutual funds:** (traditional funds) diversified portfolio of stock, bonds, or other assets. They are managed by a professional portfolio manager who makes investment decisions on behalf of the fund’s investors.

**Exchange-traded funds (ETFs):** Like mutual funds, ETFs pool money from many investors to invest in a diversified portfolio of assets. However, ETFs trade on an exchange like individual stocks, and their prices can fluctuate throughout the day. ETFs can be passively or actively managed.

**Hedge funds:** typically have a more complex and aggressive investment strategy compared to traditional funds. They are often marketed to higher net worth individuals or institutional investors and usually only accept accredited investors who meet certain criteria.

**ROA:** return on Assets. AT\*PM (Asset Turnover, Profit Margin).

**Discount Rate:** represents the risk and potential returns. Some people represent it by % =(Future value FV / Present Value PV).

**Deferred revenue:** Money deducted from contracts. Decrease every month until the sum from every quarter reaches the contract initial investment.

**Shares Outstanding (Class A and B):** class A and B are set from prioritized dividend holder A being the first to get paid in case of bankruptcy. Calculations for the MC should be a sum of both. If it is not available MC calculations should be done as Shares Issued - Treasury Stock. **Stock Based Compensation:** payment method with company equity, such as form of shares or options of that company.

**Treasury Bonds:**

**Corporate Bonds:**

**Government Bonds:**

# Other

Comment from subreddit user#

It took a couple of days to get through and some of it was dry. But there were some good nuggets there.

” The average stock doesn’t go up over long periods of time. The average stock will eventually go down 100% Indexes work because they weed those out and replace them.

“Shorting stocks is actually mathematically in your favor and that’s one of the secrets i have, that you have to search deeply for” His sample portfolio was 40% long 40% short 20% cash he believes in being cash heavy.

How often should you trade stocks? “If you own a stock for 10 dollars and you think it’s worth 20 you want it to happen as fast as possible because of opportunity cost” I would rather make 20% in two weeks then 100% in 2 years” As long as you have other opportunities”

“If you think everything is overvalued or undervalued You kind of suck and your process is not correct 8/10 stocks should be fairly valued”

“I studied pharma that helped me invest in biotech stocks that’s more important than 13f filings and listening to CNBC” The information I got from working in pharma Made the 13f filings look like useless garbage in comparison”

“The CEO is one of the most important factors, do you trust him to make big profits 10 years from now?”

“Where boys Become men, most analysts don’t understand this, Apple 100 billion EV and 33 billion in profit Is 33% on your money. It’s a calculation warren uses” (this was years ago).

“Investing 1% in something that could 10x is good risk management”

“You have to look at all stocks Imagine going to a restaurant and only eating one dish out of 800 dishes and saying this is the best dish for sure! You must try the other dishes to get perspective and to maybe find something even better”

“USA has more fairly valued companies in general, international stocks are either super undervalued or overvalued. That’s what you want so you can buy undervalued and short overvalued”

“I feel bad for people who look at p/e If Tesla is worth 50 billion and has 1 million in net profit it doesn’t mean it has 50k p/e and should be avoided”

“I like companies who make people think with a different part of their brain. Like Apple and Tesla. They don’t care about price they just have to have it. Usually great marketing, great design and a great product. With a great design comes a big price”

“very few people short sell It could be good a lot of the time In 2000-2012 you wouldn’t make a penny if you were long. Markets go down often”

“You want to be as diversified as you can”

“Don’t invest if you don’t have a good idea. Hedge funds are forced to invest”

“Leverage if you have confidence in the Investment, I made 50 million in the last 2 years with options and derivatives. But it is very risky, so you have to be really sure”

“Have a margin of safety”

“Discount rate is gold It’s theoretical Basically you guess what growth they will have looked at the history of the company and you guess how long the company will stay alive. How much cash will it bring in, in its whole lifetime. So, Apple for example might bring in 300 billion a year in profit times 20 years. Giving it a value of 6 trillion.”

But it’s all theoretical It might live for 30 years It might get a worse profit growth It might shrink by 15% per year instead of 2% You don’t know” You give them a discount rate based on how risky the investment is how diversified they are and how easy it is to eat their lunch. This could take years as an investor to calculate correctly”

Books he recommended

* + Margin of safety
  + Common stocks and uncommon profits
  + Everything from warren buffet and Charlie Munger

# Analyzing

My investment process is deep Fucking Value investing. I also use Technical Analysis to search info from market fluctuations and reaction to certain criteria in order to understand if i should secure my position with golden hands and follow my model predictions or leave it with minimal regret.

Company value = (Cash Flow /(Discount Rate - Cash Flow Growth Rate)

Value of business = Capital Invested in firm today + Present value of excess cash flows from both existing and future projects. Not equal to the company value.

* + Stock Analysis

For isolated stock pick analysis go to [openinsider.com](http://openinsider.com) and search for insiders (CEO, CFO, DIR) relative to the volume of purchases.

MAIN

Stock Price

Number of Shares Outstanding

Market CAP: estimated company value (Price \* Shares)

Cash: **"true cash"** = SUM (Cash & cash equivalents, Marketable securities (current and non-current), etc…). Everything that is easy convertible to cash.

Debt: **"true debt"** = SUM (Commercial paper, Term debt (current and non-current), etc…). Everything a company owes in debt form.

EV (Enterprise Value) = (Market Cap - Cash + Debt)

Enterprise Value: the value you are paying for the business itself (buying debt or acquiring preexisted money from the company)

MODEL

Revenue recognition not as simple. Look for referred revenue and compare, other factors.

Follow the nature order of the income statement and transcript the info to the excel.

* + Niche Analysis

UNIVERSE

Analyze niche sections of the market.

(1) Go to [DataRoma.com](http://DataRoma.com) and pick Superinvestors.

(2) Go to [finviz.com](http://finviz.com) and select the niche on the Maps side

(3) Open excel and start UNIVERSE model

(4) Copy the first page of companies given by Finviz.

(5) Automate using B3 just the price and tickets cells

(6) Link to the models and start analyze the companies above

For time saving complete the UNIVERSE and create models just for the companies that match with each other.

In UNIVERSE we use comparable for further understanding of the whole industry.

* Thought process

Managing other people money. Invest in my own capabilities rather than capitalize.

Hedge fund fees reduce risk.

Strategy needs to be adapted to the circumstances. “Sometimes we just make money by lucky opportunities” - just be patient.

Build your network